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**PLAINFIELD RENEWABLE ENERGY, LLC
PLAINFIELD, CONNECTICUT**

**115 KV TRANSMISSION LINE
DESCRIPTION AND
ELECTRO-MAGNETIC
FIELDS (EMF) ANALYSIS**

AUGUST 10, 2006



ELECTRIC POWER ENGINEERING

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Part 1 – 115 kV Transmission Line Description

The proposed 115kV transmission line would utilize a 336.4 kcmil conductor. This is the minimum size conductor that is typically used on modern 115 kV transmission lines and it is thermally adequate for this project. The conductor type would be ACSR (aluminum with steel reinforcing strands in the center for extra strength). ACSR type conductors are used on transmission lines in order to provide for longer spans, and that in turn reduces the number of supporting structures that are required.

The proposed design utilizes an "H" frame structure, consisting of two wood poles and a single wood cross member. The conductors are suspended from the wood cross member using an appropriately sized string of disc insulators. The conductor arrangement is horizontal and there are two aerial ground wires, located above the conductors and attached at the top of each pole. The aerial ground wires provide lightning shielding, which improves reliability. The typical structure height would be 50 to 60 feet, depending on the profile of the terrain beneath the line. This configuration results in the minimum overall height and is recommended.

In the event that any portion of the right of way or the usable area therein is of inadequate width for the proposed horizontal configuration, a single pole structure with davit arms would be used in place of the H-frame structure. In this case, the conductor arrangement would be vertical. Wood poles with metal arms would be used, with the exception that steel poles would be required at corners if down guys were not feasible. A single aerial ground wire would be located above the conductors, attached to the top of the pole. The vertical arrangement increases the height of the structures by approximately 25 feet.

Part 2 - Electro-Magnetic Field (EMF) Analysis

Summary

The proposed Project design and utility interconnection is consistent with the Connecticut Siting Council EMF Best Management Practices. The Project will result in relatively minimal EMF impacts along the Project Site boundaries as well as along the boundaries of the right-of-way from the Project Site to the nearby utility interconnection substation.

Project Description

The Project Site is located on an approximately 30 acre industrial zoned parcel in Plainfield, CT. The proposed Project 37.5 MW generating facility is sited along the parcel's western portion parallel to the Providence and Worcester Railroad tracks that form the parcel's western border. The facility will generate power at 13.8 kV and transform to 115 kV via a 13.8-115 kV Generator Step-Up (GSU) transformer.

The Project will electrically interconnect to the nearby 115 kV CL&P Fry Brook Substation via a single-circuit overhead 115 kV transmission line approximately 1,500 feet in length. The proposed Project 115 kV transmission line routing is along the existing CL&P right-of-way adjacent to an existing 23 kV CL&P overhead double-circuit pole line that runs through the Project Site's northern corner to the Fry Brook Substation.

The CL&P right-of-way parallels the Providence and Worcester Railroad tracks and includes the Project Site and other parcels owned by the Town of Plainfield and the Connecticut Yankee Community Avenue Associates. The Town of Plainfield parcel is undeveloped and the Connecticut Yankee Community Avenue Associates' parcel is zoned industrial. The Fry Brook substation is located within the CL&P right-of-way on the Connecticut Yankee Community Avenue Associates parcel.

The maximum anticipated loading of the Project 115 kV transmission line is approximately 190 amps based on the maximum rated net output of the Project generating facility. At this time, there are no known transmission system grid constraints that would restrict the range of dispatch of the Project generating facility. A System Impact Study is currently being performed by ISO-NE to evaluate potential transmission system impacts and to study proposed utility interconnection arrangements. The Fry Brook Substation interconnection scenarios currently under study include a 115 kV radial tap interconnection and a 115 kV ring bus interconnection to the Project Site.

EMF Analysis - Project Site Boundaries

Existing Facilities

The maximum existing EMF levels at the boundaries of the Project Site occur where the existing 23 kV CL&P overhead double-circuit pole line crosses the Project Site property

lines. Maximum existing magnetic field levels at the boundaries of the Project Site were calculated to be approximately 15 mG. Magnetic field levels were field measured and compared favorably with calculated results. Maximum existing electric field levels at the boundaries of the Project Site were calculated to be 0.13 kV per meter.

Proposed Facilities

The maximum EMF levels at the boundaries of the Project Site following construction of the proposed Project facilities occur where the proposed 115 kV transmission line crosses the Project Site's northern property boundary. Maximum expected magnetic field levels were calculated to be approximately 20 mG and maximum expected electric field levels were calculated to be 0.46 kV per meter.

EMF Analysis – CL&P Right-of-Way

Magnetic Fields - Existing Facilities

Maximum existing magnetic fields within the CL&P right-of-way were calculated to be approximately 15 mG. Maximum existing magnetic field levels at the eastern and western boundaries along the CL&P right-of-way were calculated to be approximately 4 mG and 10 mG respectively. Magnetic field levels were field measured and compared favorably with calculated results.

Magnetic Fields - Proposed Facilities

The maximum expected magnetic fields within the CL&P right-of-way following construction of the proposed Project facilities were calculated to be in the 40-50 mG range depending upon the phase orientation of the Project 115 kV transmission line. Maximum expected magnetic field levels at the boundaries along the CL&P right-of-way were calculated to be in the 4-15 mG range depending upon the phase orientation of the Project 115 kV transmission line.

Existing Facilities – Electric Fields

Maximum existing electric fields within the CL&P right-of-way were calculated to be approximately 0.13 kV per meter. Maximum existing electric field levels at the eastern and western boundaries along the CL&P right-of-way were calculated to be approximately 0.01 kV per meter and 0.08 kV per meter respectively.

Magnetic Fields - Proposed Facilities

The maximum expected electric fields within the CL&P right-of-way following construction of the proposed Project facilities were calculated to be 1.4 kV per meter. Maximum expected electric field levels at the eastern boundary along the CL&P right-of-way were calculated to be 0.4 kV per meter. Maximum expected electric field levels at the western boundary along the CL&P right-of-way were calculated to be in the 0.07-

0.17 kV per meter range depending upon the phase orientation of the Project 115 kV transmission line.

Conclusion

The expected magnetic and electric field levels attributable to the Project are well within the range of EMF levels for these types of facilities. As a result, there are no EMF design considerations or EMF exposure limits currently under consideration for the Project.

EMF Computer Analysis Results

The pages that follow document the results of the computer modeling and analysis in tabular format.

115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis

August 10, 2006
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Existing Distribution Line

ROW boundary → x = -17

ROW boundary → x = 100

23 kV, ph A = (4.25 ft, 38 ft) -430<-30deg amps

23 kV, ph B = (3.00 ft, 34 ft) -390<-150deg amps

23 kV, ph C = (1.25 ft, 38 ft) -370<90deg amps

All unbalance current in earth

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
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-100.00	1.103	2.492	2.725	2.582	0.001	0.008	0.008	0.008
-99.00	1.119	2.509	2.747	2.599	0.001	0.008	0.008	0.008
-98.00	1.135	2.526	2.769	2.617	0.001	0.008	0.008	0.008
-97.00	1.151	2.543	2.791	2.635	0.001	0.008	0.008	0.008
-96.00	1.168	2.560	2.814	2.654	0.001	0.008	0.008	0.008
-95.00	1.186	2.578	2.837	2.672	0.001	0.009	0.009	0.009
-94.00	1.203	2.596	2.861	2.691	0.001	0.009	0.009	0.009
-93.00	1.221	2.614	2.885	2.710	0.001	0.009	0.009	0.009
-92.00	1.239	2.632	2.909	2.730	0.001	0.009	0.009	0.009
-91.00	1.258	2.651	2.934	2.749	0.001	0.009	0.009	0.009
-90.00	1.277	2.670	2.960	2.769	0.001	0.009	0.009	0.009
-89.00	1.296	2.690	2.985	2.789	0.001	0.009	0.010	0.010
-88.00	1.315	2.709	3.012	2.810	0.001	0.010	0.010	0.010
-87.00	1.335	2.729	3.039	2.831	0.001	0.010	0.010	0.010
-86.00	1.356	2.750	3.066	2.852	0.001	0.010	0.010	0.010
-85.00	1.376	2.771	3.094	2.873	0.001	0.010	0.010	0.010
-84.00	1.397	2.792	3.122	2.895	0.001	0.010	0.010	0.010
-83.00	1.419	2.814	3.151	2.917	0.001	0.011	0.011	0.011
-82.00	1.440	2.836	3.181	2.940	0.001	0.011	0.011	0.011
-81.00	1.462	2.859	3.211	2.963	0.001	0.011	0.011	0.011
-80.00	1.485	2.882	3.242	2.986	0.001	0.011	0.011	0.011
-79.00	1.508	2.906	3.274	3.010	0.001	0.011	0.011	0.011
-78.00	1.531	2.930	3.306	3.034	0.001	0.012	0.012	0.012
-77.00	1.554	2.955	3.339	3.059	0.001	0.012	0.012	0.012
-76.00	1.578	2.981	3.373	3.084	0.001	0.012	0.012	0.012
-75.00	1.603	3.007	3.407	3.109	0.001	0.012	0.012	0.012
-74.00	1.627	3.034	3.443	3.136	0.002	0.013	0.013	0.013
-73.00	1.652	3.062	3.479	3.162	0.002	0.013	0.013	0.013
-72.00	1.678	3.090	3.516	3.190	0.002	0.013	0.013	0.013
-71.00	1.703	3.119	3.554	3.218	0.002	0.013	0.013	0.013
-70.00	1.729	3.150	3.593	3.246	0.002	0.014	0.014	0.014
-69.00	1.755	3.181	3.633	3.276	0.002	0.014	0.014	0.014
-68.00	1.782	3.213	3.674	3.306	0.002	0.014	0.014	0.014
-67.00	1.808	3.246	3.716	3.338	0.002	0.014	0.015	0.015
-66.00	1.835	3.281	3.759	3.370	0.002	0.015	0.015	0.015
-65.00	1.863	3.317	3.804	3.403	0.002	0.015	0.015	0.015
-64.00	1.890	3.354	3.850	3.437	0.002	0.015	0.016	0.016
-63.00	1.917	3.392	3.897	3.473	0.002	0.016	0.016	0.016
-62.00	1.945	3.432	3.945	3.509	0.002	0.016	0.016	0.016
-61.00	1.972	3.474	3.995	3.548	0.003	0.017	0.017	0.017
-60.00	2.000	3.518	4.046	3.588	0.003	0.017	0.017	0.017
-59.00	2.027	3.563	4.099	3.629	0.003	0.017	0.018	0.017
-58.00	2.055	3.610	4.154	3.673	0.003	0.018	0.018	0.018
-57.00	2.082	3.660	4.210	3.718	0.003	0.018	0.018	0.018
-56.00	2.109	3.712	4.269	3.766	0.003	0.019	0.019	0.019

**115 kV Transmission Line Description and
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**August 10, 2006
PLM, Inc.**

Existing Distribution Line

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
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-55.00	2.135	3.766	4.329	3.816	0.003	0.019	0.019	0.019
-54.00	2.161	3.823	4.391	3.869	0.003	0.020	0.020	0.020
-53.00	2.186	3.883	4.456	3.924	0.004	0.020	0.020	0.020
-52.00	2.211	3.946	4.523	3.983	0.004	0.021	0.021	0.021
-51.00	2.235	4.012	4.592	4.045	0.004	0.021	0.021	0.021
-50.00	2.258	4.081	4.664	4.111	0.004	0.022	0.022	0.022
-49.00	2.279	4.154	4.739	4.181	0.005	0.022	0.023	0.022
-48.00	2.300	4.231	4.816	4.255	0.005	0.023	0.023	0.023
-47.00	2.319	4.313	4.896	4.333	0.005	0.024	0.024	0.024
-46.00	2.336	4.398	4.980	4.416	0.005	0.024	0.025	0.025
-45.00	2.351	4.489	5.067	4.504	0.006	0.025	0.026	0.025
-44.00	2.365	4.584	5.158	4.597	0.006	0.026	0.026	0.026
-43.00	2.376	4.684	5.252	4.696	0.006	0.027	0.027	0.027
-42.00	2.385	4.790	5.351	4.800	0.007	0.028	0.028	0.028
-41.00	2.390	4.902	5.454	4.911	0.007	0.028	0.029	0.029
-40.00	2.393	5.020	5.561	5.028	0.008	0.029	0.030	0.030
-39.00	2.393	5.143	5.673	5.151	0.008	0.030	0.032	0.031
-38.00	2.389	5.274	5.790	5.281	0.008	0.032	0.033	0.032
-37.00	2.383	5.411	5.912	5.419	0.009	0.033	0.034	0.033
-36.00	2.372	5.555	6.040	5.563	0.009	0.034	0.035	0.035
-35.00	2.358	5.705	6.173	5.715	0.010	0.035	0.037	0.036
-34.00	2.341	5.863	6.313	5.874	0.011	0.037	0.038	0.038
-33.00	2.321	6.028	6.459	6.041	0.011	0.038	0.040	0.039
-32.00	2.298	6.200	6.612	6.217	0.012	0.040	0.042	0.041
-31.00	2.274	6.379	6.772	6.400	0.013	0.042	0.044	0.043
-30.00	2.250	6.564	6.939	6.592	0.013	0.044	0.046	0.045
-29.00	2.228	6.756	7.114	6.792	0.014	0.046	0.048	0.047
-28.00	2.211	6.954	7.297	7.001	0.015	0.048	0.050	0.049
-27.00	2.201	7.157	7.488	7.218	0.016	0.050	0.053	0.052
-26.00	2.203	7.365	7.687	7.444	0.016	0.053	0.055	0.054
-25.00	2.223	7.576	7.895	7.679	0.017	0.055	0.058	0.057
-24.00	2.265	7.789	8.112	7.922	0.018	0.058	0.061	0.060
-23.00	2.335	8.004	8.338	8.173	0.019	0.061	0.064	0.063
-22.00	2.439	8.218	8.572	8.433	0.020	0.064	0.067	0.066
-21.00	2.580	8.429	8.815	8.700	0.020	0.067	0.070	0.069
-20.00	2.764	8.636	9.068	8.975	0.021	0.071	0.074	0.073
-19.00	2.991	8.836	9.329	9.257	0.022	0.074	0.077	0.076
-18.00	3.262	9.026	9.598	9.545	0.022	0.078	0.081	0.080
-17.00	3.577	9.204	9.875	9.839	0.022	0.082	0.085	0.084
-16.00	3.935	9.366	10.160	10.137	0.023	0.085	0.088	0.087
-15.00	4.334	9.510	10.451	10.439	0.023	0.089	0.092	0.091
-14.00	4.772	9.631	10.748	10.744	0.023	0.093	0.096	0.095
-13.00	5.245	9.726	11.050	11.050	0.023	0.097	0.100	0.099
-12.00	5.750	9.792	11.356	11.355	0.023	0.101	0.104	0.103
-11.00	6.285	9.826	11.664	11.659	0.023	0.105	0.107	0.106
-10.00	6.843	9.825	11.973	11.959	0.022	0.108	0.111	0.110
-9.00	7.422	9.785	12.282	12.254	0.022	0.112	0.114	0.113
-8.00	8.015	9.707	12.588	12.541	0.021	0.115	0.117	0.116
-7.00	8.616	9.587	12.890	12.819	0.020	0.118	0.120	0.119
-6.00	9.219	9.426	13.185	13.086	0.019	0.121	0.122	0.121
-5.00	9.818	9.225	13.472	13.339	0.018	0.123	0.125	0.124

**115 kV Transmission Line Description and
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**August 10, 2006
PLM, Inc.**

Existing Distribution Line

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
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-4.00	10.405	8.986	13.749	13.576	0.017	0.125	0.127	0.126
-3.00	10.974	8.713	14.013	13.796	0.017	0.127	0.128	0.127
-2.00	11.518	8.410	14.262	13.997	0.016	0.128	0.129	0.128
-1.00	12.030	8.085	14.494	14.177	0.016	0.129	0.130	0.129
0.00	12.505	7.744	14.708	14.335	0.016	0.129	0.130	0.129
1.00	12.936	7.397	14.902	14.470	0.016	0.129	0.130	0.129
2.00	13.321	7.055	15.074	14.581	0.016	0.128	0.129	0.128
3.00	13.656	6.728	15.223	14.667	0.017	0.127	0.128	0.127
4.00	13.938	6.427	15.348	14.728	0.017	0.125	0.127	0.126
5.00	14.167	6.161	15.449	14.765	0.018	0.123	0.125	0.124
6.00	14.343	5.940	15.524	14.778	0.019	0.121	0.122	0.121
7.00	14.467	5.769	15.575	14.767	0.020	0.118	0.120	0.119
8.00	14.541	5.650	15.600	14.734	0.021	0.115	0.117	0.116
9.00	14.568	5.582	15.600	14.679	0.022	0.112	0.114	0.113
10.00	14.551	5.561	15.577	14.605	0.022	0.108	0.111	0.110
11.00	14.494	5.580	15.531	14.512	0.023	0.105	0.107	0.106
12.00	14.401	5.632	15.463	14.403	0.023	0.101	0.104	0.103
13.00	14.276	5.706	15.374	14.278	0.023	0.097	0.100	0.099
14.00	14.124	5.796	15.267	14.140	0.023	0.093	0.096	0.095
15.00	13.947	5.894	15.141	13.990	0.023	0.089	0.092	0.091
16.00	13.750	5.994	15.000	13.830	0.023	0.085	0.088	0.087
17.00	13.536	6.092	14.844	13.661	0.022	0.082	0.085	0.084
18.00	13.307	6.186	14.675	13.485	0.022	0.078	0.081	0.080
19.00	13.067	6.272	14.494	13.302	0.022	0.074	0.077	0.076
20.00	12.817	6.349	14.304	13.114	0.021	0.071	0.074	0.073
21.00	12.560	6.418	14.105	12.923	0.020	0.067	0.070	0.069
22.00	12.298	6.477	13.899	12.728	0.020	0.064	0.067	0.066
23.00	12.032	6.526	13.688	12.531	0.019	0.061	0.064	0.063
24.00	11.763	6.567	13.472	12.333	0.018	0.058	0.061	0.060
25.00	11.492	6.599	13.252	12.133	0.017	0.055	0.058	0.057
26.00	11.221	6.624	13.030	11.934	0.016	0.053	0.055	0.054
27.00	10.951	6.641	12.807	11.736	0.016	0.050	0.053	0.052
28.00	10.682	6.652	12.583	11.538	0.015	0.048	0.050	0.049
29.00	10.414	6.657	12.360	11.341	0.014	0.046	0.048	0.047
30.00	10.149	6.656	12.137	11.146	0.013	0.044	0.046	0.045
31.00	9.888	6.650	11.916	10.953	0.013	0.042	0.044	0.043
32.00	9.629	6.639	11.696	10.763	0.012	0.040	0.042	0.041
33.00	9.375	6.624	11.479	10.575	0.011	0.038	0.040	0.039
34.00	9.125	6.605	11.265	10.389	0.011	0.037	0.038	0.038
35.00	8.880	6.583	11.054	10.207	0.010	0.035	0.037	0.036
36.00	8.639	6.557	10.846	10.027	0.009	0.034	0.035	0.035
37.00	8.404	6.529	10.642	9.851	0.009	0.033	0.034	0.033
38.00	8.174	6.497	10.442	9.678	0.008	0.032	0.033	0.032
39.00	7.949	6.463	10.245	9.508	0.008	0.030	0.032	0.031
40.00	7.730	6.427	10.053	9.341	0.008	0.029	0.030	0.030
41.00	7.516	6.389	9.864	9.178	0.007	0.028	0.029	0.029
42.00	7.308	6.348	9.680	9.018	0.007	0.028	0.028	0.028
43.00	7.106	6.306	9.500	8.862	0.006	0.027	0.027	0.027
44.00	6.909	6.262	9.325	8.709	0.006	0.026	0.026	0.026
45.00	6.717	6.217	9.153	8.560	0.006	0.025	0.026	0.025
46.00	6.532	6.171	8.985	8.414	0.005	0.024	0.025	0.025

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Existing Distribution Line

<u>DIST</u> <u>(Ft)</u>	<u>B Horz</u> <u>(mG)</u>	<u>B Vert</u> <u>(mG)</u>	<u>B PROD</u> <u>(mG)</u>	<u>B MAX</u> <u>(mG)</u>	<u>E Horz</u> <u>(kV/m)</u>	<u>E Vert</u> <u>(kV/m)</u>	<u>E PROD</u> <u>(kV/m)</u>	<u>E MAX</u> <u>(kV/m)</u>
47.00	6.351	6.123	8.822	8.271	0.005	0.024	0.024	0.024
48.00	6.176	6.074	8.663	8.132	0.005	0.023	0.023	0.023
49.00	6.007	6.025	8.508	7.995	0.005	0.022	0.023	0.022
50.00	5.842	5.974	8.356	7.862	0.004	0.022	0.022	0.022
51.00	5.683	5.924	8.209	7.733	0.004	0.021	0.021	0.021
52.00	5.529	5.872	8.065	7.606	0.004	0.021	0.021	0.021
53.00	5.379	5.820	7.925	7.482	0.004	0.020	0.020	0.020
54.00	5.235	5.768	7.789	7.362	0.003	0.020	0.020	0.020
55.00	5.094	5.715	7.656	7.244	0.003	0.019	0.019	0.019
56.00	4.959	5.663	7.527	7.129	0.003	0.019	0.019	0.019
57.00	4.828	5.610	7.401	7.017	0.003	0.018	0.018	0.018
58.00	4.701	5.557	7.278	6.908	0.003	0.018	0.018	0.018
59.00	4.578	5.504	7.159	6.801	0.003	0.017	0.018	0.017
60.00	4.459	5.451	7.043	6.697	0.003	0.017	0.017	0.017
61.00	4.344	5.399	6.929	6.595	0.003	0.017	0.017	0.017
62.00	4.232	5.346	6.819	6.496	0.002	0.016	0.016	0.016
63.00	4.125	5.294	6.711	6.399	0.002	0.016	0.016	0.016
64.00	4.020	5.242	6.606	6.305	0.002	0.015	0.016	0.016
65.00	3.919	5.191	6.504	6.213	0.002	0.015	0.015	0.015
66.00	3.822	5.140	6.405	6.123	0.002	0.015	0.015	0.015
67.00	3.727	5.089	6.308	6.035	0.002	0.014	0.015	0.015
68.00	3.636	5.038	6.213	5.949	0.002	0.014	0.014	0.014
69.00	3.547	4.988	6.121	5.866	0.002	0.014	0.014	0.014
70.00	3.461	4.939	6.031	5.784	0.002	0.014	0.014	0.014
71.00	3.378	4.890	5.944	5.704	0.002	0.013	0.013	0.013
72.00	3.298	4.841	5.858	5.626	0.002	0.013	0.013	0.013
73.00	3.220	4.793	5.775	5.550	0.002	0.013	0.013	0.013
74.00	3.145	4.746	5.693	5.475	0.002	0.013	0.013	0.013
75.00	3.072	4.699	5.614	5.403	0.001	0.012	0.012	0.012
76.00	3.001	4.653	5.536	5.332	0.001	0.012	0.012	0.012
77.00	2.932	4.607	5.461	5.262	0.001	0.012	0.012	0.012
78.00	2.866	4.561	5.387	5.194	0.001	0.012	0.012	0.012
79.00	2.801	4.517	5.315	5.128	0.001	0.011	0.011	0.011
80.00	2.739	4.473	5.244	5.063	0.001	0.011	0.011	0.011
81.00	2.678	4.429	5.176	5.000	0.001	0.011	0.011	0.011
82.00	2.619	4.386	5.109	4.938	0.001	0.011	0.011	0.011
83.00	2.562	4.343	5.043	4.877	0.001	0.011	0.011	0.011
84.00	2.507	4.301	4.979	4.817	0.001	0.010	0.010	0.010
85.00	2.453	4.260	4.916	4.759	0.001	0.010	0.010	0.010
86.00	2.401	4.219	4.855	4.702	0.001	0.010	0.010	0.010
87.00	2.351	4.179	4.795	4.647	0.001	0.010	0.010	0.010
88.00	2.301	4.139	4.736	4.592	0.001	0.010	0.010	0.010
89.00	2.254	4.100	4.679	4.539	0.001	0.009	0.010	0.010
90.00	2.207	4.062	4.623	4.487	0.001	0.009	0.009	0.009
91.00	2.162	4.024	4.568	4.435	0.001	0.009	0.009	0.009
92.00	2.119	3.986	4.514	4.385	0.001	0.009	0.009	0.009
93.00	2.076	3.949	4.462	4.336	0.001	0.009	0.009	0.009
94.00	2.035	3.913	4.410	4.288	0.001	0.009	0.009	0.009
95.00	1.995	3.877	4.360	4.241	0.001	0.009	0.009	0.009
96.00	1.955	3.841	4.310	4.195	0.001	0.008	0.008	0.008
97.00	1.917	3.806	4.262	4.149	0.001	0.008	0.008	0.008

115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis

August 10, 2006
PLM, Inc.

Existing Distribution Line

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
98.00	1.880	3.772	4.215	4.105	0.001	0.008	0.008	0.008
99.00	1.844	3.738	4.168	4.061	0.001	0.008	0.008	0.008
100.00	1.809	3.705	4.123	4.018	0.001	0.008	0.008	0.008

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

New Transmission Line at Project Site Boundary

115 kV, ph A = (38 ft, 45 ft) 190<0deg amps

115 kV, ph B = (50 ft, 45 ft) 190<-120deg amps

115 kV, ph C = (62 ft, 45 ft) 190<120deg amps

23 kV distribution contribution → add 4 mG (100 ft away)

Ambient contribution → add 2mG (based on field measurements)

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
-----	-----	-----	-----	-----	-----	-----	-----	-----
-100.00	0.561	0.916	1.074	1.074	0.002	0.038	0.038	0.038
-99.00	0.572	0.926	1.088	1.088	0.002	0.039	0.039	0.039
-98.00	0.582	0.935	1.102	1.102	0.002	0.039	0.040	0.040
-97.00	0.593	0.945	1.116	1.116	0.002	0.040	0.040	0.040
-96.00	0.604	0.955	1.130	1.130	0.002	0.041	0.041	0.041
-95.00	0.616	0.965	1.144	1.144	0.002	0.042	0.042	0.042
-94.00	0.627	0.975	1.159	1.159	0.002	0.042	0.042	0.042
-93.00	0.639	0.985	1.174	1.174	0.002	0.043	0.043	0.043
-92.00	0.651	0.995	1.190	1.189	0.002	0.044	0.044	0.044
-91.00	0.664	1.006	1.205	1.205	0.002	0.044	0.045	0.045
-90.00	0.677	1.016	1.221	1.221	0.002	0.045	0.045	0.045
-89.00	0.690	1.027	1.237	1.237	0.002	0.046	0.046	0.046
-88.00	0.703	1.038	1.254	1.254	0.003	0.047	0.047	0.047
-87.00	0.717	1.049	1.271	1.271	0.003	0.048	0.048	0.048
-86.00	0.731	1.060	1.288	1.288	0.003	0.049	0.049	0.049
-85.00	0.746	1.072	1.306	1.305	0.003	0.050	0.050	0.050
-84.00	0.761	1.083	1.324	1.323	0.003	0.050	0.051	0.051
-83.00	0.776	1.095	1.342	1.342	0.003	0.051	0.051	0.051
-82.00	0.792	1.106	1.360	1.360	0.003	0.052	0.052	0.052
-81.00	0.808	1.118	1.379	1.379	0.003	0.053	0.053	0.053
-80.00	0.825	1.130	1.399	1.399	0.003	0.054	0.054	0.054
-79.00	0.842	1.142	1.419	1.419	0.003	0.055	0.055	0.055
-78.00	0.859	1.154	1.439	1.439	0.003	0.056	0.056	0.056
-77.00	0.877	1.167	1.460	1.459	0.003	0.057	0.058	0.058
-76.00	0.895	1.179	1.481	1.480	0.003	0.059	0.059	0.059
-75.00	0.914	1.192	1.502	1.502	0.003	0.060	0.060	0.060
-74.00	0.934	1.205	1.524	1.524	0.004	0.061	0.061	0.061
-73.00	0.953	1.218	1.547	1.546	0.004	0.062	0.062	0.062
-72.00	0.974	1.231	1.569	1.569	0.004	0.063	0.063	0.063
-71.00	0.995	1.244	1.593	1.593	0.004	0.065	0.065	0.065
-70.00	1.017	1.257	1.617	1.616	0.004	0.066	0.066	0.066
-69.00	1.039	1.271	1.641	1.641	0.004	0.067	0.067	0.067
-68.00	1.062	1.284	1.666	1.666	0.004	0.069	0.069	0.069
-67.00	1.085	1.298	1.692	1.691	0.004	0.070	0.070	0.070
-66.00	1.109	1.312	1.718	1.717	0.004	0.071	0.071	0.071
-65.00	1.134	1.325	1.744	1.744	0.005	0.073	0.073	0.073
-64.00	1.159	1.339	1.772	1.771	0.005	0.074	0.074	0.074
-63.00	1.186	1.354	1.799	1.799	0.005	0.076	0.076	0.076
-62.00	1.213	1.368	1.828	1.828	0.005	0.077	0.078	0.078
-61.00	1.240	1.382	1.857	1.857	0.005	0.079	0.079	0.079
-60.00	1.269	1.396	1.887	1.886	0.005	0.081	0.081	0.081
-59.00	1.298	1.411	1.917	1.917	0.005	0.083	0.083	0.083
-58.00	1.329	1.425	1.949	1.948	0.005	0.084	0.085	0.084
-57.00	1.360	1.440	1.980	1.980	0.006	0.086	0.086	0.086
-56.00	1.392	1.454	2.013	2.013	0.006	0.088	0.088	0.088
-55.00	1.425	1.469	2.047	2.046	0.006	0.090	0.090	0.090

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

New Transmission Line at Project Site Boundary

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
-54.00	1.459	1.484	2.081	2.080	0.006	0.092	0.092	0.092
-53.00	1.494	1.498	2.116	2.115	0.006	0.094	0.094	0.094
-52.00	1.530	1.513	2.152	2.151	0.006	0.096	0.096	0.096
-51.00	1.567	1.528	2.189	2.188	0.007	0.098	0.098	0.098
-50.00	1.605	1.542	2.226	2.226	0.007	0.100	0.101	0.101
-49.00	1.645	1.557	2.265	2.264	0.007	0.103	0.103	0.103
-48.00	1.686	1.571	2.304	2.304	0.007	0.105	0.105	0.105
-47.00	1.727	1.585	2.345	2.344	0.007	0.108	0.108	0.108
-46.00	1.771	1.600	2.386	2.385	0.008	0.110	0.110	0.110
-45.00	1.815	1.614	2.429	2.428	0.008	0.113	0.113	0.113
-44.00	1.861	1.628	2.472	2.471	0.008	0.115	0.115	0.115
-43.00	1.908	1.641	2.517	2.516	0.008	0.118	0.118	0.118
-42.00	1.957	1.655	2.563	2.562	0.009	0.121	0.121	0.121
-41.00	2.007	1.668	2.610	2.609	0.009	0.124	0.124	0.124
-40.00	2.059	1.681	2.658	2.657	0.009	0.126	0.127	0.127
-39.00	2.113	1.693	2.708	2.706	0.009	0.129	0.130	0.130
-38.00	2.168	1.705	2.758	2.757	0.010	0.133	0.133	0.133
-37.00	2.225	1.717	2.810	2.809	0.010	0.136	0.136	0.136
-36.00	2.283	1.728	2.864	2.862	0.010	0.139	0.139	0.139
-35.00	2.344	1.739	2.919	2.917	0.010	0.143	0.143	0.143
-34.00	2.406	1.749	2.975	2.973	0.011	0.146	0.146	0.146
-33.00	2.471	1.758	3.033	3.031	0.011	0.150	0.150	0.150
-32.00	2.537	1.767	3.092	3.090	0.011	0.153	0.154	0.154
-31.00	2.606	1.775	3.153	3.151	0.012	0.157	0.158	0.158
-30.00	2.676	1.782	3.215	3.213	0.012	0.161	0.161	0.161
-29.00	2.749	1.788	3.279	3.277	0.012	0.165	0.166	0.166
-28.00	2.824	1.793	3.345	3.343	0.013	0.169	0.170	0.170
-27.00	2.902	1.796	3.413	3.411	0.013	0.173	0.174	0.174
-26.00	2.982	1.799	3.483	3.480	0.013	0.178	0.178	0.178
-25.00	3.064	1.800	3.554	3.551	0.014	0.182	0.183	0.183
-24.00	3.149	1.800	3.627	3.624	0.014	0.187	0.188	0.188
-23.00	3.237	1.798	3.703	3.700	0.015	0.192	0.192	0.192
-22.00	3.327	1.794	3.780	3.777	0.015	0.197	0.197	0.197
-21.00	3.420	1.789	3.860	3.856	0.015	0.202	0.202	0.202
-20.00	3.516	1.781	3.942	3.938	0.016	0.207	0.207	0.207
-19.00	3.615	1.772	4.026	4.022	0.016	0.212	0.213	0.213
-18.00	3.717	1.760	4.112	4.108	0.017	0.218	0.218	0.218
-17.00	3.821	1.745	4.201	4.197	0.017	0.223	0.224	0.224
-16.00	3.929	1.728	4.292	4.288	0.017	0.229	0.229	0.229
-15.00	4.040	1.708	4.386	4.381	0.018	0.235	0.235	0.235
-14.00	4.154	1.685	4.483	4.477	0.018	0.241	0.241	0.241
-13.00	4.271	1.658	4.582	4.576	0.019	0.247	0.247	0.247
-12.00	4.392	1.628	4.684	4.677	0.019	0.253	0.254	0.254
-11.00	4.515	1.594	4.788	4.782	0.019	0.259	0.260	0.260
-10.00	4.642	1.557	4.896	4.889	0.020	0.266	0.267	0.267
-9.00	4.772	1.515	5.006	4.999	0.020	0.273	0.273	0.273
-8.00	4.905	1.468	5.120	5.112	0.021	0.279	0.280	0.280
-7.00	5.041	1.417	5.236	5.228	0.021	0.286	0.287	0.287
-6.00	5.180	1.361	5.356	5.347	0.021	0.293	0.294	0.294
-5.00	5.323	1.300	5.479	5.469	0.022	0.301	0.301	0.301
-4.00	5.468	1.234	5.605	5.594	0.022	0.308	0.309	0.309

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

August 10, 2006
PLM, Inc.

New Transmission Line at Project Site Boundary

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
-3.00	5.616	1.162	5.735	5.723	0.022	0.315	0.316	0.316
-2.00	5.766	1.086	5.868	5.855	0.022	0.323	0.323	0.323
-1.00	5.919	1.004	6.004	5.991	0.023	0.330	0.331	0.331
0.00	6.074	0.919	6.144	6.129	0.023	0.338	0.339	0.339
1.00	6.232	0.832	6.287	6.272	0.023	0.345	0.346	0.346
2.00	6.390	0.744	6.434	6.417	0.023	0.353	0.354	0.354
3.00	6.550	0.662	6.584	6.567	0.023	0.361	0.361	0.361
4.00	6.712	0.594	6.738	6.719	0.023	0.368	0.369	0.369
5.00	6.873	0.551	6.895	6.875	0.023	0.376	0.377	0.377
6.00	7.035	0.550	7.056	7.035	0.022	0.384	0.384	0.384
7.00	7.196	0.599	7.221	7.198	0.022	0.391	0.392	0.392
8.00	7.356	0.697	7.388	7.364	0.022	0.398	0.399	0.399
9.00	7.514	0.835	7.560	7.533	0.021	0.405	0.406	0.406
10.00	7.669	1.004	7.734	7.706	0.020	0.412	0.413	0.413
11.00	7.821	1.199	7.912	7.882	0.019	0.419	0.419	0.419
12.00	7.969	1.415	8.093	8.061	0.019	0.425	0.426	0.426
13.00	8.111	1.650	8.277	8.242	0.017	0.431	0.432	0.432
14.00	8.248	1.902	8.464	8.427	0.016	0.437	0.437	0.437
15.00	8.377	2.172	8.654	8.614	0.015	0.442	0.443	0.443
16.00	8.497	2.458	8.846	8.803	0.013	0.447	0.447	0.447
17.00	8.608	2.760	9.040	8.994	0.012	0.451	0.451	0.451
18.00	8.708	3.078	9.236	9.187	0.010	0.455	0.455	0.455
19.00	8.796	3.411	9.434	9.381	0.008	0.458	0.458	0.458
20.00	8.870	3.758	9.633	9.577	0.006	0.460	0.460	0.460
21.00	8.929	4.119	9.833	9.773	0.005	0.461	0.461	0.461
22.00	8.971	4.494	10.034	9.970	0.004	0.462	0.462	0.462
23.00	8.996	4.881	10.234	10.166	0.005	0.461	0.461	0.461
24.00	9.001	5.280	10.435	10.362	0.008	0.460	0.460	0.460
25.00	8.985	5.689	10.635	10.558	0.010	0.457	0.457	0.457
26.00	8.948	6.107	10.834	10.752	0.014	0.454	0.454	0.454
27.00	8.887	6.533	11.030	10.943	0.017	0.449	0.449	0.449
28.00	8.802	6.965	11.225	11.133	0.020	0.443	0.443	0.443
29.00	8.692	7.402	11.417	11.319	0.024	0.436	0.436	0.436
30.00	8.556	7.841	11.605	11.502	0.028	0.427	0.428	0.428
31.00	8.392	8.280	11.789	11.681	0.032	0.417	0.419	0.419
32.00	8.201	8.717	11.969	11.855	0.036	0.406	0.408	0.408
33.00	7.982	9.151	12.143	12.023	0.040	0.394	0.396	0.396
34.00	7.736	9.577	12.311	12.186	0.044	0.380	0.382	0.382
35.00	7.462	9.995	12.473	12.342	0.048	0.364	0.368	0.368
36.00	7.161	10.401	12.628	12.492	0.051	0.348	0.352	0.352
37.00	6.835	10.793	12.775	12.633	0.055	0.330	0.335	0.335
38.00	6.484	11.168	12.914	12.767	0.059	0.311	0.316	0.316
39.00	6.110	11.524	13.044	12.891	0.062	0.290	0.297	0.297
40.00	5.716	11.858	13.164	13.007	0.066	0.269	0.277	0.277
41.00	5.305	12.169	13.275	13.113	0.069	0.247	0.256	0.256
42.00	4.880	12.453	13.375	13.209	0.071	0.223	0.234	0.234
43.00	4.447	12.709	13.465	13.295	0.074	0.199	0.212	0.212
44.00	4.012	12.935	13.543	13.370	0.076	0.174	0.190	0.189
45.00	3.586	13.129	13.610	13.434	0.078	0.149	0.168	0.167
46.00	3.180	13.290	13.665	13.487	0.080	0.124	0.147	0.145
47.00	2.814	13.417	13.709	13.528	0.081	0.099	0.128	0.124

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

August 10, 2006
PLM, Inc.

New Transmission Line at Project Site Boundary

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
48.00	2.514	13.508	13.740	13.557	0.082	0.077	0.112	0.105
49.00	2.312	13.563	13.758	13.575	0.083	0.059	0.102	0.090
50.00	2.240	13.581	13.765	13.581	0.083	0.052	0.098	0.083
51.00	2.312	13.563	13.758	13.575	0.083	0.059	0.102	0.090
52.00	2.514	13.508	13.740	13.557	0.082	0.077	0.112	0.105
53.00	2.814	13.417	13.709	13.528	0.081	0.099	0.128	0.124
54.00	3.180	13.290	13.665	13.487	0.080	0.124	0.147	0.145
55.00	3.586	13.129	13.610	13.434	0.078	0.149	0.168	0.167
56.00	4.012	12.935	13.543	13.370	0.076	0.174	0.190	0.189
57.00	4.447	12.709	13.465	13.295	0.074	0.199	0.212	0.212
58.00	4.880	12.453	13.375	13.209	0.071	0.223	0.234	0.234
59.00	5.305	12.169	13.275	13.113	0.069	0.247	0.256	0.256
60.00	5.716	11.858	13.164	13.007	0.066	0.269	0.277	0.277
61.00	6.110	11.524	13.044	12.891	0.062	0.290	0.297	0.297
62.00	6.484	11.168	12.914	12.767	0.059	0.311	0.316	0.316
63.00	6.835	10.793	12.775	12.633	0.055	0.330	0.335	0.335
64.00	7.161	10.401	12.628	12.492	0.051	0.348	0.352	0.352
65.00	7.462	9.995	12.473	12.342	0.048	0.364	0.368	0.368
66.00	7.736	9.577	12.311	12.186	0.044	0.380	0.382	0.382
67.00	7.982	9.151	12.143	12.023	0.040	0.394	0.396	0.396
68.00	8.201	8.717	11.969	11.855	0.036	0.406	0.408	0.408
69.00	8.392	8.280	11.789	11.681	0.032	0.417	0.419	0.419
70.00	8.556	7.841	11.605	11.502	0.028	0.427	0.428	0.428
71.00	8.692	7.402	11.417	11.319	0.024	0.436	0.436	0.436
72.00	8.802	6.965	11.225	11.133	0.020	0.443	0.443	0.443
73.00	8.887	6.533	11.030	10.943	0.017	0.449	0.449	0.449
74.00	8.948	6.107	10.834	10.752	0.014	0.454	0.454	0.454
75.00	8.985	5.689	10.635	10.558	0.010	0.457	0.457	0.457
76.00	9.001	5.280	10.435	10.362	0.008	0.460	0.460	0.460
77.00	8.996	4.881	10.235	10.166	0.005	0.461	0.461	0.461
78.00	8.971	4.494	10.034	9.970	0.004	0.462	0.462	0.462
79.00	8.929	4.119	9.833	9.773	0.005	0.461	0.461	0.461
80.00	8.870	3.758	9.633	9.577	0.006	0.460	0.460	0.460
81.00	8.796	3.411	9.434	9.381	0.008	0.458	0.458	0.458
82.00	8.708	3.078	9.236	9.187	0.010	0.455	0.455	0.455
83.00	8.608	2.760	9.040	8.994	0.012	0.451	0.451	0.451
84.00	8.497	2.458	8.846	8.803	0.013	0.447	0.447	0.447
85.00	8.377	2.172	8.654	8.614	0.015	0.442	0.443	0.443
86.00	8.248	1.902	8.464	8.427	0.016	0.437	0.437	0.437
87.00	8.111	1.650	8.277	8.242	0.017	0.431	0.432	0.432
88.00	7.969	1.415	8.093	8.061	0.019	0.425	0.426	0.426
89.00	7.821	1.199	7.912	7.882	0.019	0.419	0.419	0.419
90.00	7.669	1.004	7.734	7.706	0.020	0.412	0.413	0.413
91.00	7.514	0.835	7.560	7.533	0.021	0.405	0.406	0.406
92.00	7.356	0.697	7.388	7.364	0.022	0.398	0.399	0.399
93.00	7.196	0.599	7.221	7.198	0.022	0.391	0.392	0.392
94.00	7.035	0.550	7.056	7.035	0.022	0.384	0.384	0.384
95.00	6.873	0.551	6.895	6.875	0.023	0.376	0.377	0.377
96.00	6.712	0.594	6.738	6.719	0.023	0.368	0.369	0.369
97.00	6.550	0.662	6.584	6.567	0.023	0.361	0.361	0.361
98.00	6.390	0.744	6.434	6.417	0.023	0.353	0.354	0.354

115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis

August 10, 2006
PLM, Inc.

New Transmission Line at Project Site Boundary

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
99.00	6.232	0.832	6.287	6.272	0.023	0.345	0.346	0.346
100.00	6.074	0.919	6.144	6.129	0.023	0.338	0.339	0.339

115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis

August 10, 2006
PLM, Inc.

Right-of-Way – Existing Distribution and Proposed Transmission Line (CBA phasing)

ROW boundary → x = -17

ROW boundary → x = 100

23 kV, ph A = (4.25 ft, 38 ft) -430<-30deg amps

23 kV, ph B = (3.00 ft, 34 ft) -390<-150deg amps

23 kV, ph C = (1.25 ft, 38 ft) -370<90deg amps

115 kV, ph A = (62 ft, 24 ft) 190<0deg amps

115 kV, ph B = (50 ft, 24 ft) 190<-120deg amps

115 kV, ph C = (38 ft, 24 ft) 190<120deg amps

All unbalance current in earth

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
-100.00	1.155	3.437	3.626	3.527	0.001	0.015	0.015	0.015
-99.00	1.172	3.467	3.660	3.559	0.001	0.015	0.015	0.015
-98.00	1.188	3.498	3.694	3.591	0.001	0.015	0.015	0.015
-97.00	1.205	3.530	3.730	3.624	0.001	0.016	0.016	0.016
-96.00	1.223	3.562	3.766	3.657	0.001	0.016	0.016	0.016
-95.00	1.240	3.594	3.802	3.691	0.001	0.016	0.016	0.016
-94.00	1.258	3.628	3.840	3.726	0.001	0.016	0.016	0.016
-93.00	1.277	3.662	3.878	3.762	0.001	0.017	0.017	0.017
-92.00	1.295	3.696	3.917	3.798	0.001	0.017	0.017	0.017
-91.00	1.314	3.732	3.956	3.834	0.001	0.017	0.017	0.017
-90.00	1.333	3.768	3.997	3.872	0.001	0.018	0.018	0.018
-89.00	1.353	3.805	4.038	3.910	0.001	0.018	0.018	0.018
-88.00	1.373	3.842	4.080	3.949	0.001	0.018	0.018	0.018
-87.00	1.393	3.881	4.123	3.989	0.001	0.019	0.019	0.019
-86.00	1.414	3.920	4.167	4.029	0.001	0.019	0.019	0.019
-85.00	1.435	3.960	4.212	4.071	0.001	0.019	0.019	0.019
-84.00	1.457	4.001	4.258	4.113	0.001	0.020	0.020	0.020
-83.00	1.479	4.043	4.304	4.156	0.001	0.020	0.020	0.020
-82.00	1.501	4.085	4.352	4.200	0.001	0.021	0.021	0.021
-81.00	1.523	4.129	4.401	4.246	0.001	0.021	0.021	0.021
-80.00	1.546	4.174	4.451	4.292	0.001	0.021	0.021	0.021
-79.00	1.570	4.220	4.502	4.339	0.001	0.022	0.022	0.022
-78.00	1.593	4.267	4.555	4.388	0.001	0.022	0.022	0.022
-77.00	1.618	4.315	4.608	4.437	0.001	0.023	0.023	0.023
-76.00	1.642	4.364	4.663	4.488	0.002	0.023	0.023	0.023
-75.00	1.667	4.415	4.719	4.540	0.002	0.024	0.024	0.024
-74.00	1.692	4.467	4.777	4.593	0.002	0.024	0.024	0.024
-73.00	1.718	4.520	4.836	4.648	0.002	0.025	0.025	0.025
-72.00	1.744	4.575	4.896	4.704	0.002	0.025	0.025	0.025
-71.00	1.771	4.631	4.958	4.761	0.002	0.026	0.026	0.026
-70.00	1.798	4.689	5.022	4.821	0.002	0.026	0.026	0.026
-69.00	1.825	4.748	5.087	4.881	0.002	0.027	0.027	0.027
-68.00	1.853	4.809	5.154	4.944	0.002	0.027	0.027	0.027
-67.00	1.881	4.872	5.223	5.008	0.002	0.028	0.028	0.028
-66.00	1.909	4.937	5.293	5.074	0.002	0.028	0.028	0.028
-65.00	1.938	5.004	5.366	5.143	0.002	0.029	0.029	0.029
-64.00	1.968	5.073	5.441	5.213	0.002	0.030	0.030	0.030
-63.00	1.997	5.144	5.518	5.285	0.002	0.030	0.030	0.030
-62.00	2.027	5.217	5.597	5.360	0.002	0.031	0.031	0.031
-61.00	2.057	5.293	5.679	5.437	0.002	0.031	0.032	0.032
-60.00	2.088	5.371	5.762	5.517	0.002	0.032	0.032	0.032
-59.00	2.119	5.452	5.849	5.599	0.002	0.033	0.033	0.033

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
-----	-----	-----	-----	-----	-----	-----	-----	-----
-58.00	2.150	5.535	5.938	5.684	0.003	0.034	0.034	0.034
-57.00	2.182	5.622	6.030	5.773	0.003	0.034	0.034	0.034
-56.00	2.214	5.711	6.125	5.864	0.003	0.035	0.035	0.035
-55.00	2.246	5.804	6.223	5.959	0.003	0.036	0.036	0.036
-54.00	2.279	5.900	6.325	6.057	0.003	0.037	0.037	0.037
-53.00	2.312	6.000	6.430	6.159	0.003	0.038	0.038	0.038
-52.00	2.345	6.103	6.538	6.265	0.003	0.038	0.039	0.038
-51.00	2.379	6.210	6.650	6.375	0.003	0.039	0.039	0.039
-50.00	2.413	6.321	6.766	6.489	0.003	0.040	0.040	0.040
-49.00	2.448	6.437	6.886	6.608	0.003	0.041	0.041	0.041
-48.00	2.483	6.557	7.011	6.731	0.004	0.042	0.042	0.042
-47.00	2.519	6.681	7.140	6.860	0.004	0.043	0.043	0.043
-46.00	2.555	6.810	7.274	6.994	0.004	0.044	0.044	0.044
-45.00	2.592	6.945	7.413	7.134	0.004	0.045	0.045	0.045
-44.00	2.631	7.084	7.557	7.280	0.004	0.046	0.046	0.046
-43.00	2.671	7.230	7.707	7.432	0.004	0.047	0.047	0.047
-42.00	2.712	7.380	7.863	7.591	0.004	0.048	0.049	0.049
-41.00	2.755	7.537	8.025	7.756	0.005	0.050	0.050	0.050
-40.00	2.800	7.700	8.193	7.929	0.005	0.051	0.051	0.051
-39.00	2.849	7.869	8.368	8.109	0.005	0.052	0.052	0.052
-38.00	2.900	8.044	8.551	8.298	0.005	0.053	0.054	0.054
-37.00	2.956	8.225	8.740	8.494	0.005	0.055	0.055	0.055
-36.00	3.016	8.414	8.938	8.700	0.006	0.056	0.056	0.056
-35.00	3.082	8.608	9.144	8.914	0.006	0.058	0.058	0.058
-34.00	3.156	8.810	9.358	9.138	0.006	0.059	0.059	0.059
-33.00	3.237	9.018	9.581	9.371	0.006	0.061	0.061	0.061
-32.00	3.328	9.232	9.814	9.614	0.006	0.062	0.063	0.062
-31.00	3.429	9.453	10.056	9.868	0.007	0.064	0.064	0.064
-30.00	3.543	9.680	10.308	10.133	0.007	0.066	0.066	0.066
-29.00	3.672	9.913	10.571	10.408	0.007	0.068	0.068	0.068
-28.00	3.817	10.150	10.844	10.695	0.007	0.069	0.070	0.070
-27.00	3.981	10.393	11.129	10.993	0.007	0.071	0.072	0.072
-26.00	4.164	10.639	11.425	11.302	0.008	0.073	0.074	0.074
-25.00	4.370	10.888	11.732	11.624	0.008	0.075	0.076	0.076
-24.00	4.600	11.139	12.052	11.957	0.008	0.078	0.078	0.078
-23.00	4.856	11.391	12.383	12.302	0.008	0.080	0.080	0.080
-22.00	5.140	11.643	12.727	12.659	0.008	0.082	0.083	0.083
-21.00	5.453	11.892	13.083	13.027	0.008	0.085	0.085	0.085
-20.00	5.797	12.137	13.451	13.407	0.008	0.087	0.087	0.087
-19.00	6.172	12.377	13.831	13.798	0.008	0.090	0.090	0.090
-18.00	6.581	12.608	14.223	14.200	0.008	0.092	0.093	0.093
-17.00	7.023	12.830	14.626	14.611	0.008	0.095	0.095	0.095
-16.00	7.498	13.038	15.040	15.032	0.009	0.098	0.098	0.098
-15.00	8.006	13.231	15.465	15.462	0.009	0.101	0.101	0.101
-14.00	8.548	13.406	15.900	15.899	0.010	0.104	0.104	0.104
-13.00	9.121	13.561	16.343	16.343	0.010	0.107	0.107	0.107
-12.00	9.725	13.692	16.794	16.792	0.012	0.110	0.111	0.111
-11.00	10.357	13.797	17.252	17.245	0.013	0.114	0.114	0.114
-10.00	11.016	13.874	17.716	17.702	0.015	0.117	0.118	0.118
-9.00	11.698	13.921	18.183	18.159	0.017	0.121	0.123	0.122
-8.00	12.401	13.935	18.654	18.617	0.019	0.126	0.127	0.127
-7.00	13.120	13.916	19.126	19.073	0.022	0.131	0.133	0.132
-6.00	13.853	13.862	19.597	19.526	0.025	0.137	0.139	0.138
DIST	B Horz	B Vert	B PROD	B MAX	E Horz	E Vert	E PROD	E MAX

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

(Ft)	(mG)	(mG)	(mG)	(mG)	(kV/m)	(kV/m)	(kV/m)	(kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
-5.00	14.594	13.773	20.067	19.975	0.028	0.143	0.146	0.145
-4.00	15.340	13.649	20.533	20.418	0.032	0.151	0.154	0.153
-3.00	16.087	13.490	20.995	20.855	0.036	0.159	0.163	0.162
-2.00	16.831	13.299	21.450	21.284	0.040	0.169	0.174	0.172
-1.00	17.567	13.075	21.899	21.704	0.045	0.180	0.186	0.184
0.00	18.293	12.823	22.340	22.116	0.049	0.193	0.199	0.197
1.00	19.006	12.544	22.773	22.519	0.054	0.207	0.214	0.213
2.00	19.704	12.241	23.196	22.913	0.059	0.224	0.231	0.230
3.00	20.384	11.917	23.612	23.300	0.065	0.242	0.250	0.249
4.00	21.046	11.575	24.019	23.680	0.070	0.262	0.271	0.270
5.00	21.691	11.217	24.420	24.054	0.075	0.284	0.294	0.293
6.00	22.319	10.847	24.815	24.425	0.081	0.308	0.319	0.318
7.00	22.930	10.466	25.206	24.795	0.087	0.335	0.346	0.345
8.00	23.529	10.077	25.596	25.166	0.092	0.363	0.375	0.374
9.00	24.116	9.681	25.987	25.541	0.098	0.394	0.406	0.405
10.00	24.696	9.281	26.383	25.923	0.104	0.427	0.439	0.438
11.00	25.272	8.876	26.786	26.316	0.109	0.461	0.474	0.474
12.00	25.848	8.470	27.201	26.723	0.115	0.498	0.511	0.511
13.00	26.428	8.065	27.631	27.147	0.120	0.537	0.550	0.550
14.00	27.016	7.662	28.082	27.593	0.126	0.578	0.591	0.591
15.00	27.615	7.268	28.556	28.064	0.130	0.621	0.634	0.634
16.00	28.230	6.888	29.058	28.564	0.135	0.665	0.679	0.679
17.00	28.862	6.534	29.593	29.097	0.139	0.711	0.725	0.725
18.00	29.516	6.220	30.164	29.665	0.143	0.759	0.772	0.772
19.00	30.191	5.969	30.775	30.272	0.146	0.808	0.821	0.821
20.00	30.889	5.810	31.430	30.920	0.148	0.858	0.870	0.870
21.00	31.608	5.779	32.132	31.612	0.149	0.908	0.920	0.920
22.00	32.345	5.914	32.881	32.348	0.148	0.959	0.971	0.971
23.00	33.096	6.247	33.681	33.130	0.147	1.010	1.021	1.021
24.00	33.854	6.800	34.530	33.958	0.143	1.060	1.070	1.070
25.00	34.610	7.581	35.430	34.829	0.138	1.109	1.118	1.117
26.00	35.350	8.586	36.378	35.742	0.131	1.156	1.163	1.163
27.00	36.061	9.808	37.371	36.692	0.122	1.200	1.206	1.206
28.00	36.724	11.238	38.405	37.675	0.112	1.240	1.245	1.245
29.00	37.319	12.866	39.474	38.685	0.100	1.276	1.280	1.279
30.00	37.823	14.680	40.572	39.712	0.088	1.306	1.309	1.308
31.00	38.214	16.667	41.690	40.749	0.078	1.330	1.332	1.331
32.00	38.466	18.810	42.819	41.785	0.074	1.345	1.347	1.346
33.00	38.557	21.090	43.948	42.810	0.080	1.352	1.355	1.352
34.00	38.466	23.481	45.066	43.811	0.096	1.350	1.353	1.350
35.00	38.176	25.952	46.162	44.776	0.120	1.338	1.343	1.339
36.00	37.676	28.469	47.222	45.695	0.148	1.315	1.323	1.318
37.00	36.961	30.993	48.236	46.555	0.178	1.281	1.293	1.286
38.00	36.036	33.485	49.192	47.348	0.209	1.237	1.255	1.246
39.00	34.912	35.904	50.080	48.064	0.240	1.183	1.207	1.196
40.00	33.612	38.210	50.890	48.696	0.269	1.121	1.152	1.138
41.00	32.163	40.367	51.614	49.240	0.296	1.050	1.091	1.073
42.00	30.602	42.344	52.245	49.693	0.320	0.974	1.025	1.003
43.00	28.970	44.116	52.778	50.052	0.340	0.894	0.957	0.928
44.00	27.310	45.664	53.208	50.319	0.357	0.812	0.888	0.851
45.00	25.667	46.977	53.531	50.495	0.371	0.732	0.821	0.774
46.00	24.088	48.046	53.746	50.582	0.382	0.657	0.760	0.699
47.00	22.616	48.871	53.850	50.584	0.389	0.591	0.708	0.629
DIST	B Horz	B Vert	B PROD	B MAX	E Horz	E Vert	E PROD	E MAX
(Ft)	(mG)	(mG)	(mG)	(mG)	(kV/m)	(kV/m)	(kV/m)	(kV/m)

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

48.00	21.296	49.452	53.843	50.503	0.395	0.540	0.669	0.566
49.00	20.174	49.792	53.723	50.341	0.398	0.509	0.646	0.517
50.00	19.293	49.891	53.491	50.100	0.399	0.502	0.641	0.503
51.00	18.696	49.750	53.147	49.780	0.399	0.521	0.656	0.538
52.00	18.416	49.368	52.691	49.380	0.397	0.563	0.688	0.596
53.00	18.471	48.742	52.124	48.900	0.392	0.623	0.736	0.664
54.00	18.855	47.870	51.449	48.337	0.386	0.695	0.795	0.739
55.00	19.536	46.750	50.667	47.689	0.376	0.775	0.862	0.819
56.00	20.460	45.384	49.782	46.955	0.363	0.860	0.933	0.899
57.00	21.557	43.778	48.798	46.134	0.347	0.945	1.007	0.980
58.00	22.753	41.946	47.719	45.227	0.327	1.029	1.079	1.058
59.00	23.974	39.905	46.552	44.234	0.304	1.108	1.149	1.132
60.00	25.153	37.681	45.305	43.161	0.278	1.182	1.214	1.200
61.00	26.232	35.307	43.985	42.013	0.249	1.248	1.273	1.262
62.00	27.164	32.819	42.602	40.796	0.219	1.306	1.324	1.315
63.00	27.916	30.257	41.167	39.519	0.188	1.353	1.367	1.360
64.00	28.464	27.663	39.691	38.192	0.158	1.391	1.400	1.395
65.00	28.797	25.078	38.186	36.827	0.130	1.418	1.424	1.420
66.00	28.916	22.541	36.663	35.433	0.105	1.435	1.439	1.436
67.00	28.826	20.086	35.134	34.023	0.086	1.442	1.445	1.442
68.00	28.544	17.745	33.610	32.608	0.075	1.440	1.442	1.440
69.00	28.087	15.542	32.101	31.198	0.073	1.429	1.431	1.430
70.00	27.480	13.496	30.615	29.803	0.079	1.411	1.413	1.412
71.00	26.747	11.622	29.162	28.431	0.088	1.387	1.389	1.389
72.00	25.911	9.929	27.748	27.089	0.098	1.356	1.360	1.359
73.00	24.997	8.425	26.378	25.785	0.108	1.322	1.326	1.326
74.00	24.026	7.114	25.057	24.522	0.116	1.284	1.289	1.288
75.00	23.018	6.000	23.787	23.305	0.122	1.243	1.249	1.248
76.00	21.991	5.084	22.572	22.135	0.127	1.200	1.207	1.206
77.00	20.960	4.370	21.410	21.016	0.129	1.156	1.163	1.163
78.00	19.936	3.854	20.305	19.947	0.131	1.111	1.119	1.119
79.00	18.929	3.522	19.254	18.929	0.131	1.066	1.075	1.074
80.00	17.947	3.346	18.257	17.961	0.130	1.022	1.030	1.030
81.00	16.997	3.289	17.313	17.043	0.128	0.978	0.987	0.987
82.00	16.082	3.310	16.419	16.173	0.125	0.935	0.944	0.944
83.00	15.206	3.373	15.575	15.350	0.122	0.894	0.902	0.902
84.00	14.370	3.454	14.779	14.572	0.118	0.853	0.861	0.861
85.00	13.574	3.536	14.027	13.837	0.114	0.814	0.822	0.822
86.00	12.820	3.609	13.318	13.143	0.110	0.776	0.784	0.784
87.00	12.107	3.669	12.650	12.488	0.106	0.740	0.748	0.748
88.00	11.433	3.713	12.021	11.870	0.101	0.706	0.713	0.713
89.00	10.798	3.741	11.428	11.288	0.097	0.673	0.680	0.680
90.00	10.201	3.753	10.869	10.738	0.092	0.641	0.648	0.648
91.00	9.639	3.750	10.343	10.220	0.088	0.611	0.618	0.618
92.00	9.111	3.735	9.847	9.732	0.084	0.583	0.589	0.589
93.00	8.615	3.708	9.379	9.271	0.079	0.556	0.562	0.562
94.00	8.150	3.672	8.939	8.837	0.075	0.530	0.536	0.536
95.00	7.713	3.627	8.523	8.427	0.072	0.506	0.511	0.511
96.00	7.304	3.575	8.132	8.040	0.068	0.483	0.488	0.488
97.00	6.920	3.517	7.763	7.675	0.064	0.461	0.465	0.465
98.00	6.560	3.455	7.414	7.331	0.061	0.440	0.444	0.444
99.00	6.222	3.389	7.085	7.005	0.058	0.420	0.424	0.424
100.00	5.906	3.320	6.775	6.698	0.055	0.402	0.406	0.406

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

August 10, 2006
PLM, Inc.

Right-of-Way – Existing Distribution and Proposed Transmission Lines (ABC phasing)

ROW boundary → x = -17

ROW boundary → x = 100

23 kV, ph A = (4.25 ft, 38 ft) -430<-30deg amps

23 kV, ph B = (3.00 ft, 34 ft) -390<-150deg amps

23 kV, ph C = (1.25 ft, 38 ft) -370<90deg amps

115 kV, ph A = (38 ft, 24 ft) 190<0deg amps

115 kV, ph B = (50 ft, 24 ft) 190<-120deg amps

115 kV, ph C = (62 ft, 24 ft) 190<120deg amps

All unbalance current in earth

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
-100.00	1.106	1.610	1.953	1.795	0.000	0.008	0.008	0.008
-99.00	1.121	1.613	1.965	1.802	0.000	0.008	0.008	0.008
-98.00	1.138	1.616	1.976	1.809	0.000	0.008	0.008	0.008
-97.00	1.154	1.619	1.988	1.817	0.000	0.008	0.008	0.008
-96.00	1.171	1.621	2.000	1.824	0.000	0.008	0.008	0.008
-95.00	1.188	1.624	2.012	1.831	0.000	0.008	0.008	0.008
-94.00	1.206	1.626	2.024	1.838	0.000	0.008	0.008	0.008
-93.00	1.223	1.629	2.037	1.845	0.000	0.008	0.008	0.008
-92.00	1.241	1.631	2.050	1.852	0.000	0.008	0.008	0.008
-91.00	1.260	1.633	2.062	1.859	0.000	0.008	0.008	0.008
-90.00	1.278	1.635	2.075	1.866	0.000	0.008	0.008	0.008
-89.00	1.298	1.636	2.088	1.873	0.000	0.008	0.008	0.008
-88.00	1.317	1.638	2.102	1.880	0.000	0.008	0.008	0.008
-87.00	1.337	1.640	2.115	1.887	0.000	0.008	0.008	0.008
-86.00	1.357	1.641	2.129	1.894	0.000	0.008	0.008	0.008
-85.00	1.377	1.642	2.143	1.900	0.000	0.008	0.008	0.008
-84.00	1.398	1.643	2.157	1.907	0.000	0.008	0.008	0.008
-83.00	1.419	1.644	2.172	1.914	0.000	0.008	0.008	0.008
-82.00	1.440	1.645	2.186	1.920	0.000	0.008	0.008	0.008
-81.00	1.462	1.645	2.201	1.927	0.000	0.008	0.008	0.008
-80.00	1.484	1.646	2.216	1.933	0.000	0.008	0.008	0.008
-79.00	1.507	1.646	2.231	1.940	0.000	0.008	0.008	0.008
-78.00	1.529	1.646	2.247	1.946	0.000	0.008	0.008	0.008
-77.00	1.553	1.646	2.263	1.952	0.000	0.008	0.008	0.008
-76.00	1.576	1.646	2.279	1.958	0.000	0.008	0.008	0.008
-75.00	1.600	1.646	2.295	1.965	0.000	0.008	0.008	0.008
-74.00	1.624	1.646	2.312	1.970	0.000	0.008	0.008	0.008
-73.00	1.648	1.645	2.329	1.976	0.000	0.008	0.008	0.008
-72.00	1.673	1.645	2.346	1.982	0.000	0.008	0.008	0.008
-71.00	1.698	1.645	2.364	1.988	0.000	0.008	0.008	0.008
-70.00	1.723	1.645	2.382	1.993	0.000	0.008	0.008	0.008
-69.00	1.748	1.644	2.400	1.999	0.000	0.008	0.008	0.008
-68.00	1.774	1.644	2.419	2.005	0.000	0.007	0.007	0.007
-67.00	1.799	1.644	2.438	2.010	0.000	0.007	0.007	0.007
-66.00	1.825	1.645	2.457	2.016	0.000	0.007	0.007	0.007
-65.00	1.851	1.645	2.477	2.021	0.001	0.007	0.007	0.007
-64.00	1.877	1.646	2.497	2.027	0.001	0.007	0.007	0.007
-63.00	1.903	1.648	2.517	2.033	0.001	0.007	0.007	0.007
-62.00	1.929	1.650	2.538	2.039	0.001	0.006	0.006	0.006
-61.00	1.955	1.652	2.560	2.046	0.001	0.006	0.006	0.006
-60.00	1.981	1.656	2.582	2.054	0.001	0.006	0.006	0.006
-59.00	2.007	1.660	2.604	2.062	0.001	0.006	0.006	0.006

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

DIST (Ft)	B Horz (mG)	B Vert (mG)	B PROD (mG)	B MAX (mG)	E Horz (kV/m)	E Vert (kV/m)	E PROD (kV/m)	E MAX (kV/m)
----	-----	-----	-----	-----	-----	-----	-----	-----
-58.00	2.032	1.666	2.627	2.072	0.001	0.005	0.005	0.005
-57.00	2.057	1.672	2.651	2.083	0.001	0.005	0.005	0.005
-56.00	2.081	1.681	2.675	2.096	0.001	0.004	0.005	0.005
-55.00	2.105	1.690	2.700	2.111	0.001	0.004	0.004	0.004
-54.00	2.128	1.702	2.725	2.129	0.002	0.004	0.004	0.004
-53.00	2.150	1.716	2.751	2.150	0.002	0.003	0.003	0.003
-52.00	2.171	1.732	2.778	2.175	0.002	0.002	0.003	0.003
-51.00	2.192	1.751	2.805	2.202	0.002	0.002	0.003	0.003
-50.00	2.210	1.772	2.833	2.234	0.002	0.001	0.002	0.002
-49.00	2.227	1.797	2.862	2.268	0.002	0.000	0.002	0.002
-48.00	2.243	1.825	2.891	2.306	0.002	0.000	0.002	0.002
-47.00	2.256	1.856	2.922	2.347	0.003	0.001	0.003	0.003
-46.00	2.268	1.892	2.953	2.391	0.003	0.002	0.004	0.004
-45.00	2.276	1.932	2.985	2.437	0.003	0.003	0.004	0.004
-44.00	2.282	1.976	3.019	2.486	0.003	0.004	0.005	0.005
-43.00	2.285	2.025	3.053	2.538	0.004	0.005	0.006	0.006
-42.00	2.284	2.078	3.088	2.592	0.004	0.007	0.008	0.008
-41.00	2.279	2.137	3.124	2.648	0.004	0.008	0.009	0.009
-40.00	2.270	2.200	3.162	2.706	0.005	0.009	0.011	0.011
-39.00	2.257	2.269	3.200	2.766	0.005	0.011	0.012	0.012
-38.00	2.237	2.344	3.240	2.829	0.005	0.013	0.014	0.014
-37.00	2.212	2.423	3.281	2.893	0.006	0.015	0.016	0.016
-36.00	2.181	2.508	3.323	2.959	0.006	0.017	0.018	0.018
-35.00	2.143	2.597	3.367	3.026	0.007	0.019	0.020	0.020
-34.00	2.097	2.692	3.412	3.096	0.007	0.021	0.022	0.022
-33.00	2.043	2.791	3.459	3.167	0.008	0.024	0.025	0.025
-32.00	1.979	2.894	3.507	3.240	0.009	0.026	0.028	0.028
-31.00	1.907	3.002	3.556	3.314	0.009	0.029	0.031	0.031
-30.00	1.823	3.112	3.607	3.389	0.010	0.032	0.034	0.034
-29.00	1.729	3.225	3.659	3.466	0.011	0.036	0.037	0.037
-28.00	1.623	3.340	3.713	3.544	0.012	0.039	0.041	0.041
-27.00	1.505	3.455	3.769	3.622	0.012	0.043	0.045	0.045
-26.00	1.374	3.571	3.826	3.702	0.013	0.048	0.049	0.049
-25.00	1.230	3.685	3.885	3.781	0.014	0.052	0.054	0.054
-24.00	1.073	3.796	3.945	3.861	0.015	0.057	0.059	0.059
-23.00	0.906	3.903	4.007	3.942	0.016	0.062	0.064	0.064
-22.00	0.731	4.004	4.070	4.021	0.017	0.067	0.070	0.069
-21.00	0.561	4.096	4.135	4.101	0.019	0.073	0.075	0.075
-20.00	0.428	4.179	4.201	4.179	0.020	0.079	0.082	0.082
-19.00	0.405	4.249	4.268	4.256	0.021	0.086	0.088	0.088
-18.00	0.532	4.304	4.337	4.332	0.023	0.093	0.096	0.095
-17.00	0.754	4.342	4.407	4.406	0.024	0.100	0.103	0.103
-16.00	1.024	4.359	4.478	4.478	0.026	0.108	0.111	0.111
-15.00	1.322	4.353	4.550	4.547	0.027	0.116	0.120	0.119
-14.00	1.640	4.322	4.623	4.614	0.029	0.125	0.128	0.128
-13.00	1.973	4.262	4.696	4.678	0.031	0.134	0.138	0.137
-12.00	2.316	4.171	4.771	4.740	0.032	0.144	0.148	0.147
-11.00	2.667	4.047	4.847	4.799	0.034	0.155	0.158	0.158
-10.00	3.021	3.887	4.923	4.856	0.036	0.166	0.169	0.169
-9.00	3.373	3.692	5.001	4.912	0.039	0.177	0.181	0.181
-8.00	3.719	3.460	5.080	4.967	0.041	0.189	0.194	0.193
-7.00	4.054	3.193	5.160	5.023	0.043	0.202	0.207	0.206
-6.00	4.371	2.895	5.242	5.082	0.046	0.215	0.220	0.219
DIST	B Horz	B Vert	B PROD	B MAX	E Horz	E Vert	E PROD	E MAX

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

(Ft)	(mG)	(mG)	(mG)	(mG)	(kV/m)	(kV/m)	(kV/m)	(kV/m)
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-5.00	4.664	2.572	5.327	5.145	0.048	0.230	0.235	0.234
-4.00	4.929	2.240	5.414	5.214	0.051	0.245	0.250	0.249
-3.00	5.158	1.923	5.505	5.293	0.054	0.260	0.266	0.265
-2.00	5.345	1.671	5.600	5.382	0.057	0.277	0.283	0.282
-1.00	5.485	1.556	5.701	5.485	0.060	0.295	0.301	0.300
0.00	5.572	1.645	5.810	5.603	0.063	0.314	0.320	0.319
1.00	5.600	1.938	5.926	5.737	0.067	0.333	0.340	0.339
2.00	5.566	2.378	6.053	5.887	0.070	0.354	0.361	0.360
3.00	5.465	2.910	6.191	6.054	0.074	0.376	0.383	0.382
4.00	5.294	3.496	6.344	6.237	0.078	0.400	0.407	0.406
5.00	5.051	4.111	6.513	6.436	0.081	0.424	0.432	0.431
6.00	4.736	4.740	6.701	6.652	0.085	0.450	0.458	0.457
7.00	4.348	5.370	6.910	6.884	0.089	0.477	0.486	0.485
8.00	3.889	5.991	7.142	7.134	0.093	0.506	0.515	0.514
9.00	3.364	6.593	7.402	7.401	0.098	0.537	0.545	0.545
10.00	2.783	7.169	7.690	7.688	0.102	0.568	0.577	0.577
11.00	2.170	7.711	8.010	7.996	0.106	0.602	0.611	0.610
12.00	1.594	8.212	8.365	8.327	0.110	0.637	0.646	0.646
13.00	1.261	8.666	8.757	8.685	0.114	0.673	0.683	0.683
14.00	1.494	9.066	9.188	9.071	0.119	0.711	0.721	0.721
15.00	2.203	9.406	9.661	9.489	0.122	0.751	0.761	0.761
16.00	3.138	9.681	10.177	9.942	0.126	0.792	0.802	0.802
17.00	4.197	9.886	10.740	10.434	0.129	0.835	0.845	0.845
18.00	5.341	10.014	11.350	10.966	0.132	0.879	0.889	0.889
19.00	6.554	10.063	12.009	11.543	0.134	0.924	0.933	0.933
20.00	7.824	10.028	12.719	12.166	0.136	0.970	0.979	0.979
21.00	9.142	9.908	13.481	12.838	0.136	1.016	1.025	1.025
22.00	10.497	9.705	14.296	13.559	0.136	1.063	1.071	1.071
23.00	11.881	9.424	15.165	14.332	0.134	1.109	1.117	1.117
24.00	13.280	9.079	16.087	15.155	0.130	1.155	1.162	1.162
25.00	14.681	8.695	17.062	16.029	0.125	1.200	1.206	1.206
26.00	16.067	8.313	18.090	16.952	0.118	1.242	1.248	1.248
27.00	17.421	7.997	19.169	17.922	0.109	1.282	1.287	1.286
28.00	18.722	7.836	20.296	18.936	0.099	1.318	1.322	1.322
29.00	19.948	7.934	21.468	19.990	0.087	1.350	1.353	1.352
30.00	21.075	8.383	22.681	21.079	0.076	1.376	1.378	1.377
31.00	22.078	9.229	23.929	22.197	0.069	1.396	1.397	1.396
32.00	22.933	10.461	25.206	23.338	0.069	1.407	1.409	1.408
33.00	23.618	12.030	26.505	24.494	0.079	1.411	1.413	1.411
34.00	24.113	13.869	27.817	25.655	0.098	1.405	1.408	1.406
35.00	24.405	15.910	29.133	26.814	0.124	1.389	1.395	1.391
36.00	24.487	18.089	30.444	27.960	0.153	1.363	1.371	1.366
37.00	24.360	20.346	31.740	29.085	0.184	1.326	1.339	1.332
38.00	24.036	22.625	33.009	30.179	0.216	1.279	1.297	1.289
39.00	23.536	24.873	34.244	31.234	0.246	1.222	1.247	1.236
40.00	22.894	27.044	35.433	32.242	0.275	1.157	1.189	1.175
41.00	22.152	29.095	36.568	33.197	0.302	1.083	1.125	1.107
42.00	21.362	30.991	37.641	34.093	0.326	1.004	1.056	1.034
43.00	20.582	32.706	38.643	34.926	0.346	0.921	0.984	0.956
44.00	19.868	34.219	39.569	35.694	0.363	0.837	0.912	0.877
45.00	19.278	35.519	40.413	36.396	0.377	0.753	0.842	0.797
46.00	18.855	36.598	41.170	37.031	0.387	0.675	0.778	0.719
47.00	18.635	37.456	41.836	37.600	0.394	0.605	0.722	0.645
DIST	B Horz	B Vert	B PROD	B MAX	E Horz	E Vert	E PROD	E MAX
(Ft)	(mG)	(mG)	(mG)	(mG)	(kV/m)	(kV/m)	(kV/m)	(kV/m)

**115 kV Transmission Line Description and
Electro-Magnetic Fields (EMF) Analysis**

**August 10, 2006
PLM, Inc.**

48.00	18.633	38.094	42.407	38.104	0.399	0.549	0.679	0.579
49.00	18.855	38.514	42.882	38.545	0.402	0.513	0.652	0.525
50.00	19.293	38.717	43.258	38.921	0.403	0.501	0.643	0.501
51.00	19.932	38.703	43.534	39.233	0.403	0.516	0.655	0.531
52.00	20.753	38.468	43.710	39.481	0.400	0.556	0.685	0.588
53.00	21.735	38.009	43.784	39.662	0.396	0.614	0.731	0.656
54.00	22.850	37.318	43.758	39.773	0.389	0.686	0.789	0.731
55.00	24.068	36.394	43.632	39.812	0.379	0.766	0.855	0.810
56.00	25.354	35.233	43.408	39.774	0.366	0.851	0.926	0.891
57.00	26.668	33.842	43.087	39.657	0.349	0.937	1.000	0.972
58.00	27.966	32.230	42.671	39.458	0.329	1.021	1.073	1.051
59.00	29.203	30.416	42.166	39.175	0.306	1.101	1.143	1.125
60.00	30.338	28.425	41.573	38.808	0.279	1.175	1.208	1.194
61.00	31.331	26.290	40.900	38.359	0.251	1.242	1.267	1.256
62.00	32.152	24.051	40.152	37.830	0.220	1.300	1.319	1.310
63.00	32.775	21.751	39.335	37.225	0.189	1.349	1.362	1.355
64.00	33.186	19.438	38.459	36.549	0.159	1.387	1.396	1.390
65.00	33.378	17.161	37.531	35.811	0.130	1.414	1.420	1.416
66.00	33.355	14.972	36.561	35.018	0.105	1.432	1.435	1.432
67.00	33.126	12.922	35.557	34.179	0.086	1.439	1.442	1.439
68.00	32.708	11.068	34.530	33.302	0.075	1.437	1.439	1.437
69.00	32.120	9.470	33.486	32.396	0.073	1.427	1.429	1.427
70.00	31.385	8.190	32.436	31.471	0.078	1.409	1.411	1.410
71.00	30.529	7.287	31.387	30.535	0.087	1.384	1.387	1.386
72.00	29.576	6.789	30.345	29.594	0.098	1.355	1.358	1.357
73.00	28.549	6.667	29.318	28.657	0.107	1.320	1.324	1.324
74.00	27.471	6.836	28.309	27.729	0.115	1.282	1.287	1.287
75.00	26.360	7.189	27.323	26.815	0.121	1.241	1.247	1.247
76.00	25.234	7.634	26.363	25.919	0.126	1.199	1.205	1.205
77.00	24.107	8.105	25.433	25.045	0.129	1.155	1.162	1.162
78.00	22.992	8.561	24.534	24.195	0.130	1.110	1.118	1.118
79.00	21.898	8.979	23.667	23.372	0.131	1.066	1.074	1.074
80.00	20.832	9.347	22.833	22.577	0.130	1.022	1.030	1.030
81.00	19.801	9.662	22.033	21.810	0.128	0.978	0.986	0.986
82.00	18.809	9.923	21.266	21.072	0.125	0.935	0.943	0.943
83.00	17.858	10.131	20.531	20.363	0.122	0.893	0.902	0.902
84.00	16.949	10.291	19.829	19.684	0.118	0.853	0.861	0.861
85.00	16.085	10.408	19.158	19.033	0.114	0.814	0.822	0.822
86.00	15.263	10.484	18.517	18.409	0.110	0.777	0.784	0.784
87.00	14.486	10.526	17.906	17.813	0.105	0.741	0.748	0.748
88.00	13.750	10.537	17.323	17.243	0.101	0.706	0.713	0.713
89.00	13.055	10.521	16.767	16.698	0.097	0.673	0.680	0.680
90.00	12.399	10.483	16.236	16.178	0.092	0.642	0.648	0.648
91.00	11.780	10.424	15.730	15.680	0.088	0.612	0.618	0.618
92.00	11.198	10.349	15.248	15.205	0.083	0.584	0.590	0.589
93.00	10.649	10.260	14.788	14.752	0.079	0.557	0.562	0.562
94.00	10.133	10.159	14.348	14.318	0.075	0.531	0.536	0.536
95.00	9.647	10.048	13.929	13.904	0.071	0.507	0.512	0.512
96.00	9.190	9.929	13.529	13.508	0.068	0.484	0.488	0.488
97.00	8.759	9.804	13.147	13.129	0.064	0.462	0.466	0.466
98.00	8.354	9.674	12.782	12.767	0.061	0.441	0.445	0.445
99.00	7.972	9.540	12.433	12.421	0.058	0.421	0.425	0.425
100.00	7.613	9.404	12.099	12.089	0.055	0.403	0.407	0.407