

Balanced Voltage Drop Report
Source: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
Laurel Ind 1		ABC	SRC-Laurel	7.50Y	125.0	0.00	0.00	490.29	0	10473	3465	95	0.00	0.0	0.000	0.000	0	0	0	658
PL.52995	Laurel Ind 1	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	101.86	20	2266	343	99	0.01	0.0	0.005	0.005	0	0	0	2
PL.61371	PL.52995	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	101.86	20	2266	343	99	0.00	0.0	0.007	0.003	0	0	0	2
----- Feeder No. 2 (Laurel Ind F2) Beginning with Device PD.9263 -----																				
PD.9263	PL.61371	ABC	480VWE	7.50Y	125.0	0.00	0.00	101.86	0	2266	343	99	0.00	0.0	0.007	0.003	0	0	0	2
PL.61383	PD.9263	ABC	397 SPACER	7.50Y	124.9	0.06	0.06	101.86	20	2266	343	99	0.39	0.0	0.295	0.288	0	0	0	2
PL.61058	PL.61383	ABC	397 SPACER	7.48Y	124.6	0.31	0.37	101.86	20	2266	338	99	2.11	0.1	1.835	1.540	0	0	0	2
PL.61056	PL.61058	ABC	397 SPACER	7.48Y	124.6	0.01	0.38	101.86	20	2263	313	99	0.07	0.0	1.885	0.050	0	0	0	2
PL.34590	PL.61056	ABC	750 MCM AL	7.47Y	124.5	0.13	0.50	101.86	20	2263	313	99	1.87	0.1	2.308	0.423	0	0	0	2
PD.5882-A	PL.34590	ABC	Closed	7.47Y	124.5	0.00	0.50	101.86	0	2261	309	99	0.00	0.0	2.308	0.423	0	0	0	2
PD.5882-B	PD.5882-A	ABC	Closed	7.47Y	124.5	0.00	0.50	101.86	0	2261	309	99	0.00	0.0	2.308	0.423	0	0	0	2
PL.33343	PD.5882-B	ABC	750 MCM AL	7.47Y	124.5	0.00	0.50	0.00	0	0	0	100	0.00	0.0	2.325	0.017	0	0	0	0
PL.34869	PD.5882-B	ABC	750 MCM AL	7.47Y	124.5	0.04	0.54	101.86	20	2261	309	99	0.55	0.0	2.434	0.126	0	0	0	2
PD.5873-A	PL.34869	ABC	Closed	7.47Y	124.5	0.00	0.54	101.86	0	2261	308	99	0.00	0.0	2.434	0.126	0	0	0	2
PD.5873-B	PD.5873-A	ABC	Closed	7.47Y	124.5	0.00	0.54	101.86	0	2261	308	99	0.00	0.0	2.434	0.126	0	0	0	2
PL.33344	PD.5873-B	ABC	750 MCM AL	7.47Y	124.4	0.02	0.56	101.86	20	2261	308	99	0.30	0.0	2.501	0.068	0	0	0	2
PL.34593	PL.33344	ABC	750 MCM AL	7.47Y	124.4	0.00	0.56	10.32	2	229	31	99	0.00	0.0	2.573	0.072	0	0	0	1
PL.34740	PL.34593	ABC	750 MCM AL	7.47Y	124.4	0.00	0.57	10.32	2	229	31	99	0.00	0.0	2.640	0.067	0	0	0	1
PL.34741	PL.34740	ABC	750 MCM AL	7.47Y	124.4	0.00	0.57	10.32	2	229	31	99	0.00	0.0	2.721	0.080	229	31	1	1
PL.33345	PL.33344	ABC	750 MCM AL	7.47Y	124.4	0.00	0.57	91.54	18	2032	277	99	0.06	0.0	2.518	0.016	0	0	0	1
PL.34052	PL.33345	ABC	750 MCM AL	7.46Y	124.4	0.06	0.63	91.54	18	2032	276	99	0.81	0.0	2.744	0.227	0	0	0	1
PL.34057	PL.34052	ABC	750 MCM AL	7.46Y	124.4	0.00	0.63	0.00	0	0	0	100	0.00	0.0	2.826	0.081	0	0	0	0
PL.34055	PL.34052	ABC	350 MCM UR	7.46Y	124.3	0.04	0.67	87.65	27	1944	263	99	0.38	0.0	2.924	0.180	1944	263	0	0
PL.34053	PL.34052	ABC	1/0 AL URD	7.46Y	124.4	0.00	0.63	3.89	2	86	12	99	0.00	0.0	2.792	0.047	86	12	1	1
PL.63312	Laurel Ind 1	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	150.22	29	3309	691	98	0.01	0.0	0.002	0.002	0	0	0	76
PL.63311	PL.63312	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	150.22	29	3309	691	98	0.01	0.0	0.004	0.002	0	0	0	76
----- Feeder No. 5 (London F5) Beginning with Device PD.9264 -----																				
PD.9264	PL.63311	ABC	480VWE	7.50Y	125.0	0.00	0.00	150.22	0	3309	691	98	0.00	0.0	0.004	0.002	0	0	0	76

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PL.63313	PD.9264	ABC	750 MCM AL	7.50Y	125.0	0.01	0.02	150.22	30	3309	691	98	0.30	0.0	0.035	0.031	0	0	0	76
PL.63314	PL.63313	ABC	397 SPACER	7.49Y	124.9	0.09	0.11	150.22	29	3308	690	98	0.74	0.0	0.284	0.249	0	0	0	76
PL.61384	PL.63314	ABC	397 SPACER	7.49Y	124.8	0.09	0.20	150.22	29	3308	681	98	0.74	0.0	0.531	0.247	0	0	0	76
PL.61057	PL.61384	ABC	336 MCM AC	7.48Y	124.6	0.17	0.37	150.22	29	3307	673	98	3.19	0.1	0.699	0.168	0	0	0	76
PL.62934	PL.61057	ABC	336 MCM AC	7.47Y	124.5	0.17	0.54	150.22	29	3304	665	98	3.13	0.1	0.864	0.165	0	0	0	76
PL.62935	PL.62934	ABC	336 MCM AC	7.44Y	124.0	0.49	1.03	150.22	29	3301	658	98	9.23	0.3	1.349	0.486	0	0	0	76
PL.59695	PL.62935	ABC	336 MCM AC	7.44Y	123.9	0.03	1.05	70.76	14	1532	382	97	0.24	0.0	1.407	0.057	6	3	1	70
PL.36068	PL.59695	ABC	336 MCM AC	7.42Y	123.7	0.28	1.33	70.48	14	1526	379	97	2.28	0.1	1.954	0.547	7	3	3	69
PL.35036	PL.36068	ABC	#2 ACSR	7.42Y	123.7	0.00	1.33	2.59	1	57	8	99	0.00	0.0	2.018	0.064	57	8	1	1
PL.35291	PL.36068	ABC	336 MCM AC	7.41Y	123.6	0.10	1.43	67.48	13	1458	362	97	0.77	0.1	2.154	0.200	0	0	0	64
PL.35109	PL.35291	ABC	#4 ACSR	7.41Y	123.5	0.03	1.46	13.93	11	298	83	96	0.07	0.0	2.213	0.060	0	0	0	17
PL.35843	PL.35109	ABC	#4 ACSR	7.41Y	123.5	0.02	1.48	10.32	8	222	58	97	0.04	0.0	2.277	0.064	1	0	1	11
PL.35844	PL.35843	ABC	#4 ACSR	7.41Y	123.5	0.02	1.50	10.28	8	221	57	97	0.03	0.0	2.323	0.046	54	7	1	10
PL.35841	PL.35844	ABC	#4 ACSR	7.41Y	123.5	0.00	1.50	7.83	6	167	50	96	0.00	0.0	2.334	0.011	23	11	1	9
PL.35842	PL.35841	ABC	#4 ACSR	7.41Y	123.5	0.01	1.51	6.71	5	144	39	97	0.01	0.0	2.365	0.031	24	12	2	8
PL.35631	PL.35842	ABC	#4 ACSR	7.41Y	123.5	0.01	1.52	5.52	4	120	27	98	0.01	0.0	2.400	0.036	0	0	0	6
PL.35633	PL.35631	C	#4 ACSR	7.41Y	123.5	0.00	1.52	4.64	4	31	15	90	0.00	0.0	2.401	0.001	0	0	0	5
PD.5023	PL.35633	C	60QA	7.41Y	123.5	0.00	1.52	4.64	8	31	15	90	0.00	0.0	2.401	0.001	0	0	0	5
PL.35635	PD.5023	C	#4 ACSR	7.41Y	123.5	0.01	1.52	4.64	4	31	15	90	0.00	0.0	2.437	0.035	10	5	2	5
PL.37152	PL.35635	C	#4 ACSR	7.41Y	123.5	0.00	1.52	3.12	2	21	10	90	0.00	0.0	2.444	0.008	0	0	1	3
PL.35634	PL.37152	C	#4 ACSR	7.41Y	123.5	0.01	1.53	3.10	2	21	10	90	0.00	0.0	2.554	0.110	21	10	2	2
PL.35632	PL.35631	ABC	#4 ACSR	7.41Y	123.5	0.02	1.53	4.03	3	89	12	99	0.01	0.0	2.602	0.202	89	12	1	1
PL.34836	PL.35632	ABC	#4 ACSR	7.41Y	123.5	0.00	1.53	0.00	0	0	0	100	0.00	0.0	2.608	0.006	0	0	0	0
PL.34829	PL.34836	ABC	1/0 AL URD	7.41Y	123.5	0.00	1.53	0.00	0	0	0	100	0.00	0.0	2.609	0.000	0	0	0	0
PD.5024	PL.34829	ABC	25QA	7.41Y	123.5	0.00	1.53	0.00	0	0	0	100	0.00	0.0	2.609	0.000	0	0	0	0
PL.34837	PD.5024	ABC	1/0 AL URD	7.41Y	123.5	0.00	1.53	0.00	0	0	0	100	0.00	0.0	2.656	0.047	0	0	0	0
PL.33991	PL.34837	ABC	1/0 AL URD	7.41Y	123.5	0.00	1.53	0.00	0	0	0	100	0.00	0.0	2.687	0.032	0	0	0	0
PL.35839	PL.35109	ABC	#4 ACSR	7.41Y	123.5	0.00	1.46	3.61	3	76	26	95	0.00	0.0	2.222	0.009	0	0	0	6
PL.35990	PL.35839	ABC	#4 ACSR	7.41Y	123.5	0.00	1.46	0.93	1	19	9	90	0.00	0.0	2.267	0.044	19	9	1	1
PL.35840	PL.35839	ABC	#4 ACSR	7.41Y	123.5	0.00	1.46	2.69	2	57	17	96	0.00	0.0	2.265	0.043	0	0	0	5
PL.35661	PL.35840	ABC	#4 ACSR	7.41Y	123.5	0.00	1.46	0.00	0	0	0	100	0.00	0.0	2.311	0.046	0	0	0	0

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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
PL.35838	PL.35840	ABC	#4 ACSR	7.41Y	123.5	0.01	1.47	2.69	2	57	17	96	0.00	0.0	2.355	0.090	0	0	0	5
PL.34683	PL.35838	ABC	#4 ACSR	7.41Y	123.5	0.00	1.48	1.47	1	32	4	99	0.00	0.0	2.441	0.086	32	4	1	1
PL.36653	PL.35838	A	#4 ACSR	7.41Y	123.5	0.01	1.48	3.77	3	25	12	90	0.00	0.0	2.421	0.066	1	0	1	4
PL.36656	PL.36653	A	#4 ACSR	7.41Y	123.5	0.00	1.49	1.87	1	12	6	89	0.00	0.0	2.471	0.050	0	0	0	1
PL.33757	PL.36656	A	#2 ACSR	7.41Y	123.5	0.00	1.49	0.00	0	0	0	100	0.00	0.0	2.512	0.041	0	0	0	0
PL.36094	PL.36656	A	#4 ACSR	7.41Y	123.5	0.00	1.49	1.87	1	12	6	89	0.00	0.0	2.490	0.019	12	6	1	1
PL.36654	PL.36653	A	#2 ACSR	7.41Y	123.5	0.00	1.49	1.77	1	12	6	89	0.00	0.0	2.452	0.030	0	0	1	2
PL.36655	PL.36654	A	#2 ACSR	7.41Y	123.5	0.00	1.49	1.77	1	12	6	89	0.00	0.0	2.468	0.016	12	6	1	1
PL.36045	PL.35291	ABC	336 MCM AC	7.41Y	123.6	0.02	1.45	53.55	10	1159	277	97	0.12	0.0	2.202	0.048	0	0	0	47
PL.36046	PL.36045	ABC	336 MCM AC	7.40Y	123.3	0.21	1.66	53.55	10	1158	276	97	1.37	0.1	2.769	0.567	0	0	0	47
PD.5883-A	PL.36046	ABC	Closed	7.40Y	123.3	0.00	1.66	53.55	0	1157	273	97	0.00	0.0	2.769	0.567	0	0	0	47
PD.5883-B	PD.5883-A	ABC	Closed	7.40Y	123.3	0.00	1.66	53.55	0	1157	273	97	0.00	0.0	2.769	0.567	0	0	0	47
PL.35798	PD.5883-B	ABC	336 MCM AC	7.40Y	123.3	0.01	1.67	53.55	10	1157	273	97	0.09	0.0	2.806	0.037	0	0	1	47
PL.57165	PL.35798	ABC	336 MCM AC	7.40Y	123.3	0.00	1.68	6.85	1	137	66	90	0.00	0.0	2.872	0.066	0	0	0	16
PL.61081	PL.57165	ABC	336 MCM AC	7.40Y	123.3	0.00	1.68	6.85	1	137	66	90	0.00	0.0	2.881	0.009	0	0	0	16
PL.61080	PL.61081	ABC	336 MCM AC	7.40Y	123.3	0.01	1.69	6.20	1	124	60	90	0.00	0.0	3.007	0.126	9	5	1	15
PL.59936	PL.61080	ABC	336 MCM AC	7.40Y	123.3	0.00	1.69	0.00	0	0	0	100	0.00	0.0	3.044	0.037	0	0	0	0
PL.59940	PL.59936	ABC	336 MCM AC	7.40Y	123.3	0.00	1.69	0.00	0	0	0	100	0.00	0.0	3.047	0.003	0	0	0	0
PD.8900-B	PL.59940	ABC	Open	7.40Y	123.3	0.00	1.69	0.00	0	0	0	100	0.00	0.0	3.047	0.003	0	0	0	0
PL.34495	PL.61080	C	#4 ACSR	7.40Y	123.3	0.00	1.69	5.48	4	37	18	90	0.00	0.0	3.007	0.001	0	0	0	6
PD.5222	PL.34495	C	75QA	7.40Y	123.3	0.00	1.69	5.48	7	37	18	90	0.00	0.0	3.007	0.001	0	0	0	6
PL.35138	PD.5222	C	#4 ACSR	7.40Y	123.3	0.01	1.69	5.48	4	37	18	90	0.00	0.0	3.048	0.041	25	12	4	6
PL.34861	PL.35138	C	#4 ACSR	7.40Y	123.3	0.00	1.70	1.80	1	12	6	89	0.00	0.0	3.110	0.061	12	6	2	2
PL.35690	PL.61080	A	6 A (CWC)	7.40Y	123.3	0.00	1.69	11.68	8	78	38	90	0.00	0.0	3.007	0.001	0	0	0	8
PD.5146	PL.35690	A	75QA	7.40Y	123.3	0.00	1.69	11.68	16	78	38	90	0.00	0.0	3.007	0.001	0	0	0	8
PL.35913	PD.5146	A	6 A (CWC)	7.40Y	123.3	0.04	1.72	11.68	8	78	38	90	0.02	0.0	3.076	0.068	11	5	1	8
PL.35914	PL.35913	A	6 A (CWC)	7.40Y	123.3	0.01	1.73	8.21	6	55	26	90	0.00	0.0	3.103	0.027	23	11	2	6
PL.35297	PL.35914	A	6 A (CWC)	7.40Y	123.3	0.01	1.74	4.82	3	32	16	89	0.00	0.0	3.172	0.069	8	4	3	4
PL.35298	PL.35297	A	6 A (CWC)	7.40Y	123.3	0.00	1.75	3.62	3	24	12	89	0.00	0.0	3.199	0.027	24	12	1	1
PL.33442	PL.35913	A	6 A (CWC)	7.40Y	123.3	0.00	1.72	1.78	1	12	6	89	0.00	0.0	3.117	0.042	12	6	1	1
PL.61079	PL.61081	A	#1/0 ACSR	7.40Y	123.3	0.00	1.68	1.96	1	13	6	91	0.00	0.0	2.909	0.028	13	6	1	1

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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
PL.57166	PL.57165	ABC	336 MCM AC	7.40Y	123.3	0.00	1.68	0.00	0	0	0	100	0.00	0.0	2.912	0.040	0	0	0	0
PD.5871-B	PL.57166	ABC	Open	7.40Y	123.3	0.00	1.68	0.00	0	0	0	100	0.00	0.0	2.912	0.040	0	0	0	0
PL.52654	PL.35798	ABC	336 MCM AC	7.40Y	123.3	0.04	1.72	46.89	9	1020	207	98	0.26	0.0	2.944	0.138	0	0	0	30
PL.52655	PL.52654	ABC	336 MCM AC	7.39Y	123.2	0.04	1.76	46.89	9	1020	206	98	0.25	0.0	3.078	0.134	0	0	0	30
PL.35435	PL.52655	ABC	336 MCM AC	7.39Y	123.2	0.02	1.78	46.89	9	1020	206	98	0.14	0.0	3.153	0.075	0	0	0	30
PL.35432	PL.35435	ABC	336 MCM AC	7.39Y	123.2	0.01	1.79	46.89	9	1019	205	98	0.06	0.0	3.183	0.030	0	0	0	30
PL.60990	PL.35432	ABC	336 MCM AC	7.39Y	123.2	0.02	1.81	46.89	9	1019	205	98	0.10	0.0	3.239	0.055	0	0	0	30
PL.63317	PL.60990	ABC	336 MCM AC	7.39Y	123.2	0.01	1.82	46.89	9	1019	205	98	0.08	0.0	3.282	0.043	0	0	1	30
PL.63318	PL.63317	ABC	336 MCM AC	7.39Y	123.1	0.04	1.87	46.89	9	1019	205	98	0.25	0.0	3.416	0.133	0	0	0	29
PL.35433	PL.63318	ABC	336 MCM AC	7.39Y	123.1	0.02	1.89	46.89	9	1019	204	98	0.11	0.0	3.481	0.065	91	12	1	29
PL.35434	PL.35433	ABC	336 MCM AC	7.39Y	123.1	0.01	1.90	42.77	8	928	192	98	0.07	0.0	3.523	0.042	0	0	0	28
PL.56342	PL.35434	ABC	336 MCM AC	7.39Y	123.1	0.01	1.91	27.97	5	606	132	98	0.03	0.0	3.576	0.052	1	0	1	23
PL.56341	PL.56342	ABC	#4 ACSR	7.39Y	123.1	0.00	1.91	1.72	1	38	5	99	0.00	0.0	3.591	0.015	38	5	1	1
PL.56343	PL.56342	ABC	336 MCM AC	7.39Y	123.1	0.01	1.92	26.22	5	567	127	98	0.02	0.0	3.611	0.036	1	0	1	21
PL.62437	PL.56343	ABC	336 MCM AC	7.38Y	123.1	0.00	1.92	26.20	5	566	126	98	0.01	0.0	3.637	0.026	0	0	0	20
PL.62424	PL.62437	A	6 A (CWC)	7.38Y	123.1	0.00	1.92	0.10	0	1	0	100	0.00	0.0	3.698	0.061	1	0	1	1
PL.62427	PL.62437	A	#4 ACSR	7.38Y	123.1	0.00	1.92	21.23	16	141	68	90	0.00	0.0	3.638	0.001	0	0	0	14
PD.9334	PL.62427	A	40QA	7.38Y	123.1	0.00	1.92	21.23	53	141	68	90	0.00	0.0	3.638	0.001	0	0	0	14
PL.62428	PD.9334	A	#4 ACSR	7.38Y	123.1	0.01	1.93	21.23	16	141	68	90	0.01	0.0	3.650	0.012	0	0	0	14
PL.60703	PL.62428	A	#4 ACSR	7.38Y	123.0	0.05	1.98	21.23	16	141	68	90	0.05	0.0	3.710	0.060	45	22	3	14
PL.60704	PL.60703	A	#4 ACSR	7.38Y	123.0	0.03	2.01	14.51	11	96	47	90	0.02	0.0	3.763	0.053	37	18	2	11
PL.34563	PL.60704	A	#4 ACSR	7.38Y	123.0	0.00	2.01	8.98	7	60	29	90	0.00	0.0	3.769	0.005	0	0	0	9
PL.34905	PL.34563	A	1/0 AL URD	7.38Y	123.0	0.00	2.01	8.98	5	60	29	90	0.00	0.0	3.769	0.000	0	0	0	9
PD.5025	PL.34905	A	75QA	7.38Y	123.0	0.00	2.01	8.98	12	60	29	90	0.00	0.0	3.769	0.000	0	0	0	9
PL.36390	PD.5025	A	1/0 AL URD	7.38Y	123.0	0.01	2.03	8.98	5	60	29	90	0.01	0.0	3.813	0.044	0	0	0	9
PL.36934	PL.36390	A	#4 ACSR	7.38Y	123.0	0.00	2.03	8.98	7	60	29	90	0.00	0.0	3.814	0.000	0	0	0	9
PD.5089	PL.36934	A	60QA	7.38Y	123.0	0.00	2.03	8.98	15	60	29	90	0.00	0.0	3.814	0.000	0	0	0	9
PL.36935	PD.5089	A	#4 ACSR	7.38Y	123.0	0.00	2.03	8.98	7	60	29	90	0.00	0.0	3.818	0.005	41	20	6	9
PL.36933	PL.36935	A	#4 ACSR	7.38Y	123.0	0.01	2.04	2.74	2	18	9	89	0.00	0.0	3.900	0.082	0	0	0	3
PL.36929	PL.36933	A	#4 ACSR	7.38Y	123.0	0.00	2.04	2.74	2	18	9	89	0.00	0.0	3.944	0.044	7	3	1	3
PL.36930	PL.36929	A	#4 ACSR	7.38Y	123.0	0.00	2.04	1.66	1	11	5	91	0.00	0.0	3.965	0.021	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.36931	PL.36930	A	#4 ACSR	7.38Y	123.0	0.00	2.04	1.66	1	11	5	91	0.00	0.0	3.984	0.018	11	5	2	2
PL.36932	PL.36931	A	#4 ACSR	7.38Y	123.0	0.00	2.04	0.00	0	0	0	100	0.00	0.0	4.003	0.019	0	0	0	0
PL.63099	PL.36933	A	#1/0 ACSR	7.38Y	123.0	0.00	2.04	0.00	0	0	0	100	0.00	0.0	3.960	0.059	0	0	0	0
PL.63102	PL.62437	ABC	#1/0 ACSR	7.38Y	123.1	0.00	1.92	19.35	8	425	58	99	0.01	0.0	3.649	0.012	0	0	1	5
PL.63103	PL.63102	ABC	#1/0 ACSR	7.38Y	123.1	0.02	1.94	19.35	8	425	58	99	0.05	0.0	3.702	0.053	0	0	0	4
PL.62503	PL.63103	ABC	1/0 AL URD	7.38Y	123.1	0.00	1.94	0.00	0	0	0	100	0.00	0.0	3.722	0.020	0	0	0	0
PL.62504	PL.63103	ABC	#1/0 ACSR	7.38Y	123.1	0.00	1.95	19.35	8	425	58	99	0.01	0.0	3.714	0.012	0	0	0	4
PL.35124	PL.62504	ABC	#4 ACSR	7.38Y	123.1	0.00	1.95	1.07	1	24	3	99	0.00	0.0	3.730	0.016	24	3	1	1
PL.60634	PL.62504	ABC	#1/0 ACSR	7.38Y	123.0	0.10	2.05	18.27	8	401	54	99	0.30	0.1	4.049	0.335	0	0	0	3
PL.60636	PL.60634	ABC	1/0 AL URD	7.38Y	123.0	0.00	2.05	14.64	9	321	43	99	0.01	0.0	4.057	0.008	0	0	0	1
PD.9052	PL.60636	ABC	100CodeSMo	7.38Y	123.0	0.00	2.05	14.64	0	321	43	99	0.00	0.0	4.057	0.008	0	0	0	1
PL.60637	PD.9052	ABC	1/0 AL URD	7.38Y	122.9	0.01	2.05	14.64	9	321	43	99	0.01	0.0	4.094	0.037	321	43	1	1
PL.60635	PL.60634	ABC	#1/0 ACSR	7.38Y	122.9	0.00	2.05	3.64	2	80	11	99	0.00	0.0	4.209	0.161	80	11	2	2
PL.33681	PL.35434	ABC	336 MCM AC	7.39Y	123.1	0.00	1.90	7.60	1	164	38	97	0.00	0.0	3.545	0.022	164	38	4	4
PL.34328	PL.35434	ABC	336 MCM AC	7.39Y	123.1	0.00	1.90	0.00	0	0	0	100	0.00	0.0	3.569	0.046	0	0	0	0
PD.5884-A	PL.34328	ABC	Open	7.39Y	123.1	0.00	1.90	0.00	0	0	0	100	0.00	0.0	3.569	0.046	0	0	0	0
PL.33220	PL.35434	ABC	#4 ACSR	7.39Y	123.1	0.00	1.90	7.22	6	158	21	99	0.00	0.0	3.558	0.035	158	21	1	1
CP.99	PL.52654	ABC	Cap (300)	7.40Y	123.3	0.00	1.72	0.00	0	0	0	100	0.00	0.0	2.944	0.035	0	0	0	0
PL.63315	PL.35291	ABC	#4 ACSR	7.41Y	123.6	0.00	1.43	0.00	0	0	0	100	0.00	0.0	2.155	0.002	0	0	0	0
PL.35518	PL.36068	C	#2 ACSR	7.42Y	123.7	0.00	1.33	0.33	0	2	1	89	0.00	0.0	1.956	0.002	0	0	0	1
PD.5842	PL.35518	C	60QA	7.42Y	123.7	0.00	1.33	0.33	1	2	1	89	0.00	0.0	1.956	0.002	0	0	0	1
PL.35519	PD.5842	C	#2 ACSR	7.42Y	123.7	0.00	1.33	0.33	0	2	1	89	0.00	0.0	2.036	0.081	2	1	1	1
PL.59693	PL.62935	ABC	#1/0 ACSR	7.43Y	123.9	0.11	1.13	79.65	35	1759	254	99	1.38	0.1	1.431	0.082	0	0	0	6
PL.59697	PL.59693	ABC	#1/0 ACSR	7.43Y	123.8	0.05	1.18	78.40	34	1731	240	99	0.62	0.0	1.469	0.038	0	0	0	1
PL.59698	PL.59697	C	#2 ACSR	7.43Y	123.8	0.00	1.18	0.15	0	1	0	100	0.00	0.0	1.469	0.000	0	0	0	1
PD.5733	PL.59698	C	60QA	7.43Y	123.8	0.00	1.18	0.15	0	1	0	100	0.00	0.0	1.469	0.000	0	0	0	1
PL.35387	PD.5733	C	#2 ACSR	7.43Y	123.8	0.00	1.18	0.15	0	1	0	100	0.00	0.0	1.507	0.038	1	0	1	1
PL.59696	PL.59697	ABC	#1/0 ACSR	7.43Y	123.8	0.02	1.20	78.35	34	1730	239	99	0.24	0.0	1.484	0.015	0	0	0	0
PD.8894	PL.59696	ABC	351VWE	7.43Y	123.8	0.00	1.20	78.35	0	1730	238	99	0.00	0.0	1.484	0.015	0	0	0	0
PL.59700	PD.8894	ABC	#1/0 ACSR	7.43Y	123.8	0.03	1.23	78.35	34	1730	238	99	0.33	0.0	1.504	0.020	0	0	0	0
PL.59699	PL.59700	ABC	#1/0 ACSR	7.43Y	123.8	0.00	1.23	78.35	34	1729	238	99	0.05	0.0	1.507	0.003	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PL.52801	PL.59699	ABC	#1/0 ACSR	7.42Y	123.7	0.05	1.29	78.35	34	1729	238	99	0.68	0.0	1.548	0.042	0	0	0	0
PL.52798	PL.52801	ABC	#1/0 ACSR	7.41Y	123.6	0.15	1.44	78.35	34	1728	237	99	1.94	0.1	1.667	0.119	0	0	0	0
PL.36207	PL.52798	ABC	#1/0 ACSR	7.41Y	123.5	0.06	1.50	78.35	34	1727	236	99	0.78	0.0	1.715	0.048	0	0	0	0
PL.36206	PL.36207	ABC	#1/0 ACSR	7.41Y	123.4	0.06	1.56	78.35	34	1726	235	99	0.71	0.0	1.758	0.043	0	0	0	0
PL.36033	PL.36206	ABC	#1/0 ACSR	7.40Y	123.4	0.07	1.63	78.35	34	1725	234	99	0.94	0.1	1.815	0.057	0	0	0	0
PL.36043	PL.36033	ABC	#1/0 ACSR	7.40Y	123.4	0.01	1.64	78.35	34	1724	233	99	0.09	0.0	1.821	0.006	0	0	0	0
PL.33998	PL.36043	ABC	1/0 AL URD	7.40Y	123.4	0.00	1.64	78.35	46	1724	233	99	0.00	0.0	1.821	0.000	0	0	0	0
PD.5211	PL.33998	ABC	140L	7.40Y	123.4	0.00	1.64	78.35	56	1724	233	99	0.00	0.0	1.821	0.000	0	0	0	0
PL.33999	PD.5211	ABC	1/0 AL URD	7.40Y	123.4	0.00	1.64	78.35	46	1724	233	99	0.01	0.0	1.823	0.002	1724	233	0	0
PL.59692	PL.36206	ABC	#1/0 ACSR	7.41Y	123.4	0.00	1.56	0.00	0	0	0	100	0.00	0.0	1.785	0.027	0	0	0	0
PL.34630	PL.36206	ABC	#1/0 ACSR	7.41Y	123.4	0.00	1.56	0.00	0	0	0	100	0.00	0.0	1.852	0.094	0	0	0	0
PL.34902	PL.36207	ABC	#1/0 ACSR	7.41Y	123.5	0.00	1.50	0.00	0	0	0	100	0.00	0.0	1.736	0.022	0	0	0	0
PL.52799	PL.52801	ABC	#1/0 ACSR	7.42Y	123.7	0.00	1.29	0.00	0	0	0	100	0.00	0.0	1.592	0.043	0	0	0	0
PL.52800	PL.52801	ABC	#2 ACSR	7.42Y	123.7	0.00	1.29	0.00	0	0	0	100	0.00	0.0	1.562	0.014	0	0	0	0
PL.52802	PL.59699	C	#2 ACSR	7.43Y	123.8	0.00	1.23	0.00	0	0	0	100	0.00	0.0	1.507	0.000	0	0	0	0
PD.5163	PL.52802	C	30QA	7.43Y	123.8	0.00	1.23	0.00	0	0	0	100	0.00	0.0	1.507	0.000	0	0	0	0
PL.35389	PD.5163	C	#2 ACSR	7.43Y	123.8	0.00	1.23	0.00	0	0	0	100	0.00	0.0	1.557	0.050	0	0	0	0
PL.33805	PL.59693	C	#4 ACSR	7.43Y	123.9	0.00	1.13	3.96	3	26	13	89	0.00	0.0	1.432	0.001	0	0	0	5
PD.5754	PL.33805	C	75QA	7.43Y	123.9	0.00	1.13	3.96	5	26	13	89	0.00	0.0	1.432	0.001	0	0	0	5
PL.33683	PD.5754	C	#4 ACSR	7.43Y	123.8	0.02	1.15	3.96	3	26	13	89	0.00	0.0	1.528	0.096	1	0	1	5
PL.33684	PL.33683	C	#4 ACSR	7.43Y	123.8	0.01	1.16	1.83	1	12	6	89	0.00	0.0	1.631	0.103	0	0	0	2
PL.33520	PL.33684	C	#4 ACSR	7.43Y	123.8	0.00	1.16	1.50	1	10	5	89	0.00	0.0	1.714	0.083	10	5	1	1
PL.35252	PL.33684	C	#4 ACSR	7.43Y	123.8	0.00	1.16	0.33	0	2	1	89	0.00	0.0	1.695	0.064	2	1	1	1
PL.36020	PL.33683	C	#4 ACSR	7.43Y	123.8	0.01	1.16	2.06	2	14	7	89	0.00	0.0	1.599	0.071	0	0	1	2
PL.36021	PL.36020	C	#4 ACSR	7.43Y	123.8	0.00	1.16	2.06	2	14	7	89	0.00	0.0	1.705	0.106	14	7	1	1
PL.59694	PL.62935	C	#4 ACSR	7.44Y	124.0	0.00	1.03	0.00	0	0	0	100	0.00	0.0	1.353	0.003	0	0	0	0
CP.101	PL.62934	ABC	Cap (300)	7.47Y	124.5	0.00	0.54	0.00	0	0	0	100	0.00	0.0	0.864	0.003	0	0	0	0
PL.52996	Laurel Ind 1	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	243.06	47	4899	2432	90	0.03	0.0	0.004	0.004	0	0	0	580
PL.52997	PL.52996	ABC	397 SPACER	7.50Y	125.0	0.00	0.01	243.06	47	4899	2431	90	0.02	0.0	0.006	0.002	0	0	0	580

----- Feeder No. 3 (SinkingCreek F3) Beginning with Device PD.8059 -----

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PD.8059	PL.52997	ABC	480VWE	7.50Y	125.0	0.00	0.01	243.06	0	4899	2431	90	0.00	0.0	0.006	0.002	0	0	0	580
PL.33733	PD.8059	ABC	397 SPACER	7.50Y	124.9	0.06	0.07	243.06	47	4899	2431	90	0.42	0.0	0.060	0.054	16	8	1	580
PL.33734	PL.33733	ABC	397 SPACER	7.49Y	124.8	0.10	0.17	238.63	46	4808	2383	90	0.72	0.0	0.156	0.096	2	1	1	572
PL.34762	PL.33734	ABC	#3/0 ACSR	7.49Y	124.8	0.01	0.18	7.00	2	149	50	95	0.01	0.0	0.252	0.097	0	0	0	11
PL.34338	PL.34762	ABC	#3/0 ACSR	7.49Y	124.8	0.03	0.20	3.72	1	75	36	90	0.01	0.0	0.733	0.480	0	0	0	6
PL.36072	PL.34338	ABC	#3/0 ACSR	7.49Y	124.8	0.01	0.21	1.61	1	33	16	90	0.00	0.0	1.057	0.325	0	0	0	3
PL.35639	PL.36072	ABC	#3/0 ACSR	7.49Y	124.8	0.00	0.21	1.61	1	33	16	90	0.00	0.0	1.167	0.109	0	0	0	3
PL.36647	PL.35639	ABC	#3/0 ACSR	7.49Y	124.8	0.00	0.21	1.61	1	33	16	90	0.00	0.0	1.218	0.051	0	0	0	3
PL.36648	PL.36647	ABC	#3/0 ACSR	7.49Y	124.8	0.00	0.22	1.61	1	33	16	90	0.00	0.0	1.351	0.133	0	0	0	3
PL.34241	PL.36648	ABC	#3/0 ACSR	7.49Y	124.8	0.00	0.22	0.00	0	0	0	100	0.00	0.0	1.418	0.067	0	0	0	0
PD.5868-A	PL.34241	ABC	Open	7.49Y	124.8	0.00	0.22	0.00	0	0	0	100	0.00	0.0	1.418	0.067	0	0	0	0
PL.35386	PL.36648	A	#4 ACSR	7.49Y	124.8	0.00	0.22	1.18	1	8	4	89	0.00	0.0	1.351	0.001	0	0	0	1
PD.5039	PL.35386	A	40QA	7.49Y	124.8	0.00	0.22	1.18	3	8	4	89	0.00	0.0	1.351	0.001	0	0	0	1
PL.33522	PD.5039	A	#4 ACSR	7.49Y	124.8	0.00	0.22	1.18	1	8	4	89	0.00	0.0	1.422	0.070	0	0	0	1
PL.33523	PL.33522	A	#4 ACSR	7.49Y	124.8	0.00	0.22	0.00	0	0	0	100	0.00	0.0	1.439	0.017	0	0	0	0
PL.35071	PL.33522	A	#4 ACSR	7.49Y	124.8	0.00	0.22	1.18	1	8	4	89	0.00	0.0	1.443	0.021	8	4	1	1
PL.33806	PL.36648	C	6 A (CWC)	7.49Y	124.8	0.00	0.22	1.20	1	8	4	89	0.00	0.0	1.352	0.001	0	0	0	1
PD.5040	PL.33806	C	40QA	7.49Y	124.8	0.00	0.22	1.20	3	8	4	89	0.00	0.0	1.352	0.001	0	0	0	1
PL.33334	PD.5040	C	6 A (CWC)	7.49Y	124.8	0.00	0.22	1.20	1	8	4	89	0.00	0.0	1.404	0.053	8	4	1	1
PL.34757	PL.36648	A	#2 ACSR	7.49Y	124.8	0.00	0.22	2.46	1	17	8	90	0.00	0.0	1.377	0.026	17	8	1	1
PL.36649	PL.36647	A	#2 ACSR	7.49Y	124.8	0.00	0.21	0.00	0	0	0	100	0.00	0.0	1.219	0.001	0	0	0	0
PD.5213	PL.36649	A	40QA	7.49Y	124.8	0.00	0.21	0.00	0	0	0	100	0.00	0.0	1.219	0.001	0	0	0	0
PL.36650	PD.5213	A	#2 ACSR	7.49Y	124.8	0.00	0.21	0.00	0	0	0	100	0.00	0.0	1.257	0.039	0	0	0	0
PL.35640	PL.36072	C	6 A (CWC)	7.49Y	124.8	0.00	0.21	0.00	0	0	0	100	0.00	0.0	1.058	0.001	0	0	0	0
PD.5110	PL.35640	C	40QA	7.49Y	124.8	0.00	0.21	0.00	0	0	0	100	0.00	0.0	1.058	0.001	0	0	0	0
PL.35641	PD.5110	C	6 A (CWC)	7.49Y	124.8	0.00	0.21	0.00	0	0	0	100	0.00	0.0	1.100	0.041	0	0	0	0
PL.36070	PL.34338	C	6 A (CWC)	7.49Y	124.8	0.00	0.20	6.33	5	43	21	90	0.00	0.0	0.736	0.003	0	0	0	3
PD.5038	PL.36070	C	20T	7.49Y	124.8	0.00	0.20	6.33	0	43	21	90	0.00	0.0	0.736	0.003	0	0	0	3
PL.36071	PD.5038	C	6 A (CWC)	7.48Y	124.7	0.09	0.29	6.33	5	43	21	90	0.03	0.1	1.065	0.328	8	4	1	3
PL.36069	PL.36071	C	6 A (CWC)	7.48Y	124.7	0.04	0.33	5.17	4	35	17	90	0.01	0.0	1.217	0.152	2	1	1	2

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

Balanced Voltage Drop Report
Source: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.35192	PL.36069	C	6 A (CWC)	7.48Y	124.6	0.02	0.35	4.85	3	33	16	90	0.01	0.0	1.314	0.097	0	0	0	1
PL.35325	PL.35192	C	#4 ACSR	7.48Y	124.6	0.00	0.35	0.00	0	0	0	100	0.00	0.0	1.397	0.083	0	0	0	0
PL.35191	PL.35192	C	#4 ACSR	7.48Y	124.6	0.00	0.35	0.00	0	0	0	100	0.00	0.0	1.352	0.038	0	0	0	0
PD.5022	PL.35191	C	60QA	7.48Y	124.6	0.00	0.35	0.00	0	0	0	100	0.00	0.0	1.352	0.038	0	0	0	0
PL.35193	PL.35192	C	6 A (CWC)	7.48Y	124.6	0.02	0.37	4.85	3	33	16	90	0.00	0.0	1.456	0.141	33	16	1	1
PL.56626	PL.34762	C	6 A (CWC)	7.49Y	124.8	0.00	0.18	1.60	1	11	5	91	0.00	0.0	0.256	0.004	0	0	0	4
PD.8318	PL.56626	C	25T	7.49Y	124.8	0.00	0.18	1.60	0	11	5	91	0.00	0.0	0.256	0.004	0	0	0	4
PL.56627	PD.8318	C	6 A (CWC)	7.49Y	124.8	0.01	0.19	1.60	1	11	5	91	0.00	0.0	0.372	0.116	0	0	0	4
PL.36083	PL.56627	C	6 A (CWC)	7.49Y	124.8	0.01	0.20	1.34	1	9	4	91	0.00	0.0	0.537	0.165	0	0	0	2
PL.36084	PL.36083	C	6 A (CWC)	7.49Y	124.8	0.00	0.20	0.01	0	0	0	100	0.00	0.0	0.620	0.083	0	0	1	1
PL.33670	PL.36083	C	#1/0 ACSR	7.49Y	124.8	0.00	0.20	1.34	1	9	4	91	0.00	0.0	0.668	0.130	9	4	1	1
PL.36085	PL.56627	C	6 A (CWC)	7.49Y	124.8	0.00	0.19	0.25	0	2	1	89	0.00	0.0	0.556	0.184	0	0	0	2
PL.34784	PL.36085	C	6 A (CWC)	7.49Y	124.8	0.00	0.19	0.23	0	2	1	89	0.00	0.0	0.663	0.106	2	1	1	1
PL.36086	PL.36085	C	6 A (CWC)	7.49Y	124.8	0.00	0.19	0.02	0	0	0	100	0.00	0.0	0.715	0.158	0	0	1	1
PL.36165	PL.34762	C	1/0 AL URD	7.49Y	124.8	0.00	0.18	8.49	5	63	9	99	0.00	0.0	0.257	0.004	0	0	0	1
PD.5214	PL.36165	C	40QA	7.49Y	124.8	0.00	0.18	8.49	21	63	9	99	0.00	0.0	0.257	0.004	0	0	0	1
PL.36166	PD.5214	C	1/0 AL URD	7.49Y	124.8	0.00	0.18	8.49	5	63	9	99	0.00	0.0	0.293	0.037	63	9	1	1
PL.35725	PL.33734	ABC	#3/0 ACSR	7.41Y	123.5	1.34	1.50	231.59	77	4657	2323	89	36.13	0.8	0.557	0.401	0	0	0	560
PL.35852	PL.35725	B	6 A (CWC)	7.41Y	123.5	0.00	1.51	0.71	1	5	2	93	0.00	0.0	0.600	0.043	0	0	0	2
PL.35853	PL.35852	B	6 A (CWC)	7.41Y	123.5	0.00	1.51	0.71	1	5	2	93	0.00	0.0	0.600	0.000	0	0	0	2
PD.5209	PL.35853	B	40QA	7.41Y	123.5	0.00	1.51	0.71	2	5	2	93	0.00	0.0	0.600	0.000	0	0	0	2
PL.35854	PD.5209	B	6 A (CWC)	7.41Y	123.5	0.00	1.51	0.71	1	5	2	93	0.00	0.0	0.645	0.045	5	2	2	2
PL.36597	PL.35725	ABC	#3/0 ACSR	7.39Y	123.1	0.37	1.88	231.35	77	4616	2268	90	10.05	0.2	0.669	0.112	0	0	0	558
PL.35724	PL.36597	ABC	#3/0 ACSR	7.36Y	122.6	0.53	2.40	231.35	77	4606	2253	90	14.35	0.3	0.829	0.160	8	4	1	558
PL.36188	PL.35724	ABC	#3/0 ACSR	7.34Y	122.4	0.23	2.63	230.93	77	4583	2228	90	6.16	0.1	0.897	0.069	0	0	0	557
PL.35722	PL.36188	ABC	#3/0 ACSR	7.34Y	122.3	0.07	2.70	230.21	77	4562	2213	90	1.91	0.0	0.919	0.021	12	6	1	556
PL.36185	PL.35722	ABC	#3/0 ACSR	7.33Y	122.1	0.16	2.86	229.58	77	4548	2204	90	4.37	0.1	0.968	0.049	9	4	2	555
PL.35717	PL.36185	ABC	#3/0 ACSR	7.32Y	122.0	0.14	3.01	229.14	76	4535	2193	90	3.88	0.1	1.012	0.044	0	0	0	553
PL.35721	PL.35717	A	#4 ACSR	7.32Y	122.0	0.00	3.01	0.71	1	5	2	93	0.00	0.0	1.013	0.001	0	0	0	1
PD.5208	PL.35721	A	40QA	7.32Y	122.0	0.00	3.01	0.71	2	5	2	93	0.00	0.0	1.013	0.001	0	0	0	1
PL.35726	PD.5208	A	#4 ACSR	7.32Y	122.0	0.00	3.01	0.71	1	5	2	93	0.00	0.0	1.080	0.067	5	2	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.35719	PL.35717	C	#4 ACSR	7.32Y	122.0	0.00	3.01	0.00	0	0	0	100	0.00	0.0	1.014	0.001	0	0	0	0
PD.5051	PL.35719	C	40QA	7.32Y	122.0	0.00	3.01	0.00	0	0	0	100	0.00	0.0	1.014	0.001	0	0	0	0
PL.35720	PD.5051	C	#4 ACSR	7.32Y	122.0	0.00	3.01	0.00	0	0	0	100	0.00	0.0	1.060	0.046	0	0	0	0
PL.35509	PL.35717	ABC	#3/0 ACSR	7.31Y	121.9	0.13	3.14	228.90	76	4526	2185	90	3.57	0.1	1.053	0.041	9	5	2	552
PL.35716	PL.35509	ABC	#3/0 ACSR	7.30Y	121.6	0.23	3.37	213.35	71	4216	2031	90	5.80	0.1	1.129	0.076	3	1	1	509
PL.36613	PL.35716	ABC	#3/0 ACSR	7.29Y	121.5	0.14	3.51	213.20	71	4207	2021	90	3.42	0.1	1.173	0.045	0	0	0	508
PL.60630	PL.36613	A	#4 ACSR	7.29Y	121.5	0.00	3.51	2.39	2	16	8	89	0.00	0.0	1.186	0.012	16	8	1	1
PL.36618	PL.36613	ABC	#3/0 ACSR	7.29Y	121.5	0.04	3.55	212.40	71	4188	2009	90	1.00	0.0	1.187	0.013	21	10	2	507
PL.60693	PL.36618	ABC	#3/0 ACSR	7.27Y	121.2	0.25	3.80	211.36	70	4167	1997	90	6.33	0.2	1.271	0.085	9	5	1	505
PL.60695	PL.60693	C	#4 ACSR	7.27Y	121.2	0.00	3.80	2.07	2	14	7	89	0.00	0.0	1.276	0.005	0	0	0	2
PD.8509	PL.60695	C	40QA	7.27Y	121.2	0.00	3.80	2.07	5	14	7	89	0.00	0.0	1.276	0.005	0	0	0	2
PL.57510	PD.8509	C	#4 ACSR	7.27Y	121.2	0.00	3.81	2.07	2	14	7	89	0.00	0.0	1.309	0.033	14	7	2	2
PL.60694	PL.60693	A	#4 ACSR	7.27Y	121.2	0.00	3.80	3.32	3	22	11	89	0.00	0.0	1.276	0.005	0	0	0	5
PD.8371	PL.60694	A	15T	7.27Y	121.2	0.00	3.80	3.32	0	22	11	89	0.00	0.0	1.276	0.005	0	0	0	5
PL.57488	PD.8371	A	#4 ACSR	7.27Y	121.2	0.00	3.81	3.32	3	22	11	89	0.00	0.0	1.288	0.012	0	0	0	5
PL.55830	PL.57488	A	#4 ACSR	7.27Y	121.2	0.00	3.81	3.32	3	22	11	89	0.00	0.0	1.323	0.035	10	5	2	5
PL.55831	PL.55830	A	#4 ACSR	7.27Y	121.2	0.00	3.81	1.86	1	12	6	89	0.00	0.0	1.406	0.083	12	6	3	3
PL.35862	PL.55831	A	#4 ACSR	7.27Y	121.2	0.00	3.81	0.00	0	0	0	100	0.00	0.0	1.447	0.041	0	0	0	0
PL.60691	PL.60693	C	#4 ACSR	7.27Y	121.2	0.03	3.84	16.01	12	105	51	90	0.03	0.0	1.321	0.050	12	6	2	12
PL.35855	PL.60691	C	#4 ACSR	7.27Y	121.1	0.04	3.88	12.53	10	82	40	90	0.02	0.0	1.399	0.078	22	11	2	8
PL.35856	PL.35855	C	#4 ACSR	7.27Y	121.1	0.01	3.88	9.17	7	60	29	90	0.00	0.0	1.416	0.017	5	3	1	6
PL.35857	PL.35856	C	#4 ACSR	7.27Y	121.1	0.01	3.90	8.37	6	55	26	90	0.01	0.0	1.457	0.041	13	6	1	5
PL.35858	PL.35857	C	#4 ACSR	7.27Y	121.1	0.00	3.90	1.85	1	12	6	89	0.00	0.0	1.553	0.096	12	6	1	1
PL.35859	PL.35857	C	#4 ACSR	7.27Y	121.1	0.01	3.90	4.58	4	30	14	91	0.00	0.0	1.500	0.043	20	10	1	3
PL.35860	PL.35859	C	#4 ACSR	7.27Y	121.1	0.00	3.91	1.51	1	10	5	89	0.00	0.0	1.580	0.080	10	5	2	2
PL.33996	PL.60691	C	#1/0 ACSR	7.27Y	121.2	0.00	3.84	1.71	1	11	5	91	0.00	0.0	1.347	0.027	11	5	2	2
PL.60692	PL.60693	ABC	#3/0 ACSR	7.26Y	120.9	0.27	4.08	203.75	68	4011	1916	90	6.53	0.2	1.365	0.094	31	15	4	485
PL.58459	PL.60692	A	6 A (CWC)	7.26Y	120.9	0.00	4.08	15.00	11	98	47	90	0.00	0.0	1.368	0.003	0	0	0	9
PD.8684	PL.58459	A	25T	7.26Y	120.9	0.00	4.08	15.00	0	98	47	90	0.00	0.0	1.368	0.003	0	0	0	9
PL.58460	PD.8684	A	6 A (CWC)	7.25Y	120.9	0.04	4.12	15.00	11	98	47	90	0.03	0.0	1.429	0.060	10	5	1	9
PL.35275	PL.58460	A	6 A (CWC)	7.25Y	120.8	0.03	4.15	10.71	8	70	34	90	0.02	0.0	1.498	0.069	9	4	1	7

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.34806	PL.35275	A	#1/0 ACSR	7.25Y	120.8	0.00	4.15	0.00	0	0	0	100	0.00	0.0	1.522	0.024	0	0	0	0
PL.35276	PL.35275	A	6 A (CWC)	7.25Y	120.8	0.02	4.18	9.30	7	61	29	90	0.01	0.0	1.550	0.052	0	0	1	6
PL.35863	PL.35276	A	6 A (CWC)	7.25Y	120.8	0.01	4.18	4.05	3	26	13	89	0.00	0.0	1.607	0.056	13	6	1	2
PL.35864	PL.35863	A	6 A (CWC)	7.25Y	120.8	0.00	4.19	2.02	1	13	6	91	0.00	0.0	1.658	0.051	13	6	1	1
PL.60701	PL.35276	A	6 A (CWC)	7.25Y	120.8	0.01	4.19	5.25	4	34	17	89	0.00	0.0	1.634	0.084	34	17	3	3
PL.34234	PL.58460	A	#2 ACSR	7.25Y	120.9	0.00	4.12	2.73	2	18	9	89	0.00	0.0	1.473	0.044	18	9	1	1
PL.35861	PL.60692	ABC	#3/0 ACSR	7.24Y	120.7	0.22	4.29	197.16	66	3875	1844	90	5.01	0.1	1.442	0.077	15	7	1	472
PL.36050	PL.35861	ABC	#3/0 ACSR	7.23Y	120.6	0.14	4.44	196.39	65	3855	1829	90	3.36	0.1	1.494	0.052	6	3	1	471
PL.62936	PL.36050	ABC	#3/0 ACSR	7.23Y	120.5	0.08	4.52	196.06	65	3845	1821	90	1.83	0.0	1.523	0.028	0	0	0	468
PL.62937	PL.62936	ABC	#3/0 ACSR	7.22Y	120.3	0.19	4.70	196.06	65	3844	1818	90	4.34	0.1	1.590	0.067	2	1	1	468
PL.60843	PL.62937	C	#4 ACSR	7.22Y	120.3	0.00	4.71	7.08	5	46	22	90	0.00	0.0	1.593	0.003	0	0	0	4
PD.8782	PL.60843	C	25T	7.22Y	120.3	0.00	4.71	7.08	0	46	22	90	0.00	0.0	1.593	0.003	0	0	0	4
PL.59437	PD.8782	C	#4 ACSR	7.22Y	120.3	0.01	4.72	7.08	5	46	22	90	0.00	0.0	1.645	0.052	24	12	2	4
PL.35361	PL.59437	C	#4 ACSR	7.22Y	120.3	0.01	4.73	3.35	3	22	11	89	0.00	0.0	1.713	0.068	0	0	0	2
PL.35362	PL.35361	C	#4 ACSR	7.22Y	120.3	0.00	4.73	3.35	3	22	11	89	0.00	0.0	1.766	0.053	22	11	2	2
PL.60842	PL.62937	ABC	#3/0 ACSR	7.20Y	120.1	0.22	4.93	193.62	65	3792	1789	90	5.06	0.1	1.670	0.080	7	3	2	463
PL.35282	PL.60842	ABC	#3/0 ACSR	7.20Y	120.0	0.09	5.02	94.53	32	1839	890	90	1.00	0.1	1.737	0.067	0	0	0	250
PL.35283	PL.35282	ABC	#3/0 ACSR	7.19Y	119.9	0.11	5.13	93.55	31	1819	880	90	1.24	0.1	1.822	0.085	13	6	1	247
PL.35247	PL.35283	ABC	#3/0 ACSR	7.19Y	119.8	0.09	5.22	91.67	31	1781	860	90	0.96	0.1	1.890	0.068	0	0	0	242
PL.35712	PL.35247	ABC	#3/0 ACSR	7.19Y	119.8	0.00	5.22	91.67	31	1780	859	90	0.01	0.0	1.891	0.001	0	0	0	242
PD.5854	PL.35712	ABC	140L	7.19Y	119.8	0.00	5.22	91.67	65	1780	859	90	0.00	0.0	1.891	0.001	0	0	0	242
PL.52448	PD.5854	ABC	#3/0 ACSR	7.18Y	119.7	0.05	5.27	91.67	31	1780	859	90	0.53	0.0	1.928	0.038	0	0	0	242
PL.52450	PL.52448	C	6 A (CWC)	7.18Y	119.7	0.00	5.27	10.55	8	68	33	90	0.00	0.0	1.930	0.001	0	0	0	5
PD.8023	PL.52450	C	40QA	7.18Y	119.7	0.00	5.27	10.55	26	68	33	90	0.00	0.0	1.930	0.001	0	0	0	5
PL.52447	PD.8023	C	6 A (CWC)	7.18Y	119.7	0.01	5.28	10.55	8	68	33	90	0.00	0.0	1.953	0.023	39	19	3	5
PL.52446	PL.52447	C	6 A (CWC)	7.18Y	119.7	0.00	5.28	4.59	3	30	14	91	0.00	0.0	1.982	0.028	30	14	2	2
PL.35711	PL.52446	C	6 A (CWC)	7.18Y	119.7	0.00	5.28	0.00	0	0	0	100	0.00	0.0	2.045	0.063	0	0	0	0
PL.52451	PL.52448	ABC	#1/0 ACSR	7.18Y	119.7	0.00	5.27	15.25	7	296	143	90	0.00	0.0	1.929	0.001	0	0	0	39
PD.8024	PL.52451	ABC	50QA	7.18Y	119.7	0.00	5.27	15.25	31	296	143	90	0.00	0.0	1.929	0.001	0	0	0	39
PL.52453	PD.8024	ABC	#1/0 ACSR	7.18Y	119.7	0.02	5.28	15.25	7	296	143	90	0.03	0.0	1.981	0.052	11	5	1	39
PL.52454	PL.52453	C	#2 ACSR	7.18Y	119.7	0.00	5.28	1.22	1	8	4	89	0.00	0.0	1.982	0.001	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.8026	PL.52454	C	20QA	7.18Y	119.7	0.00	5.28	1.22	6	8	4	89	0.00	0.0	1.982	0.001	0	0	0	1
PL.52455	PD.8026	C	#2 ACSR	7.18Y	119.7	0.00	5.28	1.22	1	8	4	89	0.00	0.0	2.028	0.046	8	4	1	1
PL.52456	PL.52453	ABC	#1/0 ACSR	7.18Y	119.7	0.02	5.30	14.28	6	277	134	90	0.03	0.0	2.040	0.059	0	0	0	37
PL.60840	PL.52456	ABC	#1/0 ACSR	7.18Y	119.7	0.02	5.32	13.71	6	266	129	90	0.03	0.0	2.104	0.064	8	4	1	36
PL.60841	PL.60840	ABC	#1/0 ACSR	7.18Y	119.7	0.02	5.33	13.31	6	258	125	90	0.03	0.0	2.172	0.068	0	0	0	35
PL.52491	PL.60841	C	#2 ACSR	7.18Y	119.7	0.00	5.33	4.26	2	28	13	91	0.00	0.0	2.174	0.002	0	0	0	4
PD.8072	PL.52491	C	25QA	7.18Y	119.7	0.00	5.33	4.26	17	28	13	91	0.00	0.0	2.174	0.002	0	0	0	4
PL.52492	PD.8072	C	#4 ACSR	7.18Y	119.7	0.01	5.34	4.26	3	28	13	91	0.00	0.0	2.217	0.043	0	0	0	4
PL.52489	PL.52492	C	#2 ACSR	7.18Y	119.7	0.00	5.35	2.64	2	17	8	90	0.00	0.0	2.272	0.055	17	8	2	2
PL.52159	PL.52489	C	#2 ACSR	7.18Y	119.7	0.00	5.35	0.00	0	0	0	100	0.00	0.0	2.298	0.026	0	0	0	0
PL.52490	PL.52492	C	#4 ACSR	7.18Y	119.7	0.00	5.34	1.61	1	10	5	89	0.00	0.0	2.261	0.044	10	5	2	2
PL.52458	PL.60841	ABC	#1/0 ACSR	7.18Y	119.6	0.02	5.35	11.89	5	230	112	90	0.02	0.0	2.242	0.070	21	10	2	31
PL.52459	PL.52458	ABC	#1/0 ACSR	7.18Y	119.6	0.01	5.36	10.80	5	209	101	90	0.01	0.0	2.272	0.030	0	0	0	29
PL.52460	PL.52459	C	#1/0 ACSR	7.18Y	119.6	0.00	5.36	1.10	0	7	3	92	0.00	0.0	2.291	0.019	7	3	2	2
PL.52465	PL.52459	ABC	#1/0 ACSR	7.18Y	119.6	0.01	5.36	10.43	5	202	98	90	0.01	0.0	2.307	0.035	8	4	1	27
PL.52466	PL.52465	A	#1/0 ACSR	7.18Y	119.6	0.00	5.36	2.66	1	17	8	90	0.00	0.0	2.309	0.003	0	0	0	2
PD.8027	PL.52466	A	15T	7.18Y	119.6	0.00	5.36	2.66	0	17	8	90	0.00	0.0	2.309	0.003	0	0	0	2
PL.57547	PD.8027	A	#1/0 ACSR	7.18Y	119.6	0.01	5.37	2.66	1	17	8	90	0.00	0.0	2.425	0.116	9	4	1	2
PL.57548	PL.57547	A	#1/0 ACSR	7.18Y	119.6	0.00	5.37	1.30	1	8	4	89	0.00	0.0	2.462	0.037	8	4	1	1
PL.52467	PL.52465	A	#2 ACSR	7.18Y	119.6	0.00	5.36	8.65	5	56	27	90	0.00	0.0	2.309	0.002	0	0	0	4
PD.8028	PL.52467	A	25QA	7.18Y	119.6	0.00	5.36	8.65	35	56	27	90	0.00	0.0	2.309	0.002	0	0	0	4
PL.52461	PD.8028	A	#2 ACSR	7.18Y	119.6	0.01	5.38	8.65	5	56	27	90	0.01	0.0	2.364	0.055	16	8	1	4
PL.52462	PL.52461	A	#2 ACSR	7.18Y	119.6	0.00	5.38	6.18	4	40	19	90	0.00	0.0	2.400	0.036	27	13	2	3
PL.52463	PL.52462	A	#2 ACSR	7.18Y	119.6	0.00	5.38	1.99	1	13	6	91	0.00	0.0	2.418	0.018	0	0	0	1
PL.52464	PL.52463	A	#2 ACSR	7.18Y	119.6	0.00	5.38	1.99	1	13	6	91	0.00	0.0	2.455	0.036	13	6	1	1
PL.52468	PL.52465	ABC	#1/0 ACSR	7.18Y	119.6	0.01	5.37	6.24	3	121	59	90	0.00	0.0	2.356	0.050	12	6	2	20
PL.52150	PL.52468	ABC	#1/0 ACSR	7.18Y	119.6	0.01	5.37	5.63	2	109	53	90	0.00	0.0	2.407	0.051	0	0	0	18
PL.52153	PL.52150	ABC	#1/0 ACSR	7.18Y	119.6	0.01	5.38	5.63	2	109	53	90	0.00	0.0	2.461	0.053	0	0	0	18
PL.52156	PL.52153	A	6 A (CWC)	7.18Y	119.6	0.00	5.38	14.78	11	95	46	90	0.00	0.0	2.464	0.003	0	0	0	16
PD.8030	PL.52156	A	50QA	7.18Y	119.6	0.00	5.38	14.78	30	95	46	90	0.00	0.0	2.464	0.003	0	0	0	16
PL.52157	PD.8030	A	6 A (CWC)	7.17Y	119.6	0.06	5.44	14.78	11	95	46	90	0.04	0.0	2.544	0.080	0	0	0	16

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.52152	PL.52157	A	6 A (CWC)	7.16Y	119.4	0.16	5.60	13.50	10	87	42	90	0.11	0.1	2.795	0.251	0	0	0	15
PL.35451	PL.52152	A	6 A (CWC)	7.16Y	119.4	0.03	5.63	10.81	8	70	34	90	0.02	0.0	2.848	0.053	0	0	1	9
PL.35452	PL.35451	A	6 A (CWC)	7.16Y	119.3	0.04	5.66	10.80	8	70	34	90	0.02	0.0	2.920	0.071	0	0	0	8
PL.34042	PL.35452	A	#4 ACSR	7.16Y	119.3	0.00	5.67	1.60	1	10	5	89	0.00	0.0	3.033	0.113	10	5	1	1
PL.35454	PL.35452	A	6 A (CWC)	7.16Y	119.3	0.03	5.69	8.39	6	54	26	90	0.01	0.0	2.993	0.073	0	0	0	6
PL.35866	PL.35454	A	6 A (CWC)	7.16Y	119.3	0.03	5.73	6.81	5	44	21	90	0.01	0.0	3.097	0.104	0	0	0	5
PL.34974	PL.35866	A	6 A (CWC)	7.15Y	119.2	0.08	5.80	6.81	5	44	21	90	0.02	0.1	3.368	0.271	12	6	1	5
PL.34050	PL.34974	A	6 A (CWC)	7.15Y	119.2	0.04	5.84	5.01	4	32	16	89	0.01	0.0	3.527	0.159	3	2	1	4
PL.35870	PL.34050	A	#4 ACSR	7.15Y	119.1	0.02	5.86	4.48	3	29	14	90	0.00	0.0	3.647	0.120	11	5	1	3
PL.35871	PL.35870	A	#4 ACSR	7.15Y	119.1	0.00	5.86	2.84	2	18	9	89	0.00	0.0	3.723	0.076	18	9	2	2
PL.51869	PL.34050	A	6 A (CWC)	7.15Y	119.2	0.00	5.84	0.00	0	0	0	100	0.00	0.0	3.570	0.044	0	0	0	0
PL.34807	PL.35454	A	#4 ACSR	7.16Y	119.3	0.00	5.70	1.58	1	10	5	89	0.00	0.0	3.069	0.077	10	5	1	1
PL.35869	PL.34807	A	#4 ACSR	7.16Y	119.3	0.00	5.70	0.00	0	0	0	100	0.00	0.0	3.161	0.092	0	0	0	0
PL.64539	PL.35452	A	#1/0 ACSR	7.16Y	119.3	0.00	5.66	0.80	0	5	3	86	0.00	0.0	2.935	0.015	5	3	1	1
PL.35867	PL.52152	A	6 A (CWC)	7.16Y	119.4	0.01	5.61	2.69	2	17	8	90	0.00	0.0	2.859	0.064	0	0	0	6
PL.35453	PL.35867	A	6 A (CWC)	7.16Y	119.4	0.00	5.61	0.00	0	0	0	100	0.00	0.0	3.008	0.149	0	0	0	0
PL.35699	PL.35453	A	6 A (CWC)	7.16Y	119.4	0.00	5.61	0.00	0	0	0	100	0.00	0.0	3.172	0.165	0	0	0	0
PL.51846	PL.35699	A	6 A (CWC)	7.16Y	119.4	0.00	5.61	0.00	0	0	0	100	0.00	0.0	3.284	0.112	0	0	0	0
PL.51847	PL.51846	A	#1/0 ACSR	7.16Y	119.4	0.00	5.61	0.00	0	0	0	100	0.00	0.0	3.324	0.041	0	0	0	0
PL.35868	PL.35867	A	6 A (CWC)	7.16Y	119.4	0.01	5.61	2.69	2	17	8	90	0.00	0.0	2.908	0.049	0	0	1	6
PL.35450	PL.35868	A	6 A (CWC)	7.16Y	119.4	0.00	5.61	0.78	1	5	2	93	0.00	0.0	2.952	0.044	5	2	1	1
PL.34888	PL.35868	A	6 A (CWC)	7.16Y	119.4	0.00	5.62	1.89	1	12	6	89	0.00	0.0	2.985	0.077	12	6	4	4
PL.52158	PL.52157	A	#2 ACSR	7.17Y	119.6	0.00	5.44	1.28	1	8	4	89	0.00	0.0	2.660	0.116	8	4	1	1
PL.52155	PL.52153	C	#2 ACSR	7.18Y	119.6	0.00	5.38	1.93	1	12	6	89	0.00	0.0	2.465	0.004	0	0	0	1
PD.8029	PL.52155	C	25QA	7.18Y	119.6	0.00	5.38	1.93	8	12	6	89	0.00	0.0	2.465	0.004	0	0	0	1
PL.52151	PD.8029	C	#2 ACSR	7.18Y	119.6	0.00	5.38	1.93	1	12	6	89	0.00	0.0	2.503	0.038	12	6	1	1
PL.52154	PL.52153	A	#4 ACSR	7.18Y	119.6	0.00	5.38	0.18	0	1	1	71	0.00	0.0	2.481	0.020	1	1	1	1
PL.52457	PL.52456	A	#4 ACSR	7.18Y	119.7	0.00	5.30	1.72	1	11	5	91	0.00	0.0	2.042	0.002	0	0	0	1
PD.8025	PL.52457	A	20QA	7.18Y	119.7	0.00	5.30	1.72	9	11	5	91	0.00	0.0	2.042	0.002	0	0	0	1
PL.72531	PD.8025	A	#1/0 ACSR	7.18Y	119.7	0.00	5.30	1.72	1	11	5	91	0.00	0.0	2.104	0.062	0	0	0	1
PL.72532	PL.72531	A	#1/0 ACSR	7.18Y	119.7	0.00	5.30	1.72	1	11	5	91	0.00	0.0	2.104	0.000	11	5	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.52449	PL.52448	ABC	#3/0 ACSR	7.18Y	119.7	0.05	5.32	72.90	24	1416	682	90	0.47	0.0	1.981	0.053	0	0	0	198
PL.35865	PL.52449	ABC	#3/0 ACSR	7.17Y	119.4	0.24	5.56	72.55	24	1408	678	90	2.06	0.1	2.214	0.233	0	0	0	197
PL.35584	PL.35865	ABC	#3/0 ACSR	7.16Y	119.4	0.04	5.61	57.91	19	1123	537	90	0.28	0.0	2.264	0.050	0	0	0	162
PL.36591	PL.35584	B	#4 ACSR	7.16Y	119.4	0.00	5.61	1.86	1	12	6	89	0.00	0.0	2.265	0.001	0	0	0	1
PD.5130	PL.36591	B	40QA	7.16Y	119.4	0.00	5.61	1.86	5	12	6	89	0.00	0.0	2.265	0.001	0	0	0	1
PL.36592	PD.5130	B	#4 ACSR	7.16Y	119.4	0.01	5.62	1.86	1	12	6	89	0.00	0.0	2.406	0.141	0	0	0	1
PL.35585	PL.36592	B	#4 ACSR	7.16Y	119.4	0.00	5.62	1.86	1	12	6	89	0.00	0.0	2.455	0.049	12	6	1	1
PL.35586	PL.35585	B	#4 ACSR	7.16Y	119.4	0.00	5.62	0.00	0	0	0	100	0.00	0.0	2.478	0.023	0	0	0	0
PL.60609	PL.35584	ABC	#3/0 ACSR	7.16Y	119.4	0.03	5.64	57.29	19	1111	531	90	0.20	0.0	2.300	0.036	6	3	1	161
PL.60608	PL.60609	ABC	#3/0 ACSR	7.16Y	119.3	0.06	5.70	50.79	17	985	470	90	0.37	0.0	2.386	0.086	0	0	0	139
PL.34746	PL.60608	ABC	#3/0 ACSR	7.16Y	119.3	0.04	5.74	49.25	16	955	455	90	0.25	0.0	2.448	0.061	20	10	3	135
PL.35522	PL.34746	ABC	#3/0 ACSR	7.15Y	119.2	0.04	5.78	48.22	16	935	445	90	0.23	0.0	2.507	0.059	8	4	1	132
PL.33963	PL.35522	A	#4 ACSR	7.15Y	119.2	0.00	5.78	0.88	1	6	3	89	0.00	0.0	2.576	0.070	6	3	1	1
PL.35281	PL.35522	ABC	#3/0 ACSR	7.15Y	119.2	0.04	5.82	46.95	16	910	433	90	0.21	0.0	2.562	0.055	0	0	0	129
PL.35296	PL.35281	ABC	#3/0 ACSR	7.15Y	119.2	0.03	5.84	45.93	15	890	423	90	0.14	0.0	2.602	0.040	9	4	1	126
PL.36614	PL.35296	ABC	#3/0 ACSR	7.15Y	119.1	0.03	5.88	45.46	15	881	418	90	0.18	0.0	2.653	0.052	0	0	0	125
PL.36615	PL.36614	ABC	#3/0 ACSR	7.14Y	119.0	0.10	5.98	45.46	15	881	418	90	0.54	0.1	2.809	0.156	0	0	1	125
PL.36709	PL.36615	ABC	#3/0 ACSR	7.14Y	119.0	0.02	6.00	45.45	15	880	417	90	0.13	0.0	2.847	0.038	0	0	0	124
PL.34251	PL.36709	ABC	1/0 AL URD	7.14Y	119.0	0.00	6.00	1.60	1	34	5	99	0.00	0.0	2.886	0.039	34	5	1	1
PL.35007	PL.36709	A	#4 ACSR	7.14Y	119.0	0.00	6.00	15.94	12	102	50	90	0.00	0.0	2.848	0.001	0	0	0	15
PD.5727	PL.35007	A	40QA	7.14Y	119.0	0.00	6.00	15.94	40	102	50	90	0.00	0.0	2.848	0.001	0	0	0	15
PL.35972	PD.5727	A	#4 ACSR	7.14Y	119.0	0.04	6.04	15.94	12	102	50	90	0.03	0.0	2.903	0.055	12	6	1	15
PL.36430	PL.35972	A	#4 ACSR	7.13Y	118.9	0.10	6.14	14.08	11	90	44	90	0.07	0.1	3.065	0.162	11	6	1	14
PL.36431	PL.36430	A	#4 ACSR	7.13Y	118.8	0.03	6.17	12.29	9	79	38	90	0.02	0.0	3.117	0.052	0	0	0	13
PL.36435	PL.36431	A	#2 ACSR	7.13Y	118.8	0.00	6.17	2.82	2	18	9	89	0.00	0.0	3.149	0.032	10	5	1	3
PL.36590	PL.36435	A	#2 ACSR	7.13Y	118.8	0.00	6.17	1.30	1	8	4	89	0.00	0.0	3.192	0.043	8	4	2	2
PL.60625	PL.36431	A	#4 ACSR	7.13Y	118.8	0.03	6.20	9.47	7	61	29	90	0.01	0.0	3.186	0.069	7	3	4	10
PL.60626	PL.60625	A	#4 ACSR	7.13Y	118.8	0.00	6.20	8.39	6	54	26	90	0.00	0.0	3.200	0.014	30	15	3	6
PL.60627	PL.60626	A	#4 ACSR	7.13Y	118.8	0.01	6.21	3.70	3	24	11	91	0.00	0.0	3.282	0.081	8	4	1	3
PL.36434	PL.60627	A	#4 ACSR	7.13Y	118.8	0.00	6.21	1.63	1	10	5	89	0.00	0.0	3.322	0.041	10	5	1	1
PL.64633	PL.36434	A	#4 ACSR	7.13Y	118.8	0.00	6.21	0.00	0	0	0	100	0.00	0.0	3.335	0.012	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.9551-A	PL.64633	A	Open	7.13Y	118.8	0.00	6.21	0.00	0	0	0	100	0.00	0.0	3.335	0.012	0	0	0	0
PL.36432	PL.60627	A	#4 ACSR	7.13Y	118.8	0.00	6.21	0.83	1	5	3	86	0.00	0.0	3.316	0.034	0	0	0	1
PL.36433	PL.36432	A	#4 ACSR	7.13Y	118.8	0.00	6.21	0.83	1	5	3	86	0.00	0.0	3.344	0.029	5	3	1	1
PL.34541	PL.36709	ABC	#3/0 ACSR	7.14Y	119.0	0.04	6.04	38.61	13	743	363	90	0.19	0.0	2.921	0.074	0	0	0	108
PL.37173	PL.34541	ABC	#1/0 ACSR	7.14Y	119.0	0.00	6.04	38.61	17	743	362	90	0.00	0.0	2.922	0.000	0	0	0	108
PL.37174	PL.37173	ABC	#1/0 ACSR	7.13Y	118.8	0.16	6.20	38.61	17	743	362	90	0.83	0.1	3.132	0.211	8	4	1	108
PL.36265	PL.37174	ABC	#1/0 ACSR	7.13Y	118.8	0.04	6.24	38.20	17	734	358	90	0.22	0.0	3.189	0.057	1	1	1	107
PL.35273	PL.36265	ABC	#1/0 ACSR	7.12Y	118.7	0.05	6.29	35.04	15	673	328	90	0.22	0.0	3.259	0.070	31	15	3	99
PL.34594	PL.35273	ABC	#1/0 ACSR	7.12Y	118.7	0.05	6.34	33.45	15	643	313	90	0.24	0.0	3.341	0.082	8	4	1	96
PL.36261	PL.34594	B	#4 ACSR	7.12Y	118.7	0.00	6.34	1.11	1	7	3	92	0.00	0.0	3.355	0.014	0	0	0	1
PL.35016	PL.36261	B	#4 ACSR	7.12Y	118.7	0.00	6.34	0.00	0	0	0	100	0.00	0.0	3.367	0.012	0	0	0	0
PL.36262	PL.36261	B	#4 ACSR	7.12Y	118.7	0.00	6.35	1.11	1	7	3	92	0.00	0.0	3.440	0.085	7	3	1	1
PL.36263	PL.34594	B	#4 ACSR	7.12Y	118.6	0.01	6.35	6.07	5	39	19	90	0.00	0.0	3.401	0.060	26	13	4	5
PL.36264	PL.36263	B	#4 ACSR	7.12Y	118.6	0.00	6.36	1.95	1	12	6	89	0.00	0.0	3.447	0.046	12	6	1	1
PL.36259	PL.34594	ABC	#1/0 ACSR	7.12Y	118.6	0.04	6.39	30.66	13	589	287	90	0.18	0.0	3.417	0.076	23	11	3	89
PL.36260	PL.36259	ABC	#1/0 ACSR	7.12Y	118.6	0.02	6.41	28.32	12	544	265	90	0.08	0.0	3.457	0.040	19	9	4	83
PL.36254	PL.36260	ABC	#1/0 ACSR	7.11Y	118.5	0.04	6.45	23.67	10	454	222	90	0.14	0.0	3.548	0.091	0	0	0	67
PL.63100	PL.36254	B	#1/0 ACSR	7.11Y	118.5	0.00	6.45	1.36	1	9	4	91	0.00	0.0	3.552	0.003	0	0	0	1
PD.9462	PL.63100	B	20T	7.11Y	118.5	0.00	6.45	1.36	0	9	4	91	0.00	0.0	3.552	0.003	0	0	0	1
PL.63101	PD.9462	B	#1/0 ACSR	7.11Y	118.5	0.00	6.45	1.36	1	9	4	91	0.00	0.0	3.577	0.025	9	4	1	1
PL.36255	PL.36254	ABC	#1/0 ACSR	7.11Y	118.5	0.05	6.50	23.22	10	445	217	90	0.15	0.0	3.654	0.106	4	2	2	66
PL.36576	PL.36255	ABC	#1/0 ACSR	7.11Y	118.5	0.01	6.51	22.09	10	423	207	90	0.02	0.0	3.671	0.017	0	0	0	63
PL.65748	PL.36576	B	#4 ACSR	7.11Y	118.5	0.00	6.51	4.01	3	26	12	91	0.00	0.0	3.674	0.003	0	0	0	6
PD.9587	PL.65748	B	T	7.11Y	118.5	0.00	6.51	4.01	0	26	12	91	0.00	0.0	3.674	0.003	0	0	0	6
PL.65749	PD.9587	B	#4 ACSR	7.11Y	118.5	0.01	6.51	4.01	3	26	12	91	0.00	0.0	3.707	0.033	0	0	0	6
PL.36577	PL.65749	B	#4 ACSR	7.11Y	118.5	0.01	6.52	2.36	2	15	7	91	0.00	0.0	3.777	0.071	0	0	0	3
PL.36580	PL.36577	B	#4 ACSR	7.11Y	118.5	0.00	6.52	2.36	2	15	7	91	0.00	0.0	3.815	0.037	6	3	1	3
PL.36253	PL.36580	B	#4 ACSR	7.11Y	118.5	0.00	6.53	1.48	1	9	5	87	0.00	0.0	3.887	0.072	0	0	0	2
PL.36961	PL.36253	B	#4 ACSR	7.11Y	118.5	0.01	6.54	1.48	1	9	5	87	0.00	0.0	4.187	0.300	9	4	1	2
PL.37160	PL.36961	B	#4 ACSR	7.11Y	118.5	0.00	6.54	0.14	0	1	0	100	0.00	0.0	4.252	0.065	1	0	1	1
PL.36579	PL.65749	B	#4 ACSR	7.11Y	118.5	0.00	6.52	1.65	1	11	5	91	0.00	0.0	3.752	0.045	11	5	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.36575	PL.36576	ABC	#1/0 ACSR	7.11Y	118.4	0.05	6.55	20.75	9	398	194	90	0.14	0.0	3.790	0.120	6	3	1	57
REG65	PL.36575	B	76.2 KVA	7.53Y	125.5	-7.06	-0.50	61.33	61	392	191	90	percent Boost= 0.00		Tap= 0.0					56
PL.63790	REG65	B	6 A (CWC)	7.52Y	125.3	0.24	-0.27	57.88	41	392	191	90	0.70	0.2	3.878	0.088	6	3	1	56
PL.36574	PL.63790	B	#4 ACSR	7.52Y	125.3	0.00	-0.26	1.49	1	10	5	89	0.00	0.0	3.946	0.069	10	5	2	2
PL.36573	PL.63790	B	#4 ACSR	7.52Y	125.3	0.00	-0.27	1.31	1	9	4	91	0.00	0.0	3.910	0.032	9	4	2	2
PL.63791	PL.63790	B	6 A (CWC)	7.44Y	124.0	1.22	0.95	54.15	39	366	178	90	3.37	0.9	4.355	0.477	3	1	1	51
PL.57489	PL.63791	B	6 A (CWC)	7.44Y	124.0	0.00	0.95	1.90	1	13	6	91	0.00	0.0	4.358	0.003	0	0	0	2
PD.8372	PL.57489	B	25T	7.44Y	124.0	0.00	0.95	1.90	0	13	6	91	0.00	0.0	4.358	0.003	0	0	0	2
PL.57490	PD.8372	B	6 A (CWC)	7.44Y	124.0	0.00	0.96	1.90	1	13	6	91	0.00	0.0	4.399	0.041	0	0	0	2
PL.35803	PL.57490	B	6 A (CWC)	7.44Y	124.0	0.00	0.96	1.90	1	13	6	91	0.00	0.0	4.440	0.041	0	0	0	2
PL.36625	PL.35803	B	6 A (CWC)	7.44Y	124.0	0.01	0.97	1.90	1	13	6	91	0.00	0.0	4.629	0.190	10	5	1	2
PL.36626	PL.36625	B	6 A (CWC)	7.44Y	124.0	0.00	0.97	0.43	0	3	1	95	0.00	0.0	4.689	0.060	0	0	0	1
PL.36627	PL.36626	B	6 A (CWC)	7.44Y	124.0	0.00	0.97	0.00	0	0	0	100	0.00	0.0	4.715	0.026	0	0	0	0
PL.33964	PL.36626	B	#4 ACSR	7.44Y	124.0	0.00	0.98	0.43	0	3	1	95	0.00	0.0	4.810	0.121	0	0	0	1
PL.63108	PL.33964	B	#1/0 ACSR	7.44Y	124.0	0.00	0.98	0.43	0	3	1	95	0.00	0.0	4.832	0.022	0	0	0	1
PL.63109	PL.63108	B	#1/0 ACSR	7.44Y	124.0	0.00	0.98	0.43	0	3	1	95	0.00	0.0	4.882	0.050	0	0	0	1
PL.63110	PL.63109	B	#1/0 ACSR	7.44Y	124.0	0.00	0.98	0.43	0	3	1	95	0.00	0.0	4.931	0.048	3	1	1	1
PL.35266	PL.36626	B	#4 ACSR	7.44Y	124.0	0.00	0.97	0.00	0	0	0	100	0.00	0.0	4.854	0.165	0	0	0	0
PL.33965	PL.57490	B	6 A (CWC)	7.44Y	124.0	0.00	0.96	0.00	0	0	0	100	0.00	0.0	4.469	0.071	0	0	0	0
PL.64807	PL.63791	B	#1/0 ACSR	7.44Y	124.0	0.09	1.04	51.82	23	347	169	90	0.19	0.1	4.421	0.067	0	0	0	48
PL.64809	PL.64807	B	#1/0 ACSR	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	4.423	0.002	0	0	0	0
PD.9561	PL.64809	B	20T	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	4.423	0.002	0	0	0	0
PL.64810	PD.9561	B	#1/0 ACSR	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	4.483	0.060	0	0	0	0
PL.64811	PL.64810	B	#1/0 ACSR	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	4.544	0.061	0	0	0	0
PL.64812	PL.64811	B	#1/0 ACSR	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	4.605	0.061	0	0	0	0
PL.64808	PL.64807	B	#1/0 ACSR	7.43Y	123.9	0.08	1.12	51.82	23	347	169	90	0.18	0.1	4.483	0.062	0	0	0	48
PL.34439	PL.64808	B	6 A (CWC)	7.43Y	123.9	0.00	1.12	0.00	0	0	0	100	0.00	0.0	4.540	0.057	0	0	0	0
PL.35903	PL.64808	B	6 A (CWC)	7.41Y	123.5	0.37	1.49	50.67	36	339	165	90	0.95	0.3	4.636	0.153	0	0	0	47
PL.34044	PL.35903	B	6 A (CWC)	7.41Y	123.5	0.01	1.50	2.96	2	20	10	89	0.00	0.0	4.741	0.106	8	4	1	2
PL.60702	PL.34044	B	#1/0 ACSR	7.41Y	123.5	0.00	1.51	1.73	1	12	6	89	0.00	0.0	4.795	0.054	12	6	1	1
PL.35902	PL.35903	B	6 A (CWC)	7.40Y	123.3	0.23	1.72	47.71	34	318	154	90	0.55	0.2	4.737	0.101	5	2	1	45

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.33368	PL.35902	B	#4 ACSR	7.40Y	123.3	0.00	1.72	0.95	1	6	3	89	0.00	0.0	4.829	0.092	6	3	1	1
PL.35901	PL.35902	B	6 A (CWC)	7.38Y	123.0	0.31	2.03	46.03	33	306	149	90	0.73	0.2	4.881	0.144	4	2	1	43
PL.35900	PL.35901	B	6 A (CWC)	7.37Y	122.8	0.21	2.24	45.36	32	301	146	90	0.48	0.2	4.977	0.096	0	0	0	42
PL.35787	PL.35900	B	#1/0 ACSR	7.36Y	122.7	0.03	2.27	45.36	20	301	146	90	0.06	0.0	5.002	0.025	0	0	0	42
PL.36161	PL.35787	B	6 A (CWC)	7.36Y	122.7	0.00	2.27	22.76	16	151	73	90	0.00	0.0	5.004	0.002	0	0	0	20
PD.5859	PL.36161	B	35L	7.36Y	122.7	0.00	2.27	22.76	65	151	73	90	0.00	0.0	5.004	0.002	0	0	0	20
PL.36162	PD.5859	B	6 A (CWC)	7.36Y	122.6	0.10	2.37	22.76	16	151	73	90	0.12	0.1	5.097	0.093	0	0	0	20
PL.35896	PL.36162	B	6 A (CWC)	7.36Y	122.6	0.04	2.41	22.76	16	151	73	90	0.04	0.0	5.131	0.034	0	0	1	20
PL.35897	PL.35896	B	6 A (CWC)	7.35Y	122.5	0.14	2.54	22.76	16	151	73	90	0.16	0.1	5.257	0.126	0	0	0	19
PL.34723	PL.35897	B	6 A (CWC)	7.35Y	122.4	0.02	2.57	14.42	10	95	46	90	0.02	0.0	5.293	0.036	0	0	0	12
PL.33596	PL.34723	B	#1/0 ACSR	7.35Y	122.4	0.00	2.57	0.00	0	0	0	100	0.00	0.0	5.352	0.059	0	0	0	0
PL.63789	PL.34723	B	6 A (CWC)	7.34Y	122.4	0.05	2.62	14.42	10	95	46	90	0.03	0.0	5.367	0.074	10	5	1	12
PL.63787	PL.63789	B	6 A (CWC)	7.34Y	122.3	0.05	2.67	12.94	9	86	41	90	0.03	0.0	5.462	0.095	21	10	3	11
PL.63788	PL.63787	B	6 A (CWC)	7.34Y	122.3	0.03	2.70	9.78	7	65	31	90	0.01	0.0	5.526	0.064	0	0	0	8
PL.33752	PL.63788	B	6 A (CWC)	7.34Y	122.3	0.00	2.70	1.88	1	12	6	89	0.00	0.0	5.605	0.079	12	6	1	1
PL.36080	PL.63788	B	6 A (CWC)	7.34Y	122.3	0.02	2.72	7.90	6	52	25	90	0.01	0.0	5.601	0.075	17	8	2	7
PL.35460	PL.36080	B	6 A (CWC)	7.34Y	122.3	0.01	2.74	5.35	4	35	17	90	0.00	0.0	5.669	0.068	10	5	1	5
PL.35461	PL.35460	B	6 A (CWC)	7.33Y	122.2	0.02	2.75	3.82	3	25	12	90	0.00	0.0	5.756	0.087	0	0	0	4
PL.34841	PL.35461	B	6 A (CWC)	7.33Y	122.2	0.00	2.75	0.00	0	0	0	100	0.00	0.0	5.829	0.072	0	0	0	0
PL.36628	PL.35461	B	6 A (CWC)	7.33Y	122.2	0.01	2.76	3.82	3	25	12	90	0.00	0.0	5.849	0.093	9	5	1	4
PL.33916	PL.36628	B	6 A (CWC)	7.33Y	122.2	0.01	2.77	2.39	2	16	8	89	0.00	0.0	5.937	0.088	0	0	0	3
PL.57278	PL.33916	B	6 A (CWC)	7.33Y	122.2	0.03	2.81	2.39	2	16	8	89	0.00	0.0	6.283	0.346	7	3	1	3
PL.57277	PL.57278	B	6 A (CWC)	7.33Y	122.2	0.00	2.81	1.36	1	9	4	91	0.00	0.0	6.318	0.035	0	0	0	2
PL.57615	PL.57277	B	#4 ACSR	7.33Y	122.2	0.00	2.81	0.96	1	6	3	89	0.00	0.0	6.353	0.035	0	0	0	1
PL.57616	PL.57615	B	#4 ACSR	7.33Y	122.2	0.00	2.81	0.96	1	6	3	89	0.00	0.0	6.393	0.041	6	3	1	1
PL.34860	PL.57277	B	6 A (CWC)	7.33Y	122.2	0.00	2.81	0.41	0	3	1	95	0.00	0.0	6.446	0.128	3	1	1	1
PL.64739	PL.35897	B	6 A (CWC)	7.35Y	122.4	0.04	2.58	8.34	6	55	27	90	0.02	0.0	5.347	0.090	0	0	0	7
PL.64740	PL.64739	B	6 A (CWC)	7.34Y	122.4	0.02	2.60	8.34	6	55	27	90	0.01	0.0	5.416	0.069	10	5	1	7
PL.34977	PL.64740	B	#2 ACSR	7.34Y	122.4	0.00	2.61	1.57	1	10	5	89	0.00	0.0	5.509	0.093	10	5	1	1
PL.36569	PL.64740	B	6 A (CWC)	7.34Y	122.4	0.02	2.62	5.26	4	35	17	90	0.00	0.0	5.485	0.069	0	0	0	5
PL.34678	PL.36569	B	#2 ACSR	7.34Y	122.4	0.00	2.63	2.47	1	16	8	89	0.00	0.0	5.557	0.072	8	4	1	2

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

Balanced Voltage Drop Report
Source: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.35895	PL.34678	B	#2 ACSR	7.34Y	122.4	0.00	2.63	1.26	1	8	4	89	0.00	0.0	5.637	0.080	8	4	1	1
PL.36570	PL.36569	B	6 A (CWC)	7.34Y	122.4	0.01	2.63	2.79	2	18	9	89	0.00	0.0	5.545	0.060	0	0	0	3
PL.36571	PL.36570	B	6 A (CWC)	7.34Y	122.4	0.00	2.63	2.79	2	18	9	89	0.00	0.0	5.587	0.042	13	6	2	3
PL.36572	PL.36571	B	6 A (CWC)	7.34Y	122.4	0.00	2.64	0.77	1	5	2	93	0.00	0.0	5.702	0.115	0	0	0	1
PL.34677	PL.36572	B	6 A (CWC)	7.34Y	122.4	0.00	2.64	0.00	0	0	0	100	0.00	0.0	5.763	0.061	0	0	0	0
PL.34517	PL.36572	B	#2 ACSR	7.34Y	122.4	0.00	2.64	0.77	0	5	2	93	0.00	0.0	5.747	0.045	5	2	1	1
PL.36160	PL.35787	B	6 A (CWC)	7.36Y	122.7	0.04	2.31	22.60	16	150	73	90	0.05	0.0	5.041	0.038	0	0	0	22
PL.36163	PL.36160	B	6 A (CWC)	7.36Y	122.7	0.03	2.34	22.60	16	150	73	90	0.04	0.0	5.072	0.032	5	3	1	22
PL.36164	PL.36163	B	6 A (CWC)	7.35Y	122.4	0.23	2.58	21.79	16	144	70	90	0.26	0.2	5.297	0.225	0	0	0	21
PL.34951	PL.36164	B	6 A (CWC)	7.35Y	122.4	0.00	2.58	1.56	1	10	5	89	0.00	0.0	5.390	0.093	10	5	1	1
PL.35899	PL.36164	B	6 A (CWC)	7.34Y	122.4	0.06	2.63	13.32	10	88	43	90	0.04	0.0	5.387	0.090	0	0	0	13
PL.60837	PL.35899	B	6 A (CWC)	7.33Y	122.2	0.14	2.77	12.23	9	81	39	90	0.09	0.1	5.629	0.242	0	0	0	12
PL.60838	PL.60837	B	6 A (CWC)	7.33Y	122.2	0.02	2.79	12.23	9	81	39	90	0.01	0.0	5.667	0.039	7	4	1	12
PL.60839	PL.60838	B	6 A (CWC)	7.33Y	122.2	0.03	2.82	11.11	8	73	36	90	0.02	0.0	5.719	0.052	0	0	0	11
PL.63804	PL.60839	B	6 A (CWC)	7.33Y	122.1	0.05	2.87	8.50	6	56	27	90	0.02	0.0	5.847	0.128	0	0	0	9
PL.63805	PL.63804	B	6 A (CWC)	7.33Y	122.1	0.00	2.87	8.50	6	56	27	90	0.00	0.0	5.847	0.000	8	4	1	9
PL.60640	PL.63805	B	6 A (CWC)	7.33Y	122.1	0.02	2.90	2.64	2	17	8	90	0.00	0.0	6.047	0.200	3	2	1	3
PL.36777	PL.60640	B	6 A (CWC)	7.33Y	122.1	0.01	2.90	2.14	2	14	7	89	0.00	0.0	6.217	0.170	14	7	2	2
PL.60642	PL.63805	B	6 A (CWC)	7.33Y	122.1	0.00	2.88	4.64	3	31	15	90	0.00	0.0	5.862	0.014	2	1	1	5
PL.60643	PL.60642	B	6 A (CWC)	7.33Y	122.1	0.01	2.89	4.35	3	29	14	90	0.00	0.0	5.918	0.056	9	4	1	4
PL.60638	PL.60643	B	6 A (CWC)	7.33Y	122.1	0.00	2.89	0.00	0	0	0	100	0.00	0.0	6.140	0.223	0	0	1	1
PL.60639	PL.60643	B	6 A (CWC)	7.33Y	122.1	0.00	2.89	0.00	0	0	0	100	0.00	0.0	6.290	0.372	0	0	0	0
PL.72493	PL.60643	B	6 A (CWC)	7.33Y	122.1	0.00	2.89	3.01	2	20	10	89	0.00	0.0	5.937	0.019	0	0	0	2
PL.72494	PL.72493	B	#1/0 ACSR	7.33Y	122.1	0.00	2.89	3.01	1	20	10	89	0.00	0.0	5.937	0.000	11	6	1	2
PL.60617	PL.72494	B	#1/0 ACSR	7.33Y	122.1	0.00	2.89	1.27	1	8	4	89	0.00	0.0	5.959	0.022	8	4	1	1
PL.60836	PL.60839	B	6 A (CWC)	7.33Y	122.2	0.01	2.83	2.61	2	17	8	90	0.00	0.0	5.844	0.125	17	8	2	2
PL.35019	PL.35899	B	#4 ACSR	7.34Y	122.4	0.00	2.64	1.08	1	7	3	92	0.00	0.0	5.552	0.165	7	3	1	1
PL.36521	PL.36164	B	#4 ACSR	7.35Y	122.4	0.00	2.58	6.91	5	46	22	90	0.00	0.0	5.303	0.006	0	0	0	7
PD.5052	PL.36521	B	25QA	7.35Y	122.4	0.00	2.58	6.91	28	46	22	90	0.00	0.0	5.303	0.006	0	0	0	7
PL.36522	PD.5052	B	#4 ACSR	7.34Y	122.4	0.04	2.62	6.91	5	46	22	90	0.01	0.0	5.429	0.126	0	0	0	7
PL.36523	PL.36522	B	#4 ACSR	7.34Y	122.3	0.07	2.69	6.91	5	46	22	90	0.02	0.1	5.645	0.216	0	0	1	7

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.35898	PL.36523	B	#4 ACSR	7.31Y	121.9	0.41	3.09	6.91	5	46	22	90	0.15	0.3	6.931	1.286	0	0	0	6
PL.34521	PL.35898	B	#4 ACSR	7.31Y	121.9	0.01	3.10	1.82	1	12	6	89	0.00	0.0	7.072	0.141	12	6	1	1
PL.36565	PL.35898	B	#4 ACSR	7.31Y	121.9	0.01	3.11	5.08	4	33	16	90	0.00	0.0	6.988	0.056	0	0	0	5
PL.33415	PL.36565	B	#4 ACSR	7.31Y	121.9	0.00	3.11	0.10	0	1	0	100	0.00	0.0	7.421	0.434	1	0	1	1
PL.36566	PL.36565	B	#4 ACSR	7.31Y	121.9	0.02	3.13	4.98	4	33	16	90	0.01	0.0	7.085	0.097	0	0	0	4
PL.36567	PL.36566	B	#4 ACSR	7.31Y	121.8	0.04	3.16	4.98	4	33	16	90	0.01	0.0	7.239	0.155	0	0	0	4
PL.36568	PL.36567	B	#4 ACSR	7.31Y	121.8	0.01	3.17	3.19	2	21	10	90	0.00	0.0	7.280	0.041	0	0	0	3
PL.34235	PL.36568	B	#4 ACSR	7.31Y	121.8	0.00	3.17	1.95	2	13	6	91	0.00	0.0	7.376	0.096	13	6	1	1
PL.34721	PL.36568	B	#4 ACSR	7.31Y	121.8	0.02	3.19	1.24	1	8	4	89	0.00	0.0	7.604	0.324	0	0	0	2
PL.34854	PL.34721	B	#4 ACSR	7.31Y	121.8	0.00	3.19	0.66	1	4	2	89	0.00	0.0	7.664	0.060	4	2	1	1
PL.34722	PL.34721	B	#4 ACSR	7.31Y	121.8	0.00	3.19	0.58	0	4	2	89	0.00	0.0	7.693	0.088	4	2	1	1
PL.34845	PL.36567	B	#2 ACSR	7.31Y	121.8	0.00	3.17	1.79	1	12	6	89	0.00	0.0	7.291	0.051	12	6	1	1
PL.34734	PL.64808	B	6 A (CWC)	7.43Y	123.9	0.00	1.13	1.15	1	8	4	89	0.00	0.0	4.556	0.073	8	4	1	1
PL.33969	PL.36255	B	#4 ACSR	7.11Y	118.5	0.00	6.50	2.76	2	18	9	89	0.00	0.0	3.726	0.072	18	9	1	1
PL.62594	PL.36260	B	6 A (CWC)	7.12Y	118.6	0.00	6.41	11.04	8	71	34	90	0.00	0.0	3.460	0.003	0	0	0	12
PD.9396	PL.62594	B	T	7.12Y	118.6	0.00	6.41	11.04	0	71	34	90	0.00	0.0	3.460	0.003	0	0	0	12
PL.62595	PD.9396	B	6 A (CWC)	7.11Y	118.6	0.04	6.45	11.04	8	71	34	90	0.02	0.0	3.533	0.072	0	0	0	12
PL.57847	PL.62595	B	#2 ACSR	7.11Y	118.6	0.00	6.45	0.00	0	0	0	100	0.00	0.0	3.556	0.023	0	0	0	0
PL.36256	PL.62595	B	6 A (CWC)	7.11Y	118.5	0.04	6.49	11.04	8	71	34	90	0.02	0.0	3.614	0.082	10	5	2	12
PL.36258	PL.36256	B	6 A (CWC)	7.11Y	118.5	0.03	6.52	9.47	7	61	29	90	0.02	0.0	3.684	0.069	0	0	0	10
PL.34842	PL.36258	B	#4 ACSR	7.11Y	118.5	0.00	6.52	1.14	1	7	4	87	0.00	0.0	3.724	0.040	7	4	1	1
PL.37168	PL.36258	B	#4 ACSR	7.11Y	118.5	0.00	6.52	2.09	2	13	6	91	0.00	0.0	3.720	0.037	9	4	1	2
PL.37169	PL.37168	B	#4 ACSR	7.11Y	118.5	0.00	6.52	0.74	1	5	2	93	0.00	0.0	3.749	0.028	5	2	1	1
PL.34488	PL.36258	B	6 A (CWC)	7.11Y	118.4	0.04	6.56	6.24	4	40	19	90	0.01	0.0	3.814	0.130	0	0	0	7
PL.34489	PL.34488	B	6 A (CWC)	7.11Y	118.4	0.02	6.58	4.24	3	27	13	90	0.00	0.0	3.933	0.119	16	8	3	5
PL.34525	PL.34489	B	6 A (CWC)	7.11Y	118.4	0.00	6.58	1.81	1	12	6	89	0.00	0.0	3.994	0.061	12	6	2	2
PL.34490	PL.34488	B	#4 ACSR	7.11Y	118.4	0.00	6.56	2.00	2	13	6	91	0.00	0.0	3.860	0.046	10	5	1	2
PL.34491	PL.34490	B	#4 ACSR	7.11Y	118.4	0.00	6.56	0.49	0	3	2	83	0.00	0.0	3.885	0.025	3	2	1	1
PL.34978	PL.36259	B	#2 ACSR	7.12Y	118.6	0.00	6.39	3.48	2	22	11	89	0.00	0.0	3.457	0.040	22	11	3	3
PL.34595	PL.36265	B	#4 ACSR	7.12Y	118.7	0.01	6.26	9.26	7	59	29	90	0.01	0.0	3.219	0.030	0	0	0	7
PL.37082	PL.34595	B	#4 ACSR	7.12Y	118.7	0.01	6.26	5.77	4	37	18	90	0.00	0.0	3.254	0.035	6	3	1	5

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

Balanced Voltage Drop Report
Source: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PL.37083	PL.37082	B	#4 ACSR	7.12Y	118.7	0.01	6.27	4.85	4	31	15	90	0.00	0.0	3.297	0.043	30	15	3	4
PL.36266	PL.37083	B	#4 ACSR	7.12Y	118.7	0.00	6.27	0.16	0	1	1	71	0.00	0.0	3.355	0.057	1	1	1	1
PL.36267	PL.36266	B	#4 ACSR	7.12Y	118.7	0.00	6.27	0.00	0	0	0	100	0.00	0.0	3.411	0.057	0	0	0	0
PL.34817	PL.34595	B	#4 ACSR	7.12Y	118.7	0.00	6.26	3.50	3	22	11	89	0.00	0.0	3.278	0.059	22	11	2	2
CP.56	PL.37173	B	Cap (500)	7.14Y	119.0	0.00	6.04	0.00	0	0	0	100	0.00	0.0	2.922	0.059	0	0	0	0
PL.35294	PL.35281	B	6 A (CWC)	7.15Y	119.2	0.01	5.83	3.06	2	20	10	89	0.00	0.0	2.633	0.071	9	4	2	3
PL.35295	PL.35294	B	6 A (CWC)	7.15Y	119.2	0.01	5.84	1.72	1	11	5	91	0.00	0.0	2.871	0.238	11	5	1	1
PL.34041	PL.35522	A	#4 ACSR	7.15Y	119.2	0.00	5.78	1.74	1	11	5	91	0.00	0.0	2.602	0.095	11	5	1	1
PL.63115	PL.60608	A	#4 ACSR	7.16Y	119.3	0.00	5.70	4.60	4	30	14	91	0.00	0.0	2.386	0.000	6	3	1	4
PL.63116	PL.63115	A	#4 ACSR	7.16Y	119.3	0.01	5.71	3.68	3	24	11	91	0.00	0.0	2.437	0.050	5	2	1	3
PL.34252	PL.63116	A	#2 ACSR	7.16Y	119.3	0.00	5.71	1.26	1	8	4	89	0.00	0.0	2.476	0.039	8	4	1	1
PL.36594	PL.63116	A	#4 ACSR	7.16Y	119.3	0.00	5.71	1.68	1	11	5	91	0.00	0.0	2.501	0.065	11	5	1	1
PL.60610	PL.60609	B	1/0 AL URD	7.16Y	119.4	0.01	5.65	8.49	5	55	26	90	0.00	0.0	2.346	0.046	15	7	2	10
PL.63117	PL.60610	B	1/0 AL URD	7.16Y	119.3	0.01	5.65	6.18	4	40	19	90	0.00	0.0	2.394	0.048	14	7	3	8
PL.64099	PL.63117	B	1/0 AL URD	7.16Y	119.3	0.00	5.66	4.05	2	26	13	89	0.00	0.0	2.435	0.041	15	7	3	5
PL.64100	PL.64099	B	1/0 AL URD	7.16Y	119.3	0.00	5.66	1.74	1	11	5	91	0.00	0.0	2.481	0.046	11	5	2	2
PL.63104	PL.60609	A	1/0 AL URD	7.16Y	119.4	0.01	5.65	10.02	6	65	31	90	0.01	0.0	2.347	0.047	25	12	3	11
PL.63105	PL.63104	A	1/0 AL URD	7.16Y	119.3	0.01	5.66	6.07	4	39	19	90	0.00	0.0	2.397	0.050	0	0	0	8
PL.60613	PL.63105	A	1/0 AL URD	7.16Y	119.3	0.01	5.66	6.07	4	39	19	90	0.00	0.0	2.433	0.036	6	3	1	8
PL.60614	PL.60613	A	1/0 AL URD	7.16Y	119.3	0.00	5.67	5.10	3	33	16	90	0.00	0.0	2.460	0.027	0	0	0	7
PL.63098	PL.60614	A	1/0 AL URD	7.16Y	119.3	0.00	5.67	5.10	3	33	16	90	0.00	0.0	2.494	0.034	9	4	1	7
PL.64097	PL.63098	A	1/0 AL URD	7.16Y	119.3	0.00	5.68	3.67	2	24	11	91	0.00	0.0	2.545	0.051	16	8	5	6
PL.64098	PL.64097	A	1/0 AL URD	7.16Y	119.3	0.00	5.68	1.21	1	8	4	89	0.00	0.0	2.599	0.054	8	4	1	1
PL.54125	PL.35865	C	6 A (CWC)	7.17Y	119.4	0.00	5.57	2.62	2	17	8	90	0.00	0.0	2.218	0.004	0	0	0	1
PD.8125	PL.54125	C	40QA	7.17Y	119.4	0.00	5.57	2.62	7	17	8	90	0.00	0.0	2.218	0.004	0	0	0	1
PL.54126	PD.8125	C	6 A (CWC)	7.17Y	119.4	0.01	5.57	2.62	2	17	8	90	0.00	0.0	2.288	0.070	0	0	0	1
PL.36593	PL.54126	C	#4 ACSR	7.17Y	119.4	0.01	5.58	2.62	2	17	8	90	0.00	0.0	2.435	0.147	17	8	1	1
PL.54127	PL.35865	A	#4 ACSR	7.17Y	119.4	0.00	5.56	2.21	2	14	7	89	0.00	0.0	2.217	0.003	0	0	0	2
PD.8126	PL.54127	A	40QA	7.17Y	119.4	0.00	5.56	2.21	6	14	7	89	0.00	0.0	2.217	0.003	0	0	0	2
PL.54128	PD.8126	A	#4 ACSR	7.17Y	119.4	0.00	5.57	2.21	2	14	7	89	0.00	0.0	2.234	0.017	0	0	0	2
PL.35999	PL.54128	A	#4 ACSR	7.17Y	119.4	0.00	5.57	2.21	2	14	7	89	0.00	0.0	2.266	0.032	14	7	2	2

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Balanced Voltage Drop Report
Source: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PL.54123	PL.35865	C	6 A (CWC)	7.17Y	119.4	0.01	5.57	39.09	28	252	122	90	0.02	0.0	2.218	0.004	0	0	0	32
PD.8124	PL.54123	C	30T	7.17Y	119.4	0.00	5.57	39.09	0	252	122	90	0.00	0.0	2.218	0.004	0	0	0	32
PL.54124	PD.8124	C	6 A (CWC)	7.13Y	118.9	0.57	6.14	39.09	28	252	122	90	1.14	0.5	2.524	0.306	0	0	0	32
PL.34151	PL.54124	C	#2 ACSR	7.13Y	118.9	0.00	6.14	0.00	0	0	0	100	0.00	0.0	2.558	0.034	0	0	0	0
PL.36595	PL.54124	C	6 A (CWC)	7.12Y	118.7	0.12	6.26	39.09	28	251	122	90	0.24	0.1	2.591	0.067	11	5	1	32
PL.36596	PL.36595	C	6 A (CWC)	7.12Y	118.6	0.12	6.38	37.38	27	240	116	90	0.22	0.1	2.658	0.067	2	1	1	31
PL.57601	PL.36596	C	#4 ACSR	7.12Y	118.6	0.01	6.38	3.33	3	21	10	90	0.00	0.0	2.725	0.067	19	9	4	6
PL.57602	PL.57601	C	#4 ACSR	7.12Y	118.6	0.00	6.39	0.33	0	2	1	89	0.00	0.0	2.783	0.059	2	1	1	2
PL.36391	PL.57602	C	#4 ACSR	7.12Y	118.6	0.00	6.39	0.00	0	0	0	100	0.00	0.0	2.833	0.050	0	0	1	1
PL.36629	PL.36596	C	#4 ACSR	7.11Y	118.6	0.06	6.44	5.95	5	38	18	90	0.02	0.0	2.964	0.306	19	9	2	4
PL.36630	PL.36629	C	#4 ACSR	7.11Y	118.6	0.00	6.44	3.00	2	19	9	90	0.00	0.0	2.978	0.014	19	9	2	2
PL.64798	PL.36596	C	6 A (CWC)	7.11Y	118.5	0.09	6.47	27.75	20	178	86	90	0.12	0.1	2.723	0.065	0	0	0	20
PL.64799	PL.64798	C	6 A (CWC)	7.11Y	118.5	0.05	6.51	27.75	20	178	86	90	0.07	0.0	2.761	0.038	2	1	1	20
PL.35103	PL.64799	C	#2 ACSR	7.11Y	118.5	0.00	6.52	2.05	1	13	6	91	0.00	0.0	2.783	0.022	13	6	1	1
PL.36632	PL.64799	C	6 A (CWC)	7.10Y	118.4	0.08	6.59	25.35	18	162	79	90	0.10	0.1	2.827	0.066	0	0	0	18
PL.34526	PL.36632	C	#4 ACSR	7.10Y	118.4	0.01	6.61	5.79	4	37	18	90	0.00	0.0	2.887	0.060	9	5	1	3
PL.34527	PL.34526	C	#4 ACSR	7.10Y	118.4	0.01	6.62	4.33	3	28	13	91	0.00	0.0	2.946	0.059	10	5	1	2
PL.36631	PL.34527	C	#4 ACSR	7.10Y	118.4	0.01	6.63	2.77	2	18	9	89	0.00	0.0	3.112	0.165	18	9	1	1
PL.35098	PL.36632	C	6 A (CWC)	7.10Y	118.3	0.12	6.71	19.55	14	125	61	90	0.11	0.1	2.962	0.135	15	7	3	15
PL.34827	PL.35098	C	6 A (CWC)	7.09Y	118.2	0.05	6.76	15.34	11	98	47	90	0.03	0.0	3.034	0.072	19	9	2	10
PL.34828	PL.34827	C	6 A (CWC)	7.09Y	118.2	0.05	6.80	12.34	9	79	38	90	0.03	0.0	3.112	0.078	1	0	1	8
PL.36633	PL.34828	C	6 A (CWC)	7.09Y	118.2	0.02	6.82	6.92	5	44	21	90	0.00	0.0	3.168	0.056	16	8	2	4
PL.36634	PL.36633	C	6 A (CWC)	7.09Y	118.2	0.00	6.82	4.39	3	28	14	89	0.00	0.0	3.180	0.011	0	0	0	2
PL.36639	PL.36634	C	6 A (CWC)	7.09Y	118.2	0.01	6.83	2.41	2	15	7	91	0.00	0.0	3.277	0.097	15	7	1	1
PL.35254	PL.36634	C	#2 ACSR	7.09Y	118.2	0.00	6.82	1.98	1	13	6	91	0.00	0.0	3.217	0.037	13	6	1	1
PL.36640	PL.34828	C	6 A (CWC)	7.09Y	118.2	0.02	6.82	5.26	4	34	16	90	0.00	0.0	3.185	0.073	0	0	0	3
PL.36643	PL.36640	C	6 A (CWC)	7.09Y	118.2	0.01	6.83	1.91	1	12	6	89	0.00	0.0	3.242	0.057	0	0	0	1
PL.36644	PL.36643	C	6 A (CWC)	7.09Y	118.2	0.00	6.83	1.91	1	12	6	89	0.00	0.0	3.350	0.108	12	6	1	1
PL.36641	PL.36640	C	#4 ACSR	7.09Y	118.2	0.01	6.83	3.35	3	21	10	90	0.00	0.0	3.250	0.065	9	4	1	2
PL.36642	PL.36641	C	#4 ACSR	7.09Y	118.2	0.00	6.83	1.92	1	12	6	89	0.00	0.0	3.265	0.015	12	6	1	1
PL.34605	PL.35098	C	#2 ACSR	7.10Y	118.3	0.00	6.71	0.00	0	0	0	100	0.00	0.0	3.011	0.049	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PL.55828	PL.35098	C	#2 ACSR	7.10Y	118.3	0.00	6.72	1.88	1	12	6	89	0.00	0.0	3.047	0.085	3	2	1	2
PL.55829	PL.55828	C	#1/0 ACSR	7.10Y	118.3	0.00	6.72	1.34	1	9	4	91	0.00	0.0	3.088	0.040	9	4	1	1
PL.35769	PL.52449	C	#4 ACSR	7.18Y	119.7	0.00	5.33	1.06	1	7	3	92	0.00	0.0	2.055	0.074	7	3	1	1
PL.34830	PL.35283	A	6 A (CWC)	7.19Y	119.9	0.00	5.13	3.60	3	23	11	90	0.00	0.0	1.856	0.035	15	7	1	4
PL.34161	PL.34830	A	6 A (CWC)	7.19Y	119.9	0.00	5.13	0.00	0	0	0	100	0.00	0.0	1.900	0.043	0	0	0	0
PL.34857	PL.34830	A	#2 ACSR	7.19Y	119.9	0.00	5.13	1.33	1	9	4	91	0.00	0.0	1.874	0.018	9	4	3	3
PL.66644	PL.35282	C	#4 ACSR	7.20Y	120.0	0.00	5.02	2.95	2	19	9	90	0.00	0.0	1.741	0.004	0	0	0	3
PD.10005	PL.66644	C	25T	7.20Y	120.0	0.00	5.02	2.95	0	19	9	90	0.00	0.0	1.741	0.004	0	0	0	3
PL.66645	PD.10005	C	#4 ACSR	7.20Y	120.0	0.00	5.02	2.95	2	19	9	90	0.00	0.0	1.753	0.013	13	7	1	3
PL.37158	PL.66645	C	#4 ACSR	7.20Y	120.0	0.00	5.02	0.87	1	6	3	89	0.00	0.0	1.933	0.179	4	2	1	2
PL.37159	PL.37158	C	#4 ACSR	7.20Y	120.0	0.00	5.02	0.29	0	2	1	89	0.00	0.0	2.073	0.141	2	1	1	1
PL.72488	PL.60842	ABC	#3/0 ACSR	7.20Y	120.0	0.09	5.01	98.74	33	1941	888	91	1.01	0.1	1.732	0.061	0	0	0	211
PL.72489	PL.72488	ABC	#3/0 ACSR	7.19Y	119.9	0.09	5.10	98.74	33	1940	886	91	1.01	0.1	1.794	0.062	16	8	1	211
PL.57586	PL.72489	ABC	#3/0 ACSR	7.19Y	119.8	0.12	5.21	97.90	33	1922	877	91	1.35	0.1	1.878	0.085	20	10	2	210
PL.57587	PL.57586	ABC	#3/0 ACSR	7.18Y	119.7	0.04	5.26	96.11	32	1886	858	91	0.51	0.0	1.911	0.033	0	0	0	203
PL.36493	PL.57587	A	#1/0 ACSR	7.18Y	119.7	0.00	5.26	3.08	1	20	10	89	0.00	0.0	1.913	0.002	0	0	0	1
PD.5269	PL.36493	A	40QA	7.18Y	119.7	0.00	5.26	3.08	8	20	10	89	0.00	0.0	1.913	0.002	0	0	0	1
PL.36494	PD.5269	A	#1/0 ACSR	7.18Y	119.7	0.00	5.26	3.08	1	20	10	89	0.00	0.0	1.964	0.051	20	10	1	1
PL.36817	PL.57587	ABC	#3/0 ACSR	7.18Y	119.6	0.13	5.39	95.08	32	1866	848	91	1.52	0.1	2.012	0.100	0	0	0	202
PL.36818	PL.36817	ABC	#3/0 ACSR	7.17Y	119.5	0.09	5.48	95.08	32	1864	846	91	0.96	0.1	2.075	0.064	12	6	1	202
PL.51867	PL.36818	ABC	#3/0 ACSR	7.14Y	119.0	0.53	6.01	94.45	31	1851	838	91	5.96	0.3	2.473	0.398	0	0	0	201
REG64	PL.51867	ABC	114.3 KVA	7.52Y	125.3	-6.26	-0.26	94.45	63	1845	830	91	percent Boost= 5.00 Tap= 8.0				0	0	0	201
PL.51868	REG64	ABC	#3/0 ACSR	7.51Y	125.1	0.16	-0.10	89.73	30	1845	830	91	1.70	0.1	2.599	0.126	0	0	0	201
PL.63794	PL.51868	ABC	#3/0 ACSR	7.51Y	125.1	0.00	-0.09	89.71	30	1843	827	91	0.04	0.0	2.602	0.003	0	0	0	200
PL.63795	PL.63794	ABC	#3/0 ACSR	7.50Y	125.0	0.10	0.00	89.71	30	1843	827	91	1.06	0.1	2.680	0.078	0	0	0	200
PL.36498	PL.63795	ABC	#3/0 ACSR	7.49Y	124.9	0.08	0.08	89.71	30	1842	825	91	0.86	0.0	2.743	0.063	0	0	0	200
PL.36819	PL.36498	A	6 A (CWC)	7.49Y	124.9	0.00	0.08	0.51	0	3	2	83	0.00	0.0	2.744	0.001	0	0	0	2
PD.5812	PL.36819	A	50QA	7.49Y	124.9	0.00	0.08	0.51	1	3	2	83	0.00	0.0	2.744	0.001	0	0	0	2
PL.36820	PD.5812	A	6 A (CWC)	7.49Y	124.9	0.00	0.08	0.51	0	3	2	83	0.00	0.0	2.763	0.019	1	1	1	2
PL.36497	PL.36820	A	6 A (CWC)	7.49Y	124.9	0.00	0.09	0.34	0	2	1	89	0.00	0.0	2.837	0.074	2	1	1	1
PL.36823	PL.36498	ABC	#3/0 ACSR	7.48Y	124.7	0.17	0.25	89.54	30	1838	823	91	1.80	0.1	2.876	0.133	0	0	0	198

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru

PL.36824	PL.36823	ABC	#3/0 ACSR	7.48Y	124.6	0.13	0.39	89.34	30	1832	818	91	1.41	0.1	2.983	0.107	36	17	3	197
PL.36825	PL.36824	A	#4 ACSR	7.48Y	124.6	0.01	0.39	1.94	1	13	6	91	0.00	0.0	3.060	0.076	5	2	1	2
PL.36826	PL.36825	A	#4 ACSR	7.48Y	124.6	0.00	0.39	1.21	1	8	4	89	0.00	0.0	3.172	0.112	8	4	1	1
PL.35645	PL.36824	ABC	#3/0 ACSR	7.47Y	124.5	0.08	0.47	67.94	23	1398	606	92	0.69	0.0	3.073	0.090	17	8	3	142
PL.36821	PL.35645	ABC	#3/0 ACSR	7.47Y	124.4	0.09	0.56	67.08	22	1380	597	92	0.73	0.1	3.170	0.097	0	0	0	139
PL.36822	PL.36821	ABC	#3/0 ACSR	7.46Y	124.4	0.03	0.59	66.08	22	1359	586	92	0.27	0.0	3.207	0.037	0	0	0	136
PL.35926	PL.36822	ABC	#3/0 ACSR	7.46Y	124.4	0.00	0.60	66.08	22	1359	586	92	0.01	0.0	3.208	0.001	0	0	0	136
PD.5858	PL.35926	ABC	100L	7.46Y	124.4	0.00	0.60	66.08	66	1359	586	92	0.00	0.0	3.208	0.001	0	0	0	136
PL.35927	PD.5858	ABC	#3/0 ACSR	7.46Y	124.4	0.05	0.65	66.08	22	1359	586	92	0.43	0.0	3.267	0.059	15	7	1	136
PL.34115	PL.35927	ABC	#3/0 ACSR	7.45Y	124.2	0.13	0.78	64.34	21	1323	568	92	1.05	0.1	3.418	0.151	0	0	1	132
PL.34116	PL.34115	ABC	#3/0 ACSR	7.45Y	124.1	0.10	0.89	64.34	21	1322	567	92	0.81	0.1	3.535	0.117	0	0	0	131
PL.34493	PL.34116	C	#4 ACSR	7.45Y	124.1	0.00	0.89	1.24	1	8	4	89	0.00	0.0	3.536	0.001	0	0	0	2
PD.5725	PL.34493	C	40QA	7.45Y	124.1	0.00	0.89	1.24	3	8	4	89	0.00	0.0	3.536	0.001	0	0	0	2
PL.35142	PD.5725	C	#4 ACSR	7.45Y	124.1	0.00	0.89	1.24	1	8	4	89	0.00	0.0	3.610	0.074	8	4	2	2
PL.36172	PL.34116	ABC	#3/0 ACSR	7.44Y	124.0	0.07	0.96	63.92	21	1313	561	92	0.52	0.0	3.611	0.076	16	8	2	129
PL.36173	PL.36172	ABC	#3/0 ACSR	7.44Y	124.0	0.07	1.03	63.11	21	1296	553	92	0.56	0.0	3.695	0.084	9	5	1	127
PL.36816	PL.36173	A	#4 ACSR	7.44Y	124.0	0.00	1.03	4.85	4	32	16	89	0.00	0.0	3.713	0.018	0	0	1	9
PL.62796	PL.36816	A	#4 ACSR	7.44Y	124.0	0.00	1.04	4.84	4	32	16	89	0.00	0.0	3.746	0.033	24	12	7	8
PL.62797	PL.62796	A	#4 ACSR	7.44Y	124.0	0.00	1.04	1.21	1	8	4	89	0.00	0.0	3.806	0.060	8	4	1	1
PL.35403	PL.36173	ABC	#3/0 ACSR	7.43Y	123.9	0.10	1.13	61.03	20	1254	532	92	0.71	0.1	3.809	0.115	7	3	2	117
PL.33887	PL.35403	ABC	#3/0 ACSR	7.43Y	123.8	0.03	1.16	45.89	15	949	383	93	0.17	0.0	3.859	0.049	8	4	1	83
PL.35239	PL.33887	C	#4 ACSR	7.43Y	123.8	0.00	1.16	1.59	1	11	5	91	0.00	0.0	3.859	0.000	0	0	0	1
PD.5271	PL.35239	C	40QA	7.43Y	123.8	0.00	1.16	1.59	4	11	5	91	0.00	0.0	3.859	0.000	0	0	0	1
PL.35240	PD.5271	C	#4 ACSR	7.43Y	123.8	0.00	1.16	1.59	1	11	5	91	0.00	0.0	3.880	0.021	11	5	1	1
PL.36789	PL.33887	ABC	#3/0 ACSR	7.43Y	123.8	0.05	1.21	43.73	15	905	362	93	0.29	0.0	3.950	0.091	10	5	1	79
PL.36437	PL.36789	A	#2 ACSR	7.43Y	123.8	0.00	1.21	6.42	4	43	21	90	0.00	0.0	3.951	0.001	0	0	0	6
PD.5747	PL.36437	A	25T	7.43Y	123.8	0.00	1.21	6.42	0	43	21	90	0.00	0.0	3.951	0.001	0	0	0	6
PL.36438	PD.5747	A	#2 ACSR	7.43Y	123.8	0.00	1.22	6.42	4	43	21	90	0.00	0.0	3.978	0.027	28	14	4	6
PL.36436	PL.36438	A	#2 ACSR	7.43Y	123.8	0.00	1.22	2.20	1	15	7	91	0.00	0.0	4.025	0.047	15	7	2	2
PL.36790	PL.36789	ABC	#3/0 ACSR	7.42Y	123.7	0.06	1.27	41.09	14	852	336	93	0.28	0.0	4.051	0.101	11	5	1	72
PL.34093	PL.36790	ABC	#2 ACSR	7.42Y	123.7	0.00	1.27	11.41	7	250	44	98	0.00	0.0	4.053	0.002	0	0	0	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.5111	PL.34093	ABC	40QA	7.42Y	123.7	0.00	1.27	11.41	29	250	44	98	0.00	0.0	4.053	0.002	0	0	0	3
PL.34094	PD.5111	ABC	#2 ACSR	7.42Y	123.7	0.01	1.28	11.41	7	250	44	98	0.01	0.0	4.080	0.027	0	0	0	3
PL.36801	PL.34094	ABC	#2 ACSR	7.42Y	123.7	0.03	1.31	10.42	6	230	33	99	0.06	0.0	4.213	0.133	0	0	0	2
PL.36802	PL.36801	ABC	#2 ACSR	7.42Y	123.7	0.01	1.32	10.10	6	223	30	99	0.02	0.0	4.270	0.057	0	0	0	1
PL.35771	PL.36802	ABC	#2 ACSR	7.42Y	123.7	0.00	1.33	10.10	6	223	30	99	0.00	0.0	4.289	0.019	223	30	1	1
PL.36803	PL.36801	A	#1/0 ACSR	7.42Y	123.7	0.00	1.31	1.02	0	7	3	92	0.00	0.0	4.213	0.000	0	0	0	1
PD.5215	PL.36803	A	10QA	7.42Y	123.7	0.00	1.31	1.02	0	7	3	92	0.00	0.0	4.213	0.000	0	0	0	1
PL.36804	PD.5215	A	#1/0 ACSR	7.42Y	123.7	0.00	1.31	1.02	0	7	3	92	0.00	0.0	4.282	0.069	7	3	1	1
PL.34091	PL.34094	A	6 A (CWC)	7.42Y	123.7	0.00	1.28	3.10	2	21	10	90	0.00	0.0	4.081	0.001	0	0	0	1
PD.5216	PL.34091	A	30QA	7.42Y	123.7	0.00	1.28	3.10	10	21	10	90	0.00	0.0	4.081	0.001	0	0	0	1
PL.34095	PD.5216	A	6 A (CWC)	7.42Y	123.7	0.00	1.28	3.10	2	21	10	90	0.00	0.0	4.110	0.029	21	10	1	1
PL.35910	PL.36790	ABC	#3/0 ACSR	7.42Y	123.7	0.01	1.28	29.47	10	590	287	90	0.04	0.0	4.082	0.031	10	5	1	68
PL.35915	PL.35910	ABC	#3/0 ACSR	7.42Y	123.7	0.05	1.33	28.54	10	572	278	90	0.16	0.0	4.198	0.116	7	4	1	66
PL.35916	PL.35915	ABC	#3/0 ACSR	7.42Y	123.7	0.02	1.35	27.45	9	550	267	90	0.06	0.0	4.246	0.048	14	7	1	63
PL.34126	PL.35916	ABC	#3/0 ACSR	7.42Y	123.6	0.02	1.37	26.77	9	536	260	90	0.08	0.0	4.312	0.067	38	18	5	62
PL.34748	PL.34126	ABC	#3/0 ACSR	7.42Y	123.6	0.02	1.39	24.88	8	498	242	90	0.06	0.0	4.369	0.057	0	0	0	57
PL.35104	PL.34748	C	6 A (CWC)	7.42Y	123.6	0.00	1.40	3.74	3	25	12	90	0.00	0.0	4.415	0.046	25	12	2	2
PL.65752	PL.34748	A	6 A (CWC)	7.42Y	123.6	0.00	1.39	10.04	7	67	32	90	0.00	0.0	4.373	0.003	0	0	0	6
PD.9589	PL.65752	A	25T	7.42Y	123.6	0.00	1.39	10.04	0	67	32	90	0.00	0.0	4.373	0.003	0	0	0	6
PL.65753	PD.9589	A	6 A (CWC)	7.42Y	123.6	0.01	1.40	10.04	7	67	32	90	0.00	0.0	4.392	0.020	0	0	0	6
PL.64801	PL.65753	A	6 A (CWC)	7.42Y	123.6	0.00	1.40	10.04	7	67	32	90	0.00	0.0	4.392	0.000	7	3	2	6
PL.36799	PL.64801	A	6 A (CWC)	7.41Y	123.5	0.05	1.45	6.25	4	42	20	90	0.01	0.0	4.657	0.264	29	14	1	2
PL.36800	PL.36799	A	6 A (CWC)	7.41Y	123.5	0.00	1.46	1.84	1	12	6	89	0.00	0.0	4.740	0.084	12	6	1	1
PL.34253	PL.64801	A	#1/0 ACSR	7.42Y	123.6	0.00	1.40	2.79	1	19	9	90	0.00	0.0	4.460	0.068	19	9	2	2
PL.36797	PL.34748	ABC	#3/0 ACSR	7.42Y	123.6	0.02	1.41	20.28	7	406	197	90	0.04	0.0	4.431	0.062	14	7	2	49
PL.34447	PL.36797	C	6 A (CWC)	7.42Y	123.6	0.00	1.41	1.51	1	10	5	89	0.00	0.0	4.495	0.064	10	5	1	1
PL.36798	PL.36797	ABC	#3/0 ACSR	7.41Y	123.6	0.02	1.43	19.06	6	381	185	90	0.04	0.0	4.493	0.062	0	0	0	46
PL.36796	PL.36798	ABC	#3/0 ACSR	7.41Y	123.6	0.01	1.44	18.79	6	376	182	90	0.02	0.0	4.528	0.035	0	0	0	45
PL.36527	PL.36796	ABC	#3/0 ACSR	7.41Y	123.5	0.02	1.46	18.79	6	376	182	90	0.05	0.0	4.614	0.086	38	18	4	45
PL.36525	PL.36527	B	6 A (CWC)	7.41Y	123.5	0.05	1.51	14.56	10	97	47	90	0.04	0.0	4.693	0.079	12	6	1	8
PL.36526	PL.36525	B	6 A (CWC)	7.41Y	123.5	0.01	1.52	12.83	9	86	41	90	0.01	0.0	4.712	0.019	0	0	0	7

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.51529	PL.36526	B	6 A (CWC)	7.41Y	123.4	0.05	1.57	12.03	9	80	39	90	0.03	0.0	4.807	0.096	0	0	0	6
PL.51528	PL.51529	B	#4 ACSR	7.41Y	123.4	0.00	1.58	1.76	1	12	6	89	0.00	0.0	4.862	0.055	12	6	1	1
PL.51530	PL.51529	B	6 A (CWC)	7.40Y	123.4	0.02	1.59	10.27	7	68	33	90	0.01	0.0	4.841	0.033	0	0	0	5
PL.57899	PL.51530	B	6 A (CWC)	7.40Y	123.4	0.03	1.62	10.27	7	68	33	90	0.01	0.0	4.903	0.062	9	4	1	5
PL.57898	PL.57899	B	6 A (CWC)	7.40Y	123.4	0.01	1.62	4.14	3	28	13	91	0.00	0.0	4.932	0.029	0	0	0	2
PL.57895	PL.57898	B	6 A (CWC)	7.40Y	123.4	0.02	1.64	4.14	3	28	13	91	0.00	0.0	5.023	0.091	0	0	0	2
PL.57896	PL.57895	B	6 A (CWC)	7.40Y	123.4	0.00	1.65	2.21	2	15	7	91	0.00	0.0	5.098	0.075	15	7	1	1
PL.57900	PL.57895	B	#1/0 ACSR	7.40Y	123.4	0.00	1.64	1.94	1	13	6	91	0.00	0.0	5.056	0.033	13	6	1	1
PL.57897	PL.57899	B	#4 ACSR	7.40Y	123.4	0.01	1.63	4.84	4	32	16	89	0.00	0.0	4.969	0.066	21	10	1	2
PL.36371	PL.57897	B	#4 ACSR	7.40Y	123.4	0.00	1.63	1.61	1	11	5	91	0.00	0.0	5.009	0.040	11	5	1	1
PL.51833	PL.36526	B	#4 ACSR	7.41Y	123.5	0.00	1.52	0.80	1	5	3	86	0.00	0.0	4.762	0.050	5	3	1	1
PL.36369	PL.36527	C	6 A (CWC)	7.41Y	123.4	0.11	1.57	36.14	26	241	117	90	0.20	0.1	4.683	0.069	24	12	2	33
PL.34197	PL.36369	C	1/0 AL URD	7.41Y	123.4	0.00	1.57	7.17	4	48	23	90	0.00	0.0	4.708	0.025	14	7	7	14
PL.36508	PL.34197	C	1/0 AL URD	7.41Y	123.4	0.00	1.58	5.14	3	34	17	89	0.00	0.0	4.727	0.019	34	17	7	7
PL.36370	PL.36369	C	6 A (CWC)	7.40Y	123.4	0.03	1.60	25.32	18	169	82	90	0.04	0.0	4.708	0.026	0	0	0	17
PL.36368	PL.36370	C	6 A (CWC)	7.40Y	123.3	0.05	1.65	25.32	18	169	82	90	0.07	0.0	4.752	0.044	0	0	0	17
PL.36528	PL.36368	C	6 A (CWC)	7.40Y	123.3	0.07	1.73	22.79	16	152	74	90	0.08	0.1	4.820	0.068	3	1	1	15
PL.36507	PL.36528	C	6 A (CWC)	7.40Y	123.3	0.01	1.74	22.36	16	149	72	90	0.01	0.0	4.831	0.010	47	23	4	14
PL.60618	PL.36507	C	6 A (CWC)	7.40Y	123.3	0.01	1.74	2.82	2	19	9	90	0.00	0.0	4.960	0.129	19	9	3	3
PL.36366	PL.36507	C	6 A (CWC)	7.39Y	123.2	0.03	1.76	12.55	9	84	40	90	0.02	0.0	4.890	0.059	31	15	2	7
PL.36367	PL.36366	C	#4 ACSR	7.39Y	123.2	0.01	1.78	7.96	6	53	26	90	0.01	0.0	4.935	0.046	14	7	1	5
PL.36365	PL.36367	C	#4 ACSR	7.39Y	123.2	0.00	1.78	2.00	2	13	6	91	0.00	0.0	4.981	0.046	13	6	2	2
PL.33373	PL.36367	C	#4 ACSR	7.39Y	123.2	0.00	1.78	3.83	3	25	12	90	0.00	0.0	4.961	0.026	25	12	2	2
PL.34531	PL.36368	C	6 A (CWC)	7.40Y	123.3	0.00	1.66	1.41	1	9	5	87	0.00	0.0	4.807	0.054	9	5	1	1
PL.35257	PL.36368	C	6 A (CWC)	7.40Y	123.3	0.00	1.65	1.13	1	8	4	89	0.00	0.0	4.791	0.038	8	4	1	1
PL.33526	PL.36798	C	6 A (CWC)	7.41Y	123.6	0.00	1.43	0.81	1	5	3	86	0.00	0.0	4.590	0.097	5	3	1	1
PL.35117	PL.35915	C	#4 ACSR	7.42Y	123.7	0.00	1.33	2.20	2	15	7	91	0.00	0.0	4.242	0.044	15	7	2	2
PL.35911	PL.35910	C	#4 ACSR	7.42Y	123.7	0.00	1.28	1.29	1	9	4	91	0.00	0.0	4.083	0.001	0	0	0	1
PD.5746	PL.35911	C	30QA	7.42Y	123.7	0.00	1.28	1.29	4	9	4	91	0.00	0.0	4.083	0.001	0	0	0	1
PL.35912	PD.5746	C	#4 ACSR	7.42Y	123.7	0.00	1.28	1.29	1	9	4	91	0.00	0.0	4.121	0.038	9	4	1	1
PL.35775	PL.33887	A	6 A (CWC)	7.43Y	123.8	0.01	1.17	3.69	3	25	12	90	0.00	0.0	3.942	0.084	10	5	1	2

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

Balanced Voltage Drop Report
Source: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.35776	PL.35775	A	6 A (CWC)	7.43Y	123.8	0.01	1.18	2.19	2	15	7	91	0.00	0.0	4.033	0.091	0	0	0	1
PL.35215	PL.35776	A	#2 ACSR	7.43Y	123.8	0.00	1.18	0.00	0	0	0	100	0.00	0.0	4.059	0.026	0	0	0	0
PL.35777	PL.35776	A	6 A (CWC)	7.43Y	123.8	0.00	1.18	2.19	2	15	7	91	0.00	0.0	4.108	0.075	15	7	1	1
PL.58182	PL.35403	C	#4 ACSR	7.43Y	123.9	0.00	1.13	44.46	34	297	144	90	0.01	0.0	3.812	0.002	0	0	0	32
PD.8604	PL.58182	C	30T	7.43Y	123.9	0.00	1.13	44.46	0	297	144	90	0.00	0.0	3.812	0.002	0	0	0	32
PL.58183	PD.8604	C	#4 ACSR	7.43Y	123.8	0.06	1.19	44.46	34	297	144	90	0.14	0.0	3.843	0.031	30	14	3	32
PL.36805	PL.58183	C	#4 ACSR	7.43Y	123.8	0.05	1.24	40.01	31	267	130	90	0.10	0.0	3.871	0.028	8	4	1	29
PL.36806	PL.36805	C	#4 ACSR	7.42Y	123.7	0.06	1.31	38.78	30	259	126	90	0.13	0.0	3.909	0.038	20	10	2	28
PL.36810	PL.36806	C	#4 ACSR	7.42Y	123.7	0.03	1.33	19.29	15	129	62	90	0.03	0.0	3.943	0.034	23	11	2	11
PL.36811	PL.36810	C	#4 ACSR	7.42Y	123.7	0.02	1.35	15.88	12	106	51	90	0.01	0.0	3.964	0.021	0	0	0	9
PL.36807	PL.36811	C	#4 ACSR	7.42Y	123.6	0.03	1.38	15.88	12	106	51	90	0.03	0.0	4.009	0.045	0	0	0	9
PL.36808	PL.36807	C	#4 ACSR	7.42Y	123.6	0.01	1.40	15.88	12	106	51	90	0.01	0.0	4.041	0.032	93	45	8	9
PL.36809	PL.36808	C	#4 ACSR	7.42Y	123.6	0.00	1.40	1.89	1	13	6	91	0.00	0.0	4.082	0.041	13	6	1	1
PL.34948	PL.36806	C	#4 ACSR	7.42Y	123.7	0.04	1.35	16.53	13	110	53	90	0.03	0.0	3.970	0.062	26	12	2	15
PL.34949	PL.34948	C	#4 ACSR	7.42Y	123.6	0.02	1.36	9.61	7	64	31	90	0.01	0.0	4.007	0.036	7	3	1	10
PL.35258	PL.34949	C	#4 ACSR	7.42Y	123.6	0.01	1.37	6.29	5	42	20	90	0.00	0.0	4.044	0.037	19	9	2	4
PL.34899	PL.35258	C	#4 ACSR	7.42Y	123.6	0.00	1.37	0.00	0	0	0	100	0.00	0.0	4.093	0.049	0	0	0	0
PL.36812	PL.35258	C	#4 ACSR	7.42Y	123.6	0.00	1.37	3.39	3	23	11	90	0.00	0.0	4.077	0.034	23	11	2	2
PL.66135	PL.34949	C	#4 ACSR	7.42Y	123.6	0.00	1.37	2.18	2	15	7	91	0.00	0.0	4.035	0.028	0	0	0	4
PL.66136	PL.66135	C	#4 ACSR	7.42Y	123.6	0.00	1.37	2.18	2	15	7	91	0.00	0.0	4.067	0.032	0	0	2	4
PL.36814	PL.66136	C	#4 ACSR	7.42Y	123.6	0.00	1.37	2.16	2	14	7	89	0.00	0.0	4.106	0.039	14	7	2	2
PL.36815	PL.36814	C	#4 ACSR	7.42Y	123.6	0.00	1.37	0.00	0	0	0	100	0.00	0.0	4.157	0.051	0	0	0	0
PL.34152	PL.34949	C	#2 ACSR	7.42Y	123.6	0.00	1.36	0.08	0	1	0	100	0.00	0.0	4.031	0.024	1	0	1	1
PL.35106	PL.34948	C	#4 ACSR	7.42Y	123.6	0.00	1.35	3.09	2	21	10	90	0.00	0.0	4.006	0.035	21	10	3	3
PL.34958	PL.36172	A	6 A (CWC)	7.44Y	124.0	0.00	0.96	0.00	0	0	0	100	0.00	0.0	3.686	0.075	0	0	0	0
PL.34610	PL.35927	A	6 A (CWC)	7.46Y	124.3	0.00	0.65	3.05	2	21	10	90	0.00	0.0	3.329	0.062	21	10	3	3
PL.33919	PL.36821	A	6 A (CWC)	7.47Y	124.4	0.01	0.57	3.01	2	20	10	89	0.00	0.0	3.257	0.087	20	10	3	3
PL.35082	PL.36824	ABC	#3/0 ACSR	7.48Y	124.6	0.02	0.41	19.00	6	383	186	90	0.05	0.0	3.073	0.090	0	0	0	50
PL.33766	PL.35082	A	#4 ACSR	7.47Y	124.6	0.01	0.42	9.97	8	67	32	90	0.01	0.0	3.102	0.028	17	8	3	10
PL.62715	PL.33766	A	#4 ACSR	7.47Y	124.6	0.01	0.43	7.39	6	50	24	90	0.00	0.0	3.153	0.051	50	24	7	7
PL.35582	PL.35082	C	6 A (CWC)	7.48Y	124.6	0.00	0.41	1.20	1	8	4	89	0.00	0.0	3.141	0.067	8	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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.34272	PL.35082	ABC	#3/0 ACSR	7.47Y	124.6	0.02	0.43	15.27	5	308	149	90	0.03	0.0	3.165	0.091	11	5	1	39
PL.36829	PL.34272	ABC	#3/0 ACSR	7.47Y	124.6	0.01	0.44	14.74	5	297	144	90	0.02	0.0	3.233	0.068	16	8	1	38
PL.36830	PL.36829	ABC	#3/0 ACSR	7.47Y	124.5	0.01	0.46	12.88	4	260	126	90	0.02	0.0	3.298	0.065	0	0	0	35
PL.34232	PL.36830	A	#2 ACSR	7.47Y	124.5	0.00	0.46	2.01	1	14	7	89	0.00	0.0	3.300	0.002	0	0	0	1
PD.5767	PL.34232	A	30QA	7.47Y	124.5	0.00	0.46	2.01	7	14	7	89	0.00	0.0	3.300	0.002	0	0	0	1
PL.34233	PD.5767	A	#2 ACSR	7.47Y	124.5	0.00	0.46	2.01	1	14	7	89	0.00	0.0	3.334	0.034	14	7	1	1
PL.36831	PL.36830	ABC	#3/0 ACSR	7.47Y	124.5	0.01	0.47	12.21	4	246	119	90	0.02	0.0	3.360	0.062	0	0	0	34
PL.36351	PL.36831	ABC	#3/0 ACSR	7.47Y	124.5	0.01	0.47	6.35	2	128	62	90	0.01	0.0	3.454	0.094	12	6	1	14
PL.34787	PL.36351	C	#4 ACSR	7.47Y	124.5	0.00	0.48	1.19	1	8	4	89	0.00	0.0	3.531	0.077	8	4	1	1
PL.36352	PL.36351	ABC	#3/0 ACSR	7.47Y	124.5	0.00	0.48	5.38	2	109	53	90	0.00	0.0	3.515	0.061	8	4	1	12
PL.35333	PL.36352	B	#2 ACSR	7.47Y	124.5	0.00	0.48	0.00	0	0	0	100	0.00	0.0	3.516	0.001	0	0	0	0
PD.5811	PL.35333	B	40QA	7.47Y	124.5	0.00	0.48	0.00	0	0	0	100	0.00	0.0	3.516	0.001	0	0	0	0
PL.35334	PD.5811	B	#2 ACSR	7.47Y	124.5	0.00	0.48	0.00	0	0	0	100	0.00	0.0	3.548	0.032	0	0	0	0
PL.34040	PL.36352	B	#2 ACSR	7.47Y	124.5	0.00	0.48	1.79	1	12	6	89	0.00	0.0	3.539	0.024	12	6	1	1
PL.59328	PL.36352	ABC	#3/0 ACSR	7.47Y	124.5	0.00	0.48	4.40	1	89	43	90	0.00	0.0	3.600	0.085	14	7	2	10
PL.62252	PL.59328	ABC	#3/0 ACSR	7.47Y	124.5	0.00	0.49	2.62	1	53	26	90	0.00	0.0	3.688	0.088	10	5	1	6
PL.62253	PL.62252	B	6 A (CWC)	7.47Y	124.5	0.00	0.49	2.48	2	17	8	90	0.00	0.0	3.688	0.000	0	0	0	1
PD.5814	PL.62253	B	60QA	7.47Y	124.5	0.00	0.49	2.48	4	17	8	90	0.00	0.0	3.688	0.000	0	0	0	1
PL.35332	PD.5814	B	6 A (CWC)	7.47Y	124.5	0.00	0.49	2.48	2	17	8	90	0.00	0.0	3.744	0.056	17	8	1	1
PL.62254	PL.62252	A	#2 ACSR	7.47Y	124.5	0.00	0.49	3.83	2	26	12	91	0.00	0.0	3.688	0.001	0	0	0	4
PD.8760	PL.62254	A	60QA	7.47Y	124.5	0.00	0.49	3.83	6	26	12	91	0.00	0.0	3.688	0.001	0	0	0	4
PL.59330	PD.8760	A	#2 ACSR	7.47Y	124.5	0.00	0.49	3.83	2	26	12	91	0.00	0.0	3.704	0.016	11	5	2	4
PL.33874	PL.59330	A	#2 ACSR	7.47Y	124.5	0.01	0.49	2.15	1	14	7	89	0.00	0.0	3.792	0.088	0	0	1	2
PL.35331	PL.33874	A	#2 ACSR	7.47Y	124.5	0.00	0.50	2.14	1	14	7	89	0.00	0.0	3.844	0.053	14	7	1	1
PL.62255	PL.62252	ABC	#3/0 ACSR	7.47Y	124.5	0.00	0.49	0.00	0	0	0	100	0.00	0.0	3.716	0.028	0	0	0	0
PD.9302-A	PL.62255	ABC	Open	7.47Y	124.5	0.00	0.49	0.00	0	0	0	100	0.00	0.0	3.716	0.028	0	0	0	0
PL.59329	PL.59328	B	#2 ACSR	7.47Y	124.5	0.00	0.48	3.25	2	22	11	89	0.00	0.0	3.601	0.001	0	0	0	2
PD.5726	PL.59329	B	20T	7.47Y	124.5	0.00	0.48	3.25	0	22	11	89	0.00	0.0	3.601	0.001	0	0	0	2
PL.34724	PD.5726	B	#2 ACSR	7.47Y	124.5	0.00	0.49	3.25	2	22	11	89	0.00	0.0	3.624	0.023	22	11	2	2
PL.33416	PL.36831	C	6 A (CWC)	7.47Y	124.4	0.11	0.58	13.92	10	94	45	90	0.08	0.1	3.539	0.179	12	6	2	15
PL.60619	PL.33416	C	6 A (CWC)	7.46Y	124.4	0.01	0.58	12.16	9	82	40	90	0.00	0.0	3.553	0.014	8	4	4	13

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.60620	PL.60619	C	#1/0 ACSR	7.46Y	124.4	0.00	0.59	1.11	0	7	4	87	0.00	0.0	3.593	0.040	7	4	1	1
PL.63331	PL.60619	C	6 A (CWC)	7.46Y	124.4	0.01	0.60	9.91	7	67	32	90	0.01	0.0	3.594	0.041	31	15	2	8
PL.63332	PL.63331	C	6 A (CWC)	7.46Y	124.4	0.00	0.60	5.27	4	35	17	90	0.00	0.0	3.616	0.021	12	6	1	6
PL.63333	PL.63332	C	6 A (CWC)	7.46Y	124.4	0.00	0.61	1.43	1	10	5	89	0.00	0.0	3.634	0.018	0	0	0	1
PL.63330	PL.63333	C	6 A (CWC)	7.46Y	124.4	0.00	0.61	1.43	1	10	5	89	0.00	0.0	3.649	0.015	10	5	1	1
PL.63334	PL.63332	C	#1/0 ACSR	7.46Y	124.4	0.00	0.61	2.07	1	14	7	89	0.00	0.0	3.637	0.021	0	0	3	4
PL.63335	PL.63334	C	#1/0 ACSR	7.46Y	124.4	0.00	0.61	2.07	1	14	7	89	0.00	0.0	3.658	0.021	14	7	1	1
PL.35029	PL.36831	A	6 A (CWC)	7.47Y	124.5	0.01	0.47	3.64	3	24	12	89	0.00	0.0	3.425	0.065	24	12	5	5
PL.34471	PL.36829	A	6 A (CWC)	7.47Y	124.6	0.01	0.45	3.26	2	22	11	89	0.00	0.0	3.306	0.073	22	11	2	2
PL.36827	PL.36823	C	6 A (CWC)	7.48Y	124.7	0.00	0.25	0.60	0	4	2	89	0.00	0.0	2.877	0.001	0	0	0	1
PD.5813	PL.36827	C	50QA	7.48Y	124.7	0.00	0.25	0.60	1	4	2	89	0.00	0.0	2.877	0.001	0	0	0	1
PL.36828	PD.5813	C	6 A (CWC)	7.48Y	124.7	0.00	0.25	0.60	0	4	2	89	0.00	0.0	2.897	0.019	4	2	1	1
PL.63796	PL.51868	A	#1/0 ACSR	7.51Y	125.1	0.00	-0.10	0.05	0	0	0	100	0.00	0.0	2.602	0.003	0	0	0	1
PD.9483	PL.63796	A	20T	7.51Y	125.1	0.00	-0.10	0.05	0	0	0	100	0.00	0.0	2.602	0.003	0	0	0	1
PL.63797	PD.9483	A	#1/0 ACSR	7.51Y	125.1	0.00	-0.10	0.05	0	0	0	100	0.00	0.0	2.625	0.023	0	0	1	1
PL.57588	PL.57586	C	6 A (CWC)	7.19Y	119.8	0.00	5.21	2.24	2	14	7	89	0.00	0.0	1.879	0.001	0	0	0	5
PD.8380	PL.57588	C	15QA	7.19Y	119.8	0.00	5.21	2.24	0	14	7	89	0.00	0.0	1.879	0.001	0	0	0	5
PL.60622	PD.8380	C	6 A (CWC)	7.19Y	119.8	0.00	5.22	2.24	2	14	7	89	0.00	0.0	1.903	0.024	0	0	0	5
PL.60624	PL.60622	C	1/0 AL URD	7.19Y	119.8	0.00	5.22	1.47	1	10	5	89	0.00	0.0	1.918	0.015	10	5	2	2
PL.60623	PL.60622	C	6 A (CWC)	7.19Y	119.8	0.00	5.22	0.77	1	5	2	93	0.00	0.0	1.946	0.043	5	2	3	3
PL.63114	PL.60623	C	#1/0 ACSR	7.19Y	119.8	0.00	5.22	0.00	0	0	0	100	0.00	0.0	1.990	0.044	0	0	0	0
PL.72487	PL.72488	C	#1/0 ACSR	7.20Y	120.0	0.00	5.01	0.00	0	0	0	100	0.00	0.0	1.751	0.019	0	0	0	0
CP.102	PL.62936	ABC	Cap (600)	7.23Y	120.5	0.00	4.52	0.00	0	0	0	100	0.00	0.0	1.523	0.019	0	0	0	0
PL.52160	PL.36050	C	6 A (CWC)	7.23Y	120.6	0.00	4.44	0.11	0	1	0	100	0.00	0.0	1.519	0.024	1	0	1	2
PL.52161	PL.52160	C	6 A (CWC)	7.23Y	120.6	0.00	4.44	0.01	0	0	0	100	0.00	0.0	1.582	0.064	0	0	1	1
PL.54129	PL.35509	C	6 A (CWC)	7.31Y	121.9	0.00	3.14	3.31	2	22	11	89	0.00	0.0	1.055	0.002	0	0	0	3
PD.8127	PL.54129	C	40QA	7.31Y	121.9	0.00	3.14	3.31	8	22	11	89	0.00	0.0	1.055	0.002	0	0	0	3
PL.54130	PD.8127	C	6 A (CWC)	7.31Y	121.9	0.00	3.14	3.31	2	22	11	89	0.00	0.0	1.072	0.017	0	0	1	3
PL.35718	PL.54130	C	6 A (CWC)	7.31Y	121.8	0.01	3.15	3.30	2	22	11	89	0.00	0.0	1.144	0.072	22	11	2	2
PL.54131	PL.35509	B	6 A (CWC)	7.31Y	121.9	0.01	3.15	41.93	30	276	134	90	0.01	0.0	1.055	0.003	0	0	0	38
PD.8128	PL.54131	B	50T	7.31Y	121.9	0.00	3.15	41.93	0	276	134	90	0.00	0.0	1.055	0.003	0	0	0	38

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.54132	PD.8128	B	#1/0 ACSR	7.31Y	121.8	0.08	3.22	41.93	18	276	134	90	0.13	0.0	1.126	0.071	6	3	2	38
PL.36157	PL.54132	B	#1/0 ACSR	7.30Y	121.7	0.09	3.31	41.02	18	270	131	90	0.15	0.1	1.207	0.081	2	1	1	36
PL.36158	PL.36157	B	#1/0 ACSR	7.30Y	121.6	0.07	3.38	36.04	16	237	115	90	0.11	0.0	1.287	0.080	0	0	0	33
PL.36156	PL.36158	B	#1/0 ACSR	7.29Y	121.5	0.07	3.46	34.02	15	223	109	90	0.10	0.0	1.375	0.088	19	9	3	32
PL.54135	PL.36156	B	#4 ACSR	7.29Y	121.5	0.00	3.46	2.37	2	16	8	89	0.00	0.0	1.379	0.004	0	0	0	3
PD.8130	PL.54135	B	40QA	7.29Y	121.5	0.00	3.46	2.37	6	16	8	89	0.00	0.0	1.379	0.004	0	0	0	3
PL.54136	PD.8130	B	#4 ACSR	7.29Y	121.5	0.01	3.46	2.37	2	16	8	89	0.00	0.0	1.431	0.052	2	1	1	3
PL.36155	PL.54136	B	#4 ACSR	7.29Y	121.5	0.00	3.46	2.07	2	14	7	89	0.00	0.0	1.501	0.071	14	7	2	2
PL.54133	PL.36156	B	#1/0 ACSR	7.29Y	121.5	0.00	3.46	28.79	13	189	92	90	0.00	0.0	1.379	0.004	0	0	0	26
PD.8129	PL.54133	B	30T	7.29Y	121.5	0.00	3.46	28.79	0	189	92	90	0.00	0.0	1.379	0.004	0	0	0	26
PL.54134	PD.8129	B	#1/0 ACSR	7.29Y	121.5	0.02	3.48	28.79	13	189	92	90	0.03	0.0	1.413	0.034	6	3	1	26
PL.35723	PL.54134	B	#1/0 ACSR	7.29Y	121.4	0.07	3.56	25.50	11	167	81	90	0.08	0.0	1.528	0.114	0	0	0	22
PL.36159	PL.35723	B	#4 ACSR	7.29Y	121.4	0.01	3.57	5.32	4	35	17	90	0.00	0.0	1.599	0.072	30	15	3	4
PL.35849	PL.36159	B	#4 ACSR	7.29Y	121.4	0.00	3.57	0.68	1	4	2	89	0.00	0.0	1.655	0.055	4	2	1	1
PL.36667	PL.35723	B	#1/0 ACSR	7.28Y	121.4	0.03	3.59	18.83	8	123	60	90	0.02	0.0	1.586	0.058	1	0	1	16
PL.60699	PL.36667	B	#1/0 ACSR	7.28Y	121.4	0.00	3.59	0.31	0	2	1	89	0.00	0.0	1.589	0.004	0	0	0	1
PD.9092	PL.60699	B	15T	7.28Y	121.4	0.00	3.59	0.31	0	2	1	89	0.00	0.0	1.589	0.004	0	0	0	1
PL.72529	PD.9092	B	#1/0 ACSR	7.28Y	121.4	0.00	3.59	0.31	0	2	1	89	0.00	0.0	1.612	0.022	0	0	0	1
PL.72530	PL.72529	B	#1/0 ACSR	7.28Y	121.4	0.00	3.59	0.31	0	2	1	89	0.00	0.0	1.766	0.154	2	1	1	1
PL.62415	PL.36667	B	#1/0 ACSR	7.28Y	121.4	0.03	3.61	18.41	8	121	59	90	0.02	0.0	1.640	0.054	0	0	1	14
PL.62416	PL.62415	B	#1/0 ACSR	7.28Y	121.3	0.05	3.66	18.38	8	120	58	90	0.04	0.0	1.739	0.098	0	0	0	13
PL.62417	PL.62416	B	#1/0 ACSR	7.28Y	121.3	0.09	3.75	18.38	8	120	58	90	0.07	0.1	1.922	0.184	0	0	0	13
PL.62418	PL.62417	B	#1/0 ACSR	7.27Y	121.2	0.04	3.79	18.38	8	120	58	90	0.03	0.0	2.011	0.088	0	0	0	13
PL.62419	PL.62418	B	#1/0 ACSR	7.27Y	121.2	0.04	3.83	18.38	8	120	58	90	0.03	0.0	2.092	0.081	0	0	0	13
PL.62420	PL.62419	B	#1/0 ACSR	7.27Y	121.1	0.03	3.85	18.38	8	120	58	90	0.02	0.0	2.146	0.054	0	0	0	13
PL.62949	PL.62420	B	#1/0 ACSR	7.27Y	121.1	0.02	3.87	18.38	8	120	58	90	0.02	0.0	2.192	0.046	6	3	1	13
PL.62950	PL.62949	B	#1/0 ACSR	7.27Y	121.1	0.02	3.89	15.92	7	104	50	90	0.01	0.0	2.237	0.044	14	7	1	11
PL.36524	PL.62950	B	#1/0 ACSR	7.27Y	121.1	0.02	3.91	13.82	6	90	44	90	0.01	0.0	2.310	0.073	18	9	1	10
PL.35850	PL.36524	B	#1/0 ACSR	7.26Y	121.1	0.01	3.92	11.14	5	73	35	90	0.00	0.0	2.332	0.022	0	0	0	9
PL.35102	PL.35850	B	6 A (CWC)	7.26Y	121.1	0.00	3.92	0.76	1	5	2	93	0.00	0.0	2.406	0.075	5	2	2	2
PL.35851	PL.35850	B	6 A (CWC)	7.26Y	121.0	0.08	3.99	10.38	7	68	33	90	0.04	0.1	2.485	0.153	0	0	0	7

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: Laurel Ind 1

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

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.62952	PL.35851	B	6 A (CWC)	7.26Y	121.0	0.01	4.00	10.38	7	68	33	90	0.01	0.0	2.507	0.022	10	5	2	7
PL.62953	PL.62952	B	6 A (CWC)	7.26Y	121.0	0.04	4.04	8.88	6	58	28	90	0.02	0.0	2.610	0.104	10	5	1	5
PL.62951	PL.62953	B	6 A (CWC)	7.26Y	121.0	0.00	4.05	1.57	1	10	5	89	0.00	0.0	2.635	0.025	10	5	1	1
PL.62954	PL.62953	B	6 A (CWC)	7.26Y	120.9	0.02	4.06	5.75	4	38	18	90	0.00	0.0	2.720	0.110	38	18	3	3
PL.34629	PL.35851	B	#4 ACSR	7.26Y	121.0	0.00	3.99	0.00	0	0	0	100	0.00	0.0	2.651	0.166	0	0	0	0
PL.62948	PL.62949	B	#2 ACSR	7.27Y	121.1	0.00	3.87	1.52	1	10	5	89	0.00	0.0	2.208	0.016	0	0	0	1
PL.62947	PL.62948	B	#1/0 ACSR	7.27Y	121.1	0.00	3.87	1.52	1	10	5	89	0.00	0.0	2.221	0.013	10	5	1	1
PL.35319	PL.35723	B	#4 ACSR	7.29Y	121.4	0.00	3.56	1.34	1	9	4	91	0.00	0.0	1.648	0.120	9	4	2	2
PL.33759	PL.54134	B	#4 ACSR	7.29Y	121.5	0.00	3.49	1.87	1	12	6	89	0.00	0.0	1.458	0.045	4	2	1	2
PL.33760	PL.33759	B	#4 ACSR	7.29Y	121.5	0.00	3.49	1.22	1	8	4	89	0.00	0.0	1.469	0.011	8	4	1	1
PL.33669	PL.54134	B	#2 ACSR	7.29Y	121.5	0.00	3.48	0.45	0	3	1	95	0.00	0.0	1.428	0.015	3	1	1	1
PL.35251	PL.36158	B	#2 ACSR	7.30Y	121.6	0.00	3.38	2.02	1	13	6	91	0.00	0.0	1.309	0.021	13	6	1	1
PL.34628	PL.36157	B	#4 ACSR	7.30Y	121.7	0.01	3.31	2.85	2	19	9	90	0.00	0.0	1.315	0.108	19	9	1	1
PL.64295	PL.36157	B	#1/0 ACSR	7.30Y	121.7	0.00	3.31	1.87	1	12	6	89	0.00	0.0	1.223	0.016	12	6	1	1
PL.36186	PL.36188	A	6 A (CWC)	7.34Y	122.4	0.00	2.63	2.17	2	14	7	89	0.00	0.0	0.898	0.001	0	0	0	1
PD.5108	PL.36186	A	30QA	7.34Y	122.4	0.00	2.63	2.17	7	14	7	89	0.00	0.0	0.898	0.001	0	0	0	1
PL.36187	PD.5108	A	6 A (CWC)	7.34Y	122.4	0.00	2.63	2.17	2	14	7	89	0.00	0.0	0.947	0.048	14	7	1	1
PL.33735	PL.33733	A	6 A (CWC)	7.50Y	124.9	0.00	0.07	10.87	8	73	36	90	0.00	0.0	0.061	0.002	0	0	0	7
PD.5852	PL.33735	A	40QA	7.50Y	124.9	0.00	0.07	10.87	27	73	36	90	0.00	0.0	0.061	0.002	0	0	0	7
PL.36169	PD.5852	A	6 A (CWC)	7.49Y	124.9	0.02	0.09	10.87	8	73	36	90	0.01	0.0	0.120	0.058	35	17	3	7
PL.34349	PL.36169	A	6 A (CWC)	7.49Y	124.9	0.02	0.11	5.69	4	38	19	89	0.01	0.0	0.222	0.102	14	7	1	4
PL.36152	PL.34349	A	6 A (CWC)	7.49Y	124.9	0.00	0.12	3.64	3	25	12	90	0.00	0.0	0.255	0.033	14	7	1	3
PL.34348	PL.36152	A	6 A (CWC)	7.49Y	124.9	0.00	0.12	1.62	1	11	5	91	0.00	0.0	0.268	0.013	11	5	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	10259	0	0	0	0	0	214		0.00	10473	Lowest Voltage =	118.17	on Element PL.36644
KVAR	3095	0	0	0	0	0	370			3465	Max Accm VoltD =	6.83	on Element PL.36644
											Max Elem VoltD =	1.34	on Element PL.35725

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: Laurel Ind 1

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

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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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