APPENDIX 5G

ENVIRO Output Files

EMF Analysis - Numerical Output

RESULTS OF ENVIRO PROGRAM

STUDY FILE NAME: C:\BV-USERS\A_BEFORE.I01

Section A 69/115/230 kV before

BUNDLE INFORMATION

BNDL #	CIRC #	VOLTAGE (kV)	VOLTAGE ANGLE (DEG)	LOAD (AMPS)	CURRENT ANGLE (DEG)	# OF COND	COORDINATES X (FT)	Y (FT)	PHASE
1	1	145.0	.0	468.0	.0	2	37.0	96.0	A
2	1	145.0	240.0	468.0	240.0	2	37.0	86.0	B
3	1	145.0	120.0	468.0	120.0	2	37.0	76.0	C
4	2	145.0	.0	514.0	.0	2	67.0	76.0	A
5	2	145.0	240.0	514.0	240.0	2	67.0	86.0	B
6	2	145.0	120.0	514.0	120.0	2	67.0	96.0	C
7	3	242.0	.0	1429.0	.0	2	122.0	105.0	A
8	3	242.0	240.0	1429.0	240.0	2	122.0	89.0	B
9	3	242.0	120.0	1429.0	120.0	2	122.0	73.0	C
10	4	72.0	.0	192.0	.0	1	232.0	54.0	A
11	4	72.0	240.0	192.0	240.0	1	232.0	47.0	B
12	4	72.0	120.0	192.0	120.0	1	232.0	40.0	C
13	4	72.0	.0	192.0	.0	1	244.0	54.0	A
14	4	72.0	240.0	192.0	240.0	1	244.0	47.0	B
15	4	72.0	120.0	192.0	120.0	1	244.0	40.0	C

MINIMUM GROUND CLEARANCE = 40.000 FT.

SUBCONDUCTOR INFORMATION - REGULAR BUNDLES

BNDL #	DIAMETER (IN)	SPACING (IN)	DC RESIST. (OHMS/MI)	AC RESIST. (OHMS/MI)	AC REACT. (OHMS/MI)
1	1.124	18.000	.09750	.10100	.403000
2	1.124	18.000	.09750	.10100	.403000
3	1.124	18.000	.09750	.10100	.403000
4	1.124	18.000	.09750	.10100	.403000
5	1.124	18.000	.09750	.10100	.403000
6	1.124	18.000	.09750	.10100	.403000
7	1.162	18.000	.10220	.10400	.393000
8	1.162	18.000	.10220	.10400	.393000
9	1.162	18.000	.10220	.10400	.393000
10	1.124	.000	.09750	.10100	.403000
11	1.124	.000	.09750	.10100	.403000
12	1.124	.000	.09750	.10100	.403000
13	1.124	.000	.09750	.10100	.403000
14	1.124	.000	.09750	.10100	.403000
15	1.124	.000	.09750	.10100	.403000

voltages, or weather conditions. If a prediction method does not apply, the appropriate output data column will be zeros.

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*                                    *
* MAXIMUM SURFACE GRADIENT (kV/cm) *
*                                    *
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BNDL #	Type	ACrms	PEAK(+)	PEAK(-)
1	AC	7.91	11.19	-11.19
2	AC	9.03	12.77	-12.77
3	AC	8.06	11.40	-11.40
4	AC	8.15	11.53	-11.53
5	AC	9.02	12.76	-12.76
6	AC	8.23	11.64	-11.64
7	AC	11.32	16.01	-16.01
8	AC	12.88	18.22	-18.22
9	AC	11.60	16.40	-16.40
10	AC	5.07	7.17	-7.17
11	AC	5.97	8.44	-8.44
12	AC	5.23	7.40	-7.40
13	AC	5.06	7.16	-7.16
14	AC	5.96	8.43	-8.43
15	AC	5.25	7.43	-7.43

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*                                      *
*     AC  ELECTRIC FIELD PROFILE       *
*    at   3.28 feet above ground       *
*                                      *
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LATERAL DISTANCE (feet)	(meters)	MAXIMUM FIELD (kV/m)	MINOR/MAJOR ELLIPSE AXES (ratio)	VERTICAL (kV/m)	HORIZONTAL (kV/m)	SPACE POTENTIAL (kV)
-300.0	-91.44	.027	.001	.027	.000	.027
-290.0	-88.39	.028	.001	.028	.000	.028
-280.0	-85.34	.030	.001	.030	.000	.030
-270.0	-82.30	.031	.001	.031	.000	.031
-260.0	-79.25	.032	.002	.032	.000	.032
-250.0	-76.20	.034	.002	.034	.001	.034
-240.0	-73.15	.035	.002	.035	.001	.035
-230.0	-70.10	.037	.002	.037	.001	.037
-220.0	-67.06	.039	.002	.039	.001	.039
-210.0	-64.01	.041	.003	.041	.001	.041
-200.0	-60.96	.043	.003	.043	.001	.043
-190.0	-57.91	.045	.003	.045	.001	.045
-180.0	-54.86	.047	.004	.047	.001	.047
-170.0	-51.82	.049	.004	.049	.001	.049
-160.0	-48.77	.052	.005	.052	.001	.052
-150.0	-45.72	.054	.006	.054	.001	.054
-140.0	-42.67	.056	.007	.056	.001	.056
-130.0	-39.62	.059	.009	.059	.001	.059
-120.0	-36.58	.061	.011	.061	.001	.061
-110.0	-33.53	.064	.014	.064	.001	.064
-100.0	-30.48	.066	.018	.066	.001	.066
-90.0	-27.43	.068	.024	.068	.002	.068
-80.0	-24.38	.070	.031	.070	.002	.070
-70.0	-21.34	.073	.041	.073	.003	.072
-60.0	-18.29	.075	.053	.075	.004	.075
-50.0	-15.24	.080	.064	.080	.006	.080
-40.0	-12.19	.089	.071	.089	.007	.089
-30.0	-9.14	.105	.067	.105	.010	.105
-20.0	-6.10	.130	.054	.129	.012	.130

-10.0	-3.05	.163	.037	.163	.014	.163
.0	.00	.203	.021	.202	.014	.202
10.0	3.05	.244	.007	.244	.013	.244
20.0	6.10	.281	.005	.280	.011	.280
30.0	9.14	.307	.015	.306	.008	.306
40.0	12.19	.321	.020	.321	.007	.321
50.0	15.24	.331	.013	.331	.005	.331
60.0	18.29	.345	.008	.345	.007	.345
70.0	21.34	.375	.033	.375	.019	.376
80.0	24.38	.435	.045	.434	.032	.435
90.0	27.43	.526	.040	.525	.040	.525
100.0	30.48	.634	.027	.633	.039	.632
110.0	33.53	.729	.017	.729	.028	.727
120.0	36.58	.781	.010	.781	.011	.779
130.0	39.62	.774	.004	.774	.013	.771
140.0	42.67	.710	.000	.709	.028	.708
150.0	45.72	.608	.005	.607	.037	.606
160.0	48.77	.492	.010	.491	.038	.491
170.0	51.82	.386	.015	.385	.032	.386
180.0	54.86	.306	.015	.305	.021	.307
190.0	57.91	.265	.000	.265	.005	.267
200.0	60.96	.276	.022	.276	.014	.278
210.0	64.01	.348	.026	.347	.034	.349
220.0	67.06	.470	.015	.468	.042	.467
230.0	70.10	.581	.005	.580	.025	.577
240.0	73.15	.601	.002	.601	.014	.597
250.0	76.20	.503	.011	.501	.048	.498
260.0	79.25	.340	.032	.335	.056	.336
270.0	82.30	.189	.089	.185	.045	.186
280.0	85.34	.095	.234	.093	.029	.094
290.0	88.39	.073	.225	.073	.017	.073
300.0	91.44	.085	.090	.085	.009	.084

AC CURRENTS IN EACH BUNDLE:

BNDL #	----- AC CURRENTS (Amperes) ----- REAL	IMAGINARY	TOTAL	BUNDLE POSITION X-COORD	Y-COORD
1	468.00	.00	468.00	37.00	96.00
2	-234.00	-405.30	468.00	37.00	86.00
3	-234.00	405.30	468.00	37.00	76.00
4	514.00	.00	514.00	67.00	76.00
5	-257.00	-445.14	514.00	67.00	86.00
6	-257.00	445.14	514.00	67.00	96.00
7	1429.00	.00	1429.00	122.00	105.00
8	-714.50	-1237.55	1429.00	122.00	89.00
9	-714.50	1237.55	1429.00	122.00	73.00
10	192.00	.00	192.00	232.00	54.00
11	-96.00	-166.28	192.00	232.00	47.00
12	-96.00	166.28	192.00	232.00	40.00
13	192.00	.00	192.00	244.00	54.00
14	-96.00	-166.28	192.00	244.00	47.00
15	-96.00	166.28	192.00	244.00	40.00

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*                                   *
*       MAGNETIC FIELD PROFILE      *
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*     at   3.28 feet  above ground    *
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LATERAL DISTANCE (feet)	LATERAL DISTANCE (meters)	AC MAGNETIC FIELD MAJOR AXIS (mG)	MINOR/ MAJOR (RATIO)	VERTICAL COMP (mG)	HORIZONTAL COMP (mG)	RMS RESULTANT (mG)
-300.0	-91.44	1.42	.017	.58	1.30	1.42
-290.0	-88.39	1.49	.018	.62	1.36	1.49
-280.0	-85.34	1.57	.019	.67	1.42	1.57
-270.0	-82.30	1.66	.021	.72	1.49	1.66
-260.0	-79.25	1.75	.022	.78	1.56	1.75
-250.0	-76.20	1.84	.024	.84	1.64	1.84
-240.0	-73.15	1.95	.025	.91	1.72	1.95
-230.0	-70.10	2.06	.026	.99	1.81	2.07
-220.0	-67.06	2.19	.028	1.08	1.91	2.19
-210.0	-64.01	2.32	.029	1.18	2.00	2.32
-200.0	-60.96	2.47	.031	1.29	2.11	2.47
-190.0	-57.91	2.63	.033	1.41	2.22	2.63
-180.0	-54.86	2.81	.034	1.55	2.34	2.81
-170.0	-51.82	3.00	.036	1.70	2.47	3.00
-160.0	-48.77	3.21	.037	1.88	2.60	3.21
-150.0	-45.72	3.44	.039	2.08	2.74	3.44
-140.0	-42.67	3.70	.041	2.31	2.89	3.70
-130.0	-39.62	3.98	.043	2.57	3.04	3.98
-120.0	-36.58	4.29	.045	2.88	3.19	4.30
-110.0	-33.53	4.64	.047	3.22	3.35	4.65
-100.0	-30.48	5.03	.049	3.62	3.49	5.03
-90.0	-27.43	5.46	.051	4.08	3.63	5.46
-80.0	-24.38	5.93	.053	4.61	3.74	5.94
-70.0	-21.34	6.46	.055	5.22	3.82	6.47
-60.0	-18.29	7.03	.056	5.91	3.83	7.05
-50.0	-15.24	7.66	.058	6.68	3.77	7.67
-40.0	-12.19	8.33	.059	7.53	3.59	8.35
-30.0	-9.14	9.03	.059	8.44	3.27	9.05
-20.0	-6.10	9.74	.059	9.35	2.78	9.76
-10.0	-3.05	10.42	.057	10.22	2.12	10.44
.0	.00	11.04	.054	10.97	1.34	11.05
10.0	3.05	11.57	.048	11.56	.65	11.58
20.0	6.10	12.06	.040	12.05	.65	12.07
30.0	9.14	12.68	.030	12.63	1.09	12.68
40.0	12.19	13.71	.019	13.63	1.52	13.71
50.0	15.24	15.46	.011	15.29	2.26	15.46
60.0	18.29	18.01	.006	17.59	3.90	18.01
70.0	21.34	21.19	.004	19.99	7.04	21.19
80.0	24.38	24.63	.003	21.56	11.91	24.63
90.0	27.43	27.92	.000	21.25	18.12	27.92
100.0	30.48	30.67	.005	18.26	24.65	30.67
110.0	33.53	32.53	.013	12.47	30.05	32.53
120.0	36.58	33.24	.023	4.71	32.91	33.24
130.0	39.62	32.69	.034	3.85	32.49	32.71
140.0	42.67	31.00	.045	10.99	29.02	31.03
150.0	45.72	28.39	.057	15.91	23.56	28.43
160.0	48.77	25.16	.068	18.22	17.43	25.21
170.0	51.82	21.55	.080	18.17	11.71	21.62
180.0	54.86	17.72	.096	16.29	7.17	17.80
190.0	57.91	13.77	.120	13.18	4.31	13.86
200.0	60.96	10.00	.152	9.52	3.41	10.11
210.0	64.01	7.78	.118	6.35	4.59	7.84
220.0	67.06	9.40	.007	5.28	7.78	9.40
230.0	70.10	13.47	.027	7.55	11.15	13.47

240.0	73.15	17.14	.008	12.43	11.80	17.14
250.0	76.20	18.94	.013	16.85	8.65	18.94
260.0	79.25	18.71	.029	18.36	3.62	18.72
270.0	82.30	17.18	.039	17.16	1.08	17.19
280.0	85.34	15.17	.043	14.72	3.72	15.19
290.0	88.39	13.20	.045	12.18	5.12	13.21
300.0	91.44	11.47	.044	9.99	5.65	11.48

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*                               *
*         AUDIBLE NOISE         *
*   GENERATED ACOUSTIC POWER    *
*       (dB above 1uW/m)        *
*                               *
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BNDL #	Type	Summer Fair	L5 RAIN	L50 RAIN
1	AC	******	-94.46	******
2	AC	******	-84.06	******
3	AC	******	-92.93	******
4	AC	******	-92.02	******
5	AC	******	-84.16	******
6	AC	******	-91.21	******
7	AC	-96.46	-68.52	-83.92
8	AC	-84.99	-61.42	-73.97
9	AC	-94.21	-67.13	-81.96
10	AC	******	******	******
11	AC	******	******	******
12	AC	******	******	******
13	AC	******	******	******
14	AC	******	******	******
15	AC	******	******	******

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*****************************************
*                                       *
*              AUDIBLE NOISE            *
*                                       *
* Microphone is   5.00 feet  above ground *
*          Altitude        0. ft        *
*                                       *
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<---------- HVTRC CALCULATION METHOD ---------->

LATERAL DISTANCE (feet)	(meters)	L50 FAIR (dB(A))	L5 RAIN (dB(A))	L50 RAIN (dB(A))	Leq(24) (dB(A))	Ldn (dB(A))
-300.0	-91.44	6.3	30.8	17.5	16.0	23.8
-290.0	-88.39	6.4	30.9	17.7	16.2	24.0
-280.0	-85.34	6.6	31.1	17.9	16.3	24.1
-270.0	-82.30	6.8	31.3	18.0	16.5	24.3
-260.0	-79.25	6.9	31.4	18.2	16.7	24.5
-250.0	-76.20	7.1	31.6	18.4	16.8	24.6
-240.0	-73.15	7.3	31.8	18.5	17.0	24.8
-230.0	-70.10	7.4	32.0	18.7	17.2	25.0
-220.0	-67.06	7.6	32.1	18.9	17.3	25.2
-210.0	-64.01	7.8	32.3	19.1	17.5	25.3
-200.0	-60.96	8.0	32.5	19.3	17.7	25.5
-190.0	-57.91	8.2	32.7	19.4	17.9	25.7
-180.0	-54.86	8.4	32.9	19.6	18.1	25.9

-170.0	-51.82	8.6	33.1	19.8	18.3	26.1
-160.0	-48.77	8.8	33.3	20.0	18.5	26.3
-150.0	-45.72	9.0	33.5	20.2	18.7	26.5
-140.0	-42.67	9.2	33.7	20.4	18.9	26.7
-130.0	-39.62	9.4	33.9	20.6	19.1	26.9
-120.0	-36.58	9.6	34.1	20.9	19.3	27.1
-110.0	-33.53	9.8	34.3	21.1	19.5	27.4
-100.0	-30.48	10.0	34.6	21.3	19.8	27.6
-90.0	-27.43	10.3	34.8	21.5	20.0	27.8
-80.0	-24.38	10.5	35.0	21.8	20.2	28.0
-70.0	-21.34	10.7	35.3	22.0	20.5	28.3
-60.0	-18.29	11.0	35.5	22.3	20.7	28.5
-50.0	-15.24	11.2	35.8	22.5	21.0	28.8
-40.0	-12.19	11.5	36.0	22.8	21.2	29.1
-30.0	-9.14	11.8	36.3	23.1	21.5	29.3
-20.0	-6.10	12.1	36.6	23.3	21.8	29.6
-10.0	-3.05	12.3	36.9	23.6	22.1	29.9
.0	.00	12.6	37.2	23.9	22.4	30.2
10.0	3.05	12.9	37.5	24.2	22.7	30.5
20.0	6.10	13.2	37.8	24.5	23.0	30.8
30.0	9.14	13.5	38.1	24.8	23.3	31.1
40.0	12.19	13.8	38.4	25.1	23.6	31.4
50.0	15.24	14.1	38.7	25.4	23.9	31.7
60.0	18.29	14.4	39.0	25.7	24.2	32.0
70.0	21.34	14.7	39.2	26.0	24.5	32.3
80.0	24.38	15.0	39.5	26.3	24.7	32.5
90.0	27.43	15.2	39.7	26.5	24.9	32.8
100.0	30.48	15.4	39.9	26.7	25.1	32.9
110.0	33.53	15.5	40.0	26.8	25.2	33.1
120.0	36.58	15.5	40.1	26.8	25.3	33.1
130.0	39.62	15.5	40.0	26.8	25.3	33.1
140.0	42.67	15.4	40.0	26.7	25.2	33.0
150.0	45.72	15.3	39.8	26.6	25.0	32.8
160.0	48.77	15.1	39.6	26.3	24.8	32.6
170.0	51.82	14.8	39.3	26.1	24.6	32.4
180.0	54.86	14.6	39.1	25.8	24.3	32.1
190.0	57.91	14.3	38.8	25.5	24.0	31.8
200.0	60.96	14.0	38.5	25.2	23.7	31.5
210.0	64.01	13.7	38.2	24.9	23.4	31.2
220.0	67.06	13.4	37.8	24.6	23.1	30.9
230.0	70.10	13.0	37.5	24.3	22.8	30.6
240.0	73.15	12.7	37.2	24.0	22.5	30.3
250.0	76.20	12.5	36.9	23.7	22.2	30.0
260.0	79.25	12.2	36.7	23.4	21.9	29.7
270.0	82.30	11.9	36.4	23.2	21.6	29.4
280.0	85.34	11.6	36.1	22.9	21.4	29.2
290.0	88.39	11.4	35.8	22.6	21.1	28.9
300.0	91.44	11.1	35.6	22.4	20.8	28.6

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*                       *
*     AUDIBLE NOISE     *
*    (other methods)    *
*                       *
* Altitude        0. ft *
*                       *
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LATERAL DISTANCE (feet)	(meters)	<------ BPA METHOD -------> FAIR WEATHER dB(A)	L5 RAIN dB(A)	L50 RAIN dB(A)	Ldn dB(A)	<- CRIEPI --> AVERAGE FAIR dB(A)	L5 RAIN dB(A)	EdF L5 RAIN dB(A)	ENEL L5 RAIN dB(A)	IREQ L5 RAIN dB(A)

-300.0	-91.44	.0	24.9	21.4	.0	.0	.0	33.7	31.6	.0
-290.0	-88.39	.0	25.0	21.5	.0	.0	.0	33.8	31.7	.0
-280.0	-85.34	.0	25.1	21.6	.0	.0	.0	33.9	31.8	.0
-270.0	-82.30	.0	25.2	21.7	.0	.0	.0	34.0	31.9	.0
-260.0	-79.25	.0	25.4	21.9	.0	.0	.0	34.1	32.0	.0
-250.0	-76.20	.0	25.5	22.0	.0	.0	.0	34.2	32.1	.0
-240.0	-73.15	.0	25.6	22.1	.0	.0	.0	34.3	32.2	.0
-230.0	-70.10	.0	25.7	22.2	.0	.0	.0	34.4	32.4	.0
-220.0	-67.06	.0	25.9	22.4	.0	.0	.0	34.6	32.5	.0
-210.0	-64.01	.0	26.0	22.5	.0	.0	.0	34.7	32.6	.0
-200.0	-60.96	.0	26.2	22.7	.0	.0	.0	34.8	32.7	.0
-190.0	-57.91	.0	26.3	22.8	.0	.0	.0	34.9	32.9	.0
-180.0	-54.86	.0	26.5	23.0	.0	.0	.0	35.1	33.0	.0
-170.0	-51.82	.0	26.6	23.1	.0	.0	.0	35.2	33.1	.0
-160.0	-48.77	.0	26.8	23.3	.0	.0	.0	35.4	33.3	.0
-150.0	-45.72	.0	26.9	23.4	.0	.0	.0	35.5	33.4	.0
-140.0	-42.67	.0	27.1	23.6	.0	.0	.0	35.7	33.6	.0
-130.0	-39.62	.0	27.3	23.8	.0	.0	.0	35.8	33.7	.0
-120.0	-36.58	.0	27.5	24.0	.0	.0	.0	36.0	33.9	.0
-110.0	-33.53	.0	27.7	24.2	.0	.0	.0	36.2	34.1	.0
-100.0	-30.48	.0	27.9	24.4	.0	.0	.0	36.3	34.2	.0
-90.0	-27.43	.0	28.1	24.6	.0	.0	.0	36.5	34.4	.0
-80.0	-24.38	.0	28.3	24.8	.0	.0	.0	36.7	34.6	.0
-70.0	-21.34	.0	28.5	25.0	.0	.0	.0	36.9	34.8	.0
-60.0	-18.29	.2	28.7	25.2	.0	.0	.0	37.1	35.0	.0
-50.0	-15.24	.4	28.9	25.4	.0	.0	.0	37.3	35.2	.0
-40.0	-12.19	.7	29.2	25.7	.0	.0	.0	37.5	35.4	.0
-30.0	-9.14	.9	29.4	25.9	.0	.0	.0	37.7	35.6	.0
-20.0	-6.10	1.2	29.7	26.2	.0	.0	.0	38.0	35.9	.0
-10.0	-3.05	1.4	29.9	26.4	.0	.0	.0	38.2	36.1	.0
.0	.00	1.7	30.2	26.7	.0	.0	.0	38.5	36.3	.0
10.0	3.05	2.0	30.5	27.0	.0	.0	.0	38.7	36.6	.0
20.0	6.10	2.3	30.8	27.3	.0	.0	.0	38.9	36.8	.0
30.0	9.14	2.6	31.1	27.6	.0	.0	.0	39.2	37.1	.0
40.0	12.19	2.9	31.4	27.9	.0	.0	.0	39.4	37.3	.0
50.0	15.24	3.2	31.7	28.2	.0	.0	.0	39.7	37.6	.0
60.0	18.29	3.5	32.0	28.5	.0	.0	.0	39.9	37.8	.0
70.0	21.34	3.7	32.2	28.7	.0	.0	.0	40.1	38.0	.0
80.0	24.38	4.0	32.5	29.0	.0	.0	.0	40.3	38.2	.0
90.0	27.43	4.2	32.7	29.2	.0	.0	.0	40.5	38.4	.0
100.0	30.48	4.4	32.9	29.4	.0	.0	.0	40.6	38.5	.0
110.0	33.53	4.5	33.0	29.5	.0	.0	.0	40.7	38.6	.0
120.0	36.58	4.5	33.0	29.5	.0	.0	.0	40.7	38.6	.0
130.0	39.62	4.5	33.0	29.5	.0	.0	.0	40.6	38.6	.0
140.0	42.67	4.4	32.9	29.4	.0	.0	.0	40.5	38.5	.0
150.0	45.72	4.2	32.7	29.2	.0	.0	.0	40.4	38.4	.0
160.0	48.77	4.0	32.5	29.0	.0	.0	.0	40.2	38.2	.0
170.0	51.82	3.8	32.3	28.8	.0	.0	.0	40.0	37.9	.0
180.0	54.86	3.5	32.0	28.5	.0	.0	.0	39.7	37.7	.0
190.0	57.91	3.2	31.7	28.2	.0	.0	.0	39.5	37.4	.0
200.0	60.96	2.9	31.4	27.9	.0	.0	.0	39.2	37.2	.0
210.0	64.01	2.6	31.1	27.6	.0	.0	.0	39.0	36.9	.0
220.0	67.06	2.3	30.8	27.3	.0	.0	.0	38.7	36.7	.0
230.0	70.10	2.0	30.5	27.0	.0	.0	.0	38.5	36.4	.0
240.0	73.15	1.7	30.2	26.7	.0	.0	.0	38.2	36.2	.0
250.0	76.20	1.5	30.0	26.5	.0	.0	.0	38.0	35.9	.0
260.0	79.25	1.2	29.7	26.2	.0	.0	.0	37.7	35.7	.0
270.0	82.30	.9	29.4	25.9	.0	.0	.0	37.5	35.5	.0
280.0	85.34	.7	29.2	25.7	.0	.0	.0	37.3	35.3	.0
290.0	88.39	.4	28.9	25.4	.0	.0	.0	37.1	35.0	.0
300.0	91.44	.2	28.7	25.2	.0	.0	.0	36.9	34.8	.0

Audible noise prediction methods do not apply to all line geometries,

RESULTS OF ENVIRO PROGRAM

STUDY FILE NAME: C:\BV-USERS\A_AFTERC.I01

Section A 69/115/230 kV after

BUNDLE INFORMATION

BNDL #	CIRC #	VOLTAGE (kV)	VOLTAGE ANGLE (DEG)	LOAD (AMPS)	CURRENT ANGLE (DEG)	# OF COND	COORDINATES X (FT)	Y (FT)	PHASE
1	1	145.0	.0	584.0	.0	2	37.0	96.0	A
2	1	145.0	240.0	584.0	240.0	2	37.0	86.0	B
3	1	145.0	120.0	584.0	120.0	2	37.0	76.0	C
4	2	145.0	.0	283.0	.0	2	67.0	76.0	A
5	2	145.0	240.0	283.0	240.0	2	67.0	86.0	B
6	2	145.0	120.0	283.0	120.0	2	67.0	96.0	C
7	3	242.0	.0	1194.0	.0	2	122.0	105.0	A
8	3	242.0	240.0	1194.0	240.0	2	122.0	89.0	B
9	3	242.0	120.0	1194.0	120.0	2	122.0	73.0	C
10	4	72.0	.0	204.0	.0	1	232.0	54.0	A
11	4	72.0	240.0	204.0	240.0	1	232.0	47.0	B
12	4	72.0	120.0	204.0	120.0	1	232.0	40.0	C
13	4	72.0	.0	204.0	.0	1	244.0	54.0	A
14	4	72.0	240.0	204.0	240.0	1	244.0	47.0	B
15	4	72.0	120.0	204.0	120.0	1	244.0	40.0	C

MINIMUM GROUND CLEARANCE = 40.000 FT.

SUBCONDUCTOR INFORMATION - REGULAR BUNDLES

BNDL #	DIAMETER (IN)	SPACING (IN)	DC RESIST. (OHMS/MI)	AC RESIST. (OHMS/MI)	AC REACT. (OHMS/MI)
1	1.124	18.000	.09750	.10100	.403000
2	1.124	18.000	.09750	.10100	.403000
3	1.124	18.000	.09750	.10100	.403000
4	1.124	18.000	.09750	.10100	.403000
5	1.124	18.000	.09750	.10100	.403000
6	1.124	18.000	.09750	.10100	.403000
7	1.162	18.000	.10220	.10400	.393000
8	1.162	18.000	.10220	.10400	.393000
9	1.162	18.000	.10220	.10400	.393000
10	1.124	.000	.09750	.10100	.403000
11	1.124	.000	.09750	.10100	.403000
12	1.124	.000	.09750	.10100	.403000
13	1.124	.000	.09750	.10100	.403000
14	1.124	.000	.09750	.10100	.403000
15	1.124	.000	.09750	.10100	.403000

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*                                    *
* MAXIMUM SURFACE GRADIENT (kV/cm) *
*                                    *
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BNDL #	Type	ACrms	PEAK(+)	PEAK(-)
1	AC	7.91	11.19	-11.19
2	AC	9.03	12.77	-12.77
3	AC	8.06	11.40	-11.40
4	AC	8.15	11.53	-11.53
5	AC	9.02	12.76	-12.76
6	AC	8.23	11.64	-11.64
7	AC	11.32	16.01	-16.01
8	AC	12.88	18.22	-18.22
9	AC	11.60	16.40	-16.40
10	AC	5.07	7.17	-7.17
11	AC	5.97	8.44	-8.44
12	AC	5.23	7.40	-7.40
13	AC	5.06	7.16	-7.16
14	AC	5.96	8.43	-8.43
15	AC	5.25	7.43	-7.43

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*                                      *
*     AC  ELECTRIC FIELD PROFILE       *
*    at   3.28 feet above ground       *
*                                      *
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LATERAL DISTANCE (feet)	(meters)	MAXIMUM FIELD (kV/m)	MINOR/MAJOR ELLIPSE AXES (ratio)	VERTICAL (kV/m)	HORIZONTAL (kV/m)	SPACE POTENTIAL (kV)
-300.0	-91.44	.027	.001	.027	.000	.027
-290.0	-88.39	.028	.001	.028	.000	.028
-280.0	-85.34	.030	.001	.030	.000	.030
-270.0	-82.30	.031	.001	.031	.000	.031
-260.0	-79.25	.032	.002	.032	.000	.032
-250.0	-76.20	.034	.002	.034	.001	.034
-240.0	-73.15	.035	.002	.035	.001	.035
-230.0	-70.10	.037	.002	.037	.001	.037
-220.0	-67.06	.039	.002	.039	.001	.039
-210.0	-64.01	.041	.003	.041	.001	.041
-200.0	-60.96	.043	.003	.043	.001	.043
-190.0	-57.91	.045	.003	.045	.001	.045
-180.0	-54.86	.047	.004	.047	.001	.047
-170.0	-51.82	.049	.004	.049	.001	.049
-160.0	-48.77	.052	.005	.052	.001	.052
-150.0	-45.72	.054	.006	.054	.001	.054
-140.0	-42.67	.056	.007	.056	.001	.056
-130.0	-39.62	.059	.009	.059	.001	.059
-120.0	-36.58	.061	.011	.061	.001	.061
-110.0	-33.53	.064	.014	.064	.001	.064
-100.0	-30.48	.066	.018	.066	.001	.066
-90.0	-27.43	.068	.024	.068	.002	.068
-80.0	-24.38	.070	.031	.070	.002	.070
-70.0	-21.34	.073	.041	.073	.003	.072
-60.0	-18.29	.075	.053	.075	.004	.075
-50.0	-15.24	.080	.064	.080	.006	.080
-40.0	-12.19	.089	.071	.089	.007	.089
-30.0	-9.14	.105	.067	.105	.010	.105
-20.0	-6.10	.130	.054	.129	.012	.130

-10.0	-3.05	.163	.037	.163	.014	.163
.0	.00	.203	.021	.202	.014	.202
10.0	3.05	.244	.007	.244	.013	.244
20.0	6.10	.281	.005	.280	.011	.280
30.0	9.14	.307	.015	.306	.008	.306
40.0	12.19	.321	.020	.321	.007	.321
50.0	15.24	.331	.013	.331	.005	.331
60.0	18.29	.345	.008	.345	.007	.345
70.0	21.34	.375	.033	.375	.019	.376
80.0	24.38	.435	.045	.434	.032	.435
90.0	27.43	.526	.040	.525	.040	.525
100.0	30.48	.634	.027	.633	.039	.632
110.0	33.53	.729	.017	.729	.028	.727
120.0	36.58	.781	.010	.781	.011	.779
130.0	39.62	.774	.004	.774	.013	.771
140.0	42.67	.710	.000	.709	.028	.708
150.0	45.72	.608	.005	.607	.037	.606
160.0	48.77	.492	.010	.491	.038	.491
170.0	51.82	.386	.015	.385	.032	.386
180.0	54.86	.306	.015	.305	.021	.307
190.0	57.91	.265	.000	.265	.005	.267
200.0	60.96	.276	.022	.276	.014	.278
210.0	64.01	.348	.026	.347	.034	.349
220.0	67.06	.470	.015	.468	.042	.467
230.0	70.10	.581	.005	.580	.025	.577
240.0	73.15	.601	.002	.601	.014	.597
250.0	76.20	.503	.011	.501	.048	.498
260.0	79.25	.340	.032	.335	.056	.336
270.0	82.30	.189	.089	.185	.045	.186
280.0	85.34	.095	.234	.093	.029	.094
290.0	88.39	.073	.225	.073	.017	.073
300.0	91.44	.085	.090	.085	.009	.084

AC CURRENTS IN EACH BUNDLE:

BNDL #	----- AC CURRENTS (Amperes) ----- REAL	IMAGINARY	TOTAL	BUNDLE POSITION X-COORD	Y-COORD
1	584.00	.00	584.00	37.00	96.00
2	-292.00	-505.76	584.00	37.00	86.00
3	-292.00	505.76	584.00	37.00	76.00
4	283.00	.00	283.00	67.00	76.00
5	-141.50	-245.09	283.00	67.00	86.00
6	-141.50	245.09	283.00	67.00	96.00
7	1194.00	.00	1194.00	122.00	105.00
8	-597.00	-1034.03	1194.00	122.00	89.00
9	-597.00	1034.03	1194.00	122.00	73.00
10	204.00	.00	204.00	232.00	54.00
11	-102.00	-176.67	204.00	232.00	47.00
12	-102.00	176.67	204.00	232.00	40.00
13	204.00	.00	204.00	244.00	54.00
14	-102.00	-176.67	204.00	244.00	47.00
15	-102.00	176.67	204.00	244.00	40.00

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*                                   *
*       MAGNETIC FIELD PROFILE      *
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*     at   3.28 feet  above ground    *
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LATERAL DISTANCE (feet)	LATERAL DISTANCE (meters)	AC MAGNETIC FIELD MAJOR AXIS (mG)	MINOR/ MAJOR (RATIO)	VERTICAL COMP (mG)	HORIZONTAL COMP (mG)	RMS RESULTANT (mG)
-300.0	-91.44	1.49	.012	.62	1.35	1.49
-290.0	-88.39	1.57	.013	.67	1.42	1.57
-280.0	-85.34	1.65	.015	.72	1.49	1.65
-270.0	-82.30	1.75	.016	.78	1.56	1.75
-260.0	-79.25	1.84	.017	.84	1.64	1.84
-250.0	-76.20	1.95	.018	.92	1.72	1.95
-240.0	-73.15	2.07	.019	.99	1.81	2.07
-230.0	-70.10	2.19	.021	1.08	1.91	2.19
-220.0	-67.06	2.33	.022	1.18	2.01	2.33
-210.0	-64.01	2.48	.023	1.29	2.11	2.48
-200.0	-60.96	2.64	.024	1.42	2.23	2.64
-190.0	-57.91	2.82	.026	1.56	2.35	2.82
-180.0	-54.86	3.01	.027	1.72	2.48	3.01
-170.0	-51.82	3.23	.028	1.90	2.61	3.23
-160.0	-48.77	3.46	.030	2.10	2.75	3.47
-150.0	-45.72	3.73	.031	2.34	2.90	3.73
-140.0	-42.67	4.02	.033	2.61	3.05	4.02
-130.0	-39.62	4.34	.034	2.92	3.21	4.34
-120.0	-36.58	4.70	.036	3.28	3.36	4.70
-110.0	-33.53	5.10	.037	3.70	3.51	5.10
-100.0	-30.48	5.54	.039	4.18	3.65	5.55
-90.0	-27.43	6.04	.041	4.73	3.76	6.05
-80.0	-24.38	6.60	.042	5.37	3.84	6.60
-70.0	-21.34	7.22	.044	6.11	3.85	7.22
-60.0	-18.29	7.90	.045	6.95	3.77	7.91
-50.0	-15.24	8.65	.046	7.89	3.57	8.66
-40.0	-12.19	9.46	.047	8.91	3.19	9.47
-30.0	-9.14	10.31	.047	9.99	2.59	10.32
-20.0	-6.10	11.17	.046	11.05	1.73	11.18
-10.0	-3.05	11.99	.045	11.98	.71	12.00
.0	.00	12.71	.043	12.67	1.12	12.72
10.0	3.05	13.25	.039	13.00	2.61	13.26
20.0	6.10	13.58	.035	12.96	4.09	13.58
30.0	9.14	13.74	.032	12.69	5.29	13.75
40.0	12.19	13.95	.029	12.53	6.16	13.96
50.0	15.24	14.55	.029	12.80	6.92	14.55
60.0	18.29	15.83	.029	13.62	8.07	15.83
70.0	21.34	17.85	.029	14.69	10.16	17.86
80.0	24.38	20.38	.026	15.31	13.46	20.38
90.0	27.43	23.03	.020	14.65	17.77	23.03
100.0	30.48	25.40	.012	12.03	22.37	25.40
110.0	33.53	27.11	.002	7.29	26.11	27.11
120.0	36.58	27.89	.010	1.05	27.87	27.89
130.0	39.62	27.59	.022	5.63	27.02	27.60
140.0	42.67	26.26	.035	11.26	23.75	26.28
150.0	45.72	24.09	.048	14.97	18.92	24.12
160.0	48.77	21.32	.060	16.45	13.62	21.35
170.0	51.82	18.13	.074	15.93	8.76	18.18
180.0	54.86	14.65	.094	13.83	5.02	14.71
190.0	57.91	10.96	.126	10.67	2.87	11.05
200.0	60.96	7.38	.175	7.04	2.56	7.49
210.0	64.01	5.84	.086	4.01	4.28	5.86
220.0	67.06	8.66	.050	3.21	8.05	8.67
230.0	70.10	13.28	.040	5.91	11.91	13.30

240.0	73.15	17.09	.014	11.36	12.77	17.09
250.0	76.20	18.88	.009	16.31	9.52	18.88
260.0	79.25	18.61	.025	18.13	4.23	18.62
270.0	82.30	17.04	.036	17.03	.77	17.05
280.0	85.34	15.00	.040	14.60	3.49	15.02
290.0	88.39	13.02	.042	12.04	4.97	13.03
300.0	91.44	11.27	.041	9.83	5.54	11.28

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*                               *
*         AUDIBLE NOISE         *
*   GENERATED ACOUSTIC POWER    *
*       (dB above 1uW/m)        *
*                               *
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BNDL #	Type	Summer Fair	L5 RAIN	L50 RAIN
1	AC	******	-94.46	******
2	AC	******	-84.06	******
3	AC	******	-92.93	******
4	AC	******	-92.02	******
5	AC	******	-84.16	******
6	AC	******	-91.21	******
7	AC	-96.46	-68.52	-83.92
8	AC	-84.99	-61.42	-73.97
9	AC	-94.21	-67.13	-81.96
10	AC	******	******	******
11	AC	******	******	******
12	AC	******	******	******
13	AC	******	******	******
14	AC	******	******	******
15	AC	******	******	******

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*****************************************
*                                       *
*              AUDIBLE NOISE            *
*                                       *
* Microphone is   5.00 feet  above ground *
*          Altitude        0. ft        *
*                                       *
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<---------- HVTRC CALCULATION METHOD ---------->

LATERAL DISTANCE (feet)	(meters)	L50 FAIR (dB(A))	L5 RAIN (dB(A))	L50 RAIN (dB(A))	Leq(24) (dB(A))	Ldn (dB(A))
-300.0	-91.44	6.3	30.8	17.5	16.0	23.8
-290.0	-88.39	6.4	30.9	17.7	16.2	24.0
-280.0	-85.34	6.6	31.1	17.9	16.3	24.1
-270.0	-82.30	6.8	31.3	18.0	16.5	24.3
-260.0	-79.25	6.9	31.4	18.2	16.7	24.5
-250.0	-76.20	7.1	31.6	18.4	16.8	24.6
-240.0	-73.15	7.3	31.8	18.5	17.0	24.8
-230.0	-70.10	7.4	32.0	18.7	17.2	25.0
-220.0	-67.06	7.6	32.1	18.9	17.3	25.2
-210.0	-64.01	7.8	32.3	19.1	17.5	25.3
-200.0	-60.96	8.0	32.5	19.3	17.7	25.5
-190.0	-57.91	8.2	32.7	19.4	17.9	25.7
-180.0	-54.86	8.4	32.9	19.6	18.1	25.9

-170.0	-51.82	8.6	33.1	19.8	18.3	26.1
-160.0	-48.77	8.8	33.3	20.0	18.5	26.3
-150.0	-45.72	9.0	33.5	20.2	18.7	26.5
-140.0	-42.67	9.2	33.7	20.4	18.9	26.7
-130.0	-39.62	9.4	33.9	20.6	19.1	26.9
-120.0	-36.58	9.6	34.1	20.9	19.3	27.1
-110.0	-33.53	9.8	34.3	21.1	19.5	27.4
-100.0	-30.48	10.0	34.6	21.3	19.8	27.6
-90.0	-27.43	10.3	34.8	21.5	20.0	27.8
-80.0	-24.38	10.5	35.0	21.8	20.2	28.0
-70.0	-21.34	10.7	35.3	22.0	20.5	28.3
-60.0	-18.29	11.0	35.5	22.3	20.7	28.5
-50.0	-15.24	11.2	35.8	22.5	21.0	28.8
-40.0	-12.19	11.5	36.0	22.8	21.2	29.1
-30.0	-9.14	11.8	36.3	23.1	21.5	29.3
-20.0	-6.10	12.1	36.6	23.3	21.8	29.6
-10.0	-3.05	12.3	36.9	23.6	22.1	29.9
.0	.00	12.6	37.2	23.9	22.4	30.2
10.0	3.05	12.9	37.5	24.2	22.7	30.5
20.0	6.10	13.2	37.8	24.5	23.0	30.8
30.0	9.14	13.5	38.1	24.8	23.3	31.1
40.0	12.19	13.8	38.4	25.1	23.6	31.4
50.0	15.24	14.1	38.7	25.4	23.9	31.7
60.0	18.29	14.4	39.0	25.7	24.2	32.0
70.0	21.34	14.7	39.2	26.0	24.5	32.3
80.0	24.38	15.0	39.5	26.3	24.7	32.5
90.0	27.43	15.2	39.7	26.5	24.9	32.8
100.0	30.48	15.4	39.9	26.7	25.1	32.9
110.0	33.53	15.5	40.0	26.8	25.2	33.1
120.0	36.58	15.5	40.1	26.8	25.3	33.1
130.0	39.62	15.5	40.0	26.8	25.3	33.1
140.0	42.67	15.4	40.0	26.7	25.2	33.0
150.0	45.72	15.3	39.8	26.6	25.0	32.8
160.0	48.77	15.1	39.6	26.3	24.8	32.6
170.0	51.82	14.8	39.3	26.1	24.6	32.4
180.0	54.86	14.6	39.1	25.8	24.3	32.1
190.0	57.91	14.3	38.8	25.5	24.0	31.8
200.0	60.96	14.0	38.5	25.2	23.7	31.5
210.0	64.01	13.7	38.2	24.9	23.4	31.2
220.0	67.06	13.4	37.8	24.6	23.1	30.9
230.0	70.10	13.0	37.5	24.3	22.8	30.6
240.0	73.15	12.7	37.2	24.0	22.5	30.3
250.0	76.20	12.5	36.9	23.7	22.2	30.0
260.0	79.25	12.2	36.7	23.4	21.9	29.7
270.0	82.30	11.9	36.4	23.2	21.6	29.4
280.0	85.34	11.6	36.1	22.9	21.4	29.2
290.0	88.39	11.4	35.8	22.6	21.1	28.9
300.0	91.44	11.1	35.6	22.4	20.8	28.6

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*                       *
*     AUDIBLE NOISE     *
*    (other methods)    *
*                       *
* Altitude        0. ft *
*                       *
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LATERAL DISTANCE (feet)	(meters)	<------ BPA METHOD -------> FAIR WEATHER dB(A)	L5 RAIN dB(A)	L50 RAIN dB(A)	Ldn dB(A)	<- CRIEPI --> AVERAGE FAIR dB(A)	L5 RAIN dB(A)	EdF L5 RAIN dB(A)	ENEL L5 RAIN dB(A)	IREQ L5 RAIN dB(A)

-300.0	-91.44	.0	24.9	21.4	.0	.0	.0	33.7	31.6	.0
-290.0	-88.39	.0	25.0	21.5	.0	.0	.0	33.8	31.7	.0
-280.0	-85.34	.0	25.1	21.6	.0	.0	.0	33.9	31.8	.0
-270.0	-82.30	.0	25.2	21.7	.0	.0	.0	34.0	31.9	.0
-260.0	-79.25	.0	25.4	21.9	.0	.0	.0	34.1	32.0	.0
-250.0	-76.20	.0	25.5	22.0	.0	.0	.0	34.2	32.1	.0
-240.0	-73.15	.0	25.6	22.1	.0	.0	.0	34.3	32.2	.0
-230.0	-70.10	.0	25.7	22.2	.0	.0	.0	34.4	32.4	.0
-220.0	-67.06	.0	25.9	22.4	.0	.0	.0	34.6	32.5	.0
-210.0	-64.01	.0	26.0	22.5	.0	.0	.0	34.7	32.6	.0
-200.0	-60.96	.0	26.2	22.7	.0	.0	.0	34.8	32.7	.0
-190.0	-57.91	.0	26.3	22.8	.0	.0	.0	34.9	32.9	.0
-180.0	-54.86	.0	26.5	23.0	.0	.0	.0	35.1	33.0	.0
-170.0	-51.82	.0	26.6	23.1	.0	.0	.0	35.2	33.1	.0
-160.0	-48.77	.0	26.8	23.3	.0	.0	.0	35.4	33.3	.0
-150.0	-45.72	.0	26.9	23.4	.0	.0	.0	35.5	33.4	.0
-140.0	-42.67	.0	27.1	23.6	.0	.0	.0	35.7	33.6	.0
-130.0	-39.62	.0	27.3	23.8	.0	.0	.0	35.8	33.7	.0
-120.0	-36.58	.0	27.5	24.0	.0	.0	.0	36.0	33.9	.0
-110.0	-33.53	.0	27.7	24.2	.0	.0	.0	36.2	34.1	.0
-100.0	-30.48	.0	27.9	24.4	.0	.0	.0	36.3	34.2	.0
-90.0	-27.43	.0	28.1	24.6	.0	.0	.0	36.5	34.4	.0
-80.0	-24.38	.0	28.3	24.8	.0	.0	.0	36.7	34.6	.0
-70.0	-21.34	.0	28.5	25.0	.0	.0	.0	36.9	34.8	.0
-60.0	-18.29	.2	28.7	25.2	.0	.0	.0	37.1	35.0	.0
-50.0	-15.24	.4	28.9	25.4	.0	.0	.0	37.3	35.2	.0
-40.0	-12.19	.7	29.2	25.7	.0	.0	.0	37.5	35.4	.0
-30.0	-9.14	.9	29.4	25.9	.0	.0	.0	37.7	35.6	.0
-20.0	-6.10	1.2	29.7	26.2	.0	.0	.0	38.0	35.9	.0
-10.0	-3.05	1.4	29.9	26.4	.0	.0	.0	38.2	36.1	.0
.0	.00	1.7	30.2	26.7	.0	.0	.0	38.5	36.3	.0
10.0	3.05	2.0	30.5	27.0	.0	.0	.0	38.7	36.6	.0
20.0	6.10	2.3	30.8	27.3	.0	.0	.0	38.9	36.8	.0
30.0	9.14	2.6	31.1	27.6	.0	.0	.0	39.2	37.1	.0
40.0	12.19	2.9	31.4	27.9	.0	.0	.0	39.4	37.3	.0
50.0	15.24	3.2	31.7	28.2	.0	.0	.0	39.7	37.6	.0
60.0	18.29	3.5	32.0	28.5	.0	.0	.0	39.9	37.8	.0
70.0	21.34	3.7	32.2	28.7	.0	.0	.0	40.1	38.0	.0
80.0	24.38	4.0	32.5	29.0	.0	.0	.0	40.3	38.2	.0
90.0	27.43	4.2	32.7	29.2	.0	.0	.0	40.5	38.4	.0
100.0	30.48	4.4	32.9	29.4	.0	.0	.0	40.6	38.5	.0
110.0	33.53	4.5	33.0	29.5	.0	.0	.0	40.7	38.6	.0
120.0	36.58	4.5	33.0	29.5	.0	.0	.0	40.7	38.6	.0
130.0	39.62	4.5	33.0	29.5	.0	.0	.0	40.6	38.6	.0
140.0	42.67	4.4	32.9	29.4	.0	.0	.0	40.5	38.5	.0
150.0	45.72	4.2	32.7	29.2	.0	.0	.0	40.4	38.4	.0
160.0	48.77	4.0	32.5	29.0	.0	.0	.0	40.2	38.2	.0
170.0	51.82	3.8	32.3	28.8	.0	.0	.0	40.0	37.9	.0
180.0	54.86	3.5	32.0	28.5	.0	.0	.0	39.7	37.7	.0
190.0	57.91	3.2	31.7	28.2	.0	.0	.0	39.5	37.4	.0
200.0	60.96	2.9	31.4	27.9	.0	.0	.0	39.2	37.2	.0
210.0	64.01	2.6	31.1	27.6	.0	.0	.0	39.0	36.9	.0
220.0	67.06	2.3	30.8	27.3	.0	.0	.0	38.7	36.7	.0
230.0	70.10	2.0	30.5	27.0	.0	.0	.0	38.5	36.4	.0
240.0	73.15	1.7	30.2	26.7	.0	.0	.0	38.2	36.2	.0
250.0	76.20	1.5	30.0	26.5	.0	.0	.0	38.0	35.9	.0
260.0	79.25	1.2	29.7	26.2	.0	.0	.0	37.7	35.7	.0
270.0	82.30	.9	29.4	25.9	.0	.0	.0	37.5	35.5	.0
280.0	85.34	.7	29.2	25.7	.0	.0	.0	37.3	35.3	.0
290.0	88.39	.4	28.9	25.4	.0	.0	.0	37.1	35.0	.0
300.0	91.44	.2	28.7	25.2	.0	.0	.0	36.9	34.8	.0

Audible noise prediction methods do not apply to all line geometries,

voltages, or weather conditions. If a prediction method does not apply, the appropriate output data column will be zeros.

RESULTS OF ENVIRO PROGRAM

STUDY FILE NAME: C:\BV-USERS\C_BEFORE.I01

Section C 69/115/230 kV before

BUNDLE INFORMATION

BNDL #	CIRC #	VOLTAGE (kV)	VOLTAGE ANGLE (DEG)	LOAD (AMPS)	CURRENT ANGLE (DEG)	# OF COND	COORDINATES X (FT)	Y (FT)	PHASE
1	1	72.0	.0	382.0	.0	1	-40.5	59.8	A
2	1	72.0	240.0	382.0	240.0	1	-49.5	52.8	B
3	1	72.0	120.0	382.0	120.0	1	-40.5	45.8	C
4	2	72.0	.0	253.5	.0	1	.5	59.8	A
5	2	72.0	240.0	253.5	240.0	1	.5	52.8	B
6	2	72.0	120.0	253.5	120.0	1	.5	45.8	C
7	2	72.0	.0	253.5	.0	1	9.5	59.8	A
8	2	72.0	240.0	253.5	240.0	1	9.5	52.8	B
9	2	72.0	120.0	253.5	120.0	1	9.5	45.8	C
10	3	145.0	.0	365.5	.0	1	35.0	83.8	A
11	3	145.0	240.0	365.5	240.0	1	35.0	68.8	B
12	3	145.0	120.0	365.5	120.0	1	35.0	53.8	C
13	3	145.0	.0	365.5	.0	1	55.0	83.8	A
14	3	145.0	240.0	365.5	240.0	1	55.0	68.8	B
15	3	145.0	120.0	365.5	120.0	1	55.0	53.8	C
16	4	145.0	.0	450.0	.0	1	55.0	103.8	A
17	4	145.0	240.0	450.0	240.0	1	75.0	103.8	B
18	4	145.0	120.0	450.0	120.0	1	95.0	103.8	C
19	5	242.0	.0	714.5	.0	1	97.1	1.8	A
20	5	242.0	240.0	714.5	240.0	1	97.1	.9	B
21	5	242.0	120.0	714.5	120.0	1	97.1	.0	C
22	5	242.0	.0	714.5	.0	1	98.9	1.8	A
23	5	242.0	240.0	714.5	240.0	1	98.9	.9	B
24	5	242.0	120.0	714.5	120.0	1	98.9	.0	C
25	6	145.0	.0	290.5	.0	1	95.0	83.8	A
26	6	145.0	240.0	290.5	240.0	1	95.0	68.8	B
27	6	145.0	120.0	290.5	120.0	1	95.0	53.8	C
28	6	145.0	.0	290.5	.0	1	115.0	83.8	A
29	6	145.0	240.0	290.5	240.0	1	115.0	68.8	B
30	6	145.0	120.0	290.5	120.0	1	115.0	53.8	C
31	7	72.0	.0	423.0	.0	1	149.5	59.8	A
32	7	72.0	240.0	423.0	240.0	1	140.5	52.8	B
33	7	72.0	120.0	423.0	120.0	1	149.5	45.8	C

MINIMUM GROUND CLEARANCE = .000 FT.

SUBCONDUCTOR INFORMATION - REGULAR BUNDLES

BNDL #	DIAMETER (IN)	SPACING (IN)	DC RESIST. (OHMS/MI)	AC RESIST. (OHMS/MI)	AC REACT. (OHMS/MI)

1	1.124	.000	.09750	.10100	.403000
2	1.124	.000	.09750	.10100	.403000
3	1.124	.000	.09750	.10100	.403000
4	1.124	.000	.09750	.10100	.403000
5	1.124	.000	.09750	.10100	.403000
6	1.124	.000	.09750	.10100	.403000
7	1.124	.000	.09750	.10100	.403000
8	1.124	.000	.09750	.10100	.403000
9	1.124	.000	.09750	.10100	.403000
10	1.245	.000	.08900	.09100	.385000
11	1.245	.000	.08900	.09100	.385000
12	1.245	.000	.08900	.09100	.385000
13	1.245	.000	.08900	.09100	.385000
14	1.245	.000	.08900	.09100	.385000
15	1.245	.000	.08900	.09100	.385000
16	1.245	.000	.08900	.09100	.385000
17	1.245	.000	.08900	.09100	.385000
18	1.245	.000	.08900	.09100	.385000
19	2.159	.000	.01660	.01990	.239000
20	2.159	.000	.01660	.01990	.239000
21	2.159	.000	.01660	.01990	.239000
22	2.159	.000	.01660	.01990	.239000
23	2.159	.000	.01660	.01990	.239000
24	2.159	.000	.01660	.01990	.239000
25	.728	.000	.14520	.15000	.456000
26	.728	.000	.14520	.15000	.456000
27	.728	.000	.14520	.15000	.456000
28	.728	.000	.14520	.15000	.456000
29	.728	.000	.14520	.15000	.456000
30	.728	.000	.14520	.15000	.456000
31	1.124	.000	.09750	.10100	.403000
32	1.124	.000	.09750	.10100	.403000
33	1.124	.000	.09750	.10100	.403000

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*                                *
* MAXIMUM SURFACE GRADIENT (kV/cm) *
*                                *
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BNDL #	Type	ACrms	PEAK(+)	PEAK(-)
1	AC	4.89	6.91	-6.91
2	AC	5.39	7.62	-7.62
3	AC	5.28	7.47	-7.47
4	AC	4.83	6.83	-6.83
5	AC	5.93	8.39	-8.39
6	AC	4.94	6.99	-6.99
7	AC	5.05	7.15	-7.15
8	AC	5.91	8.36	-8.36
9	AC	4.70	6.65	-6.65
10	AC	7.59	10.74	-10.74
11	AC	9.46	13.38	-13.38
12	AC	8.52	12.05	-12.05
13	AC	7.79	11.02	-11.02
14	AC	9.30	13.15	-13.15
15	AC	8.37	11.83	-11.83
16	AC	6.95	9.82	-9.82
17	AC	9.44	13.36	-13.36
18	AC	9.77	13.82	-13.82
19	AC	17.71	25.05	-25.05
20	AC	22.17	31.36	-31.36

21	AC	6.06	8.57	-8.57
22	AC	17.71	25.05	-25.05
23	AC	22.17	31.36	-31.36
24	AC	6.06	8.57	-8.57
25	AC	13.97	19.76	-19.76
26	AC	14.46	20.46	-20.46
27	AC	13.13	18.57	-18.57
28	AC	13.51	19.11	-19.11
29	AC	14.55	20.57	-20.57
30	AC	13.44	19.00	-19.00
31	AC	5.17	7.31	-7.31
32	AC	5.47	7.73	-7.73
33	AC	4.99	7.06	-7.06

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*************************************
*                                   *
*     AC  ELECTRIC FIELD PROFILE    *
*    at   9.08 feet above ground    *
*                                   *
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LATERAL DISTANCE (feet)	(meters)	MAXIMUM FIELD (kV/m)	MINOR/MAJOR ELLIPSE AXES (ratio)	VERTICAL (kV/m)	HORIZONTAL (kV/m)	SPACE POTENTIAL (kV)
-300.0	-91.44	.041	.004	.041	.002	.114
-290.0	-88.39	.043	.005	.043	.002	.120
-280.0	-85.34	.046	.005	.046	.002	.127
-270.0	-82.30	.048	.006	.048	.003	.134
-260.0	-79.25	.051	.006	.051	.003	.142
-250.0	-76.20	.054	.007	.054	.003	.151
-240.0	-73.15	.058	.008	.058	.003	.160
-230.0	-70.10	.061	.009	.061	.003	.170
-220.0	-67.06	.065	.010	.065	.004	.180
-210.0	-64.01	.069	.012	.069	.004	.192
-200.0	-60.96	.074	.014	.074	.004	.204
-190.0	-57.91	.079	.016	.079	.005	.218
-180.0	-54.86	.084	.020	.084	.005	.231
-170.0	-51.82	.089	.024	.089	.005	.246
-160.0	-48.77	.094	.029	.094	.006	.261
-150.0	-45.72	.100	.037	.100	.006	.275
-140.0	-42.67	.105	.047	.105	.006	.289
-130.0	-39.62	.109	.061	.109	.007	.299
-120.0	-36.58	.112	.082	.112	.009	.306
-110.0	-33.53	.112	.115	.112	.013	.304
-100.0	-30.48	.108	.169	.108	.020	.290
-90.0	-27.43	.099	.276	.098	.031	.258
-80.0	-24.38	.085	.524	.083	.049	.212
-70.0	-21.34	.086	.799	.081	.074	.214
-60.0	-18.29	.157	.385	.134	.102	.374
-50.0	-15.24	.259	.203	.239	.114	.654
-40.0	-12.19	.361	.106	.349	.101	.951
-30.0	-9.14	.446	.033	.438	.087	1.217
-20.0	-6.10	.546	.019	.534	.110	1.508
-10.0	-3.05	.694	.034	.678	.147	1.898
.0	.00	.871	.027	.857	.156	2.364
10.0	3.05	1.030	.016	1.022	.134	2.806
20.0	6.10	1.160	.007	1.155	.108	3.174
30.0	9.14	1.265	.000	1.263	.078	3.461
40.0	12.19	1.329	.006	1.329	.025	3.622
50.0	15.24	1.321	.020	1.320	.062	3.577
60.0	18.29	1.228	.063	1.217	.179	3.256
70.0	21.34	1.076	.219	1.020	.414	2.560

80.0	24.38	1.306	.447	.787	1.195	1.819
90.0	27.43	4.530	.143	1.939	4.145	7.931
100.0	30.48	8.394	.041	7.833	3.038	16.067
110.0	33.53	2.533	.233	.777	2.482	4.236
120.0	36.58	.764	.564	.611	.629	1.344
130.0	39.62	.652	.199	.648	.151	1.629
140.0	42.67	.620	.021	.619	.036	1.652
150.0	45.72	.548	.065	.541	.091	1.466
160.0	48.77	.441	.120	.428	.117	1.174
170.0	51.82	.324	.176	.309	.112	.863
180.0	54.86	.227	.240	.216	.088	.610
190.0	57.91	.163	.287	.159	.061	.447
200.0	60.96	.130	.273	.128	.040	.358
210.0	64.01	.114	.214	.113	.026	.313
220.0	67.06	.104	.154	.104	.017	.287
230.0	70.10	.097	.110	.097	.012	.268
240.0	73.15	.091	.080	.091	.009	.251
250.0	76.20	.085	.060	.085	.007	.235
260.0	79.25	.080	.046	.079	.006	.220
270.0	82.30	.074	.036	.074	.005	.206
280.0	85.34	.069	.029	.069	.005	.192
290.0	88.39	.065	.024	.065	.004	.180
300.0	91.44	.061	.020	.061	.004	.168

AC CURRENTS IN EACH BUNDLE:

BNDL #	----- AC CURRENTS (Amperes) ----- REAL	IMAGINARY	TOTAL	BUNDLE POSITION X-COORD	Y-COORD
1	382.00	.00	382.00	-40.50	59.80
2	-191.00	-330.82	382.00	-49.50	52.80
3	-191.00	330.82	382.00	-40.50	45.80
4	253.50	.00	253.50	.50	59.80
5	-126.75	-219.54	253.50	.50	52.80
6	-126.75	219.54	253.50	.50	45.80
7	253.50	.00	253.50	9.50	59.80
8	-126.75	-219.54	253.50	9.50	52.80
9	-126.75	219.54	253.50	9.50	45.80
10	365.50	.00	365.50	35.00	83.80
11	-182.75	-316.53	365.50	35.00	68.80
12	-182.75	316.53	365.50	35.00	53.80
13	365.50	.00	365.50	55.00	83.80
14	-182.75	-316.53	365.50	55.00	68.80
15	-182.75	316.53	365.50	55.00	53.80
16	450.00	.00	450.00	55.00	103.80
17	-225.00	-389.71	450.00	75.00	103.80
18	-225.00	389.71	450.00	95.00	103.80
19	714.50	.00	714.50	97.10	1.80
20	-357.25	-618.78	714.50	97.10	.90
21	-357.25	618.78	714.50	97.10	.00
22	714.50	.00	714.50	98.90	1.80
23	-357.25	-618.78	714.50	98.90	.90
24	-357.25	618.78	714.50	98.90	.00
25	290.50	.00	290.50	95.00	83.80
26	-145.25	-251.58	290.50	95.00	68.80
27	-145.25	251.58	290.50	95.00	53.80
28	290.50	.00	290.50	115.00	83.80
29	-145.25	-251.58	290.50	115.00	68.80
30	-145.25	251.58	290.50	115.00	53.80

31	423.00	.00	423.00	149.50	59.80
32	-211.50	-366.33	423.00	140.50	52.80
33	-211.50	366.33	423.00	149.50	45.80

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*************************************
*                                   *
*       MAGNETIC FIELD PROFILE      *
*     at   9.08 feet  above ground  *
*                                   *
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LATERAL DISTANCE (feet)	(meters)	MAJOR AXIS (mG)	MINOR/ MAJOR (RATIO)	<---------- AC MAGNETIC FIELD ----------> VERTICAL COMP (mG)	HORIZONTAL COMP (mG)	RMS RESULTANT (mG)
-300.0	-91.44	2.79	.161	.48	2.79	2.83
-290.0	-88.39	2.97	.163	.53	2.96	3.01
-280.0	-85.34	3.17	.166	.59	3.15	3.21
-270.0	-82.30	3.38	.168	.66	3.36	3.43
-260.0	-79.25	3.61	.171	.74	3.59	3.67
-250.0	-76.20	3.87	.174	.83	3.84	3.93
-240.0	-73.15	4.16	.177	.94	4.12	4.22
-230.0	-70.10	4.48	.180	1.08	4.42	4.55
-220.0	-67.06	4.83	.184	1.24	4.76	4.92
-210.0	-64.01	5.23	.188	1.43	5.13	5.33
-200.0	-60.96	5.68	.193	1.66	5.55	5.79
-190.0	-57.91	6.20	.198	1.94	6.01	6.32
-180.0	-54.86	6.78	.204	2.28	6.53	6.92
-170.0	-51.82	7.45	.210	2.70	7.11	7.61
-160.0	-48.77	8.22	.217	3.22	7.77	8.41
-150.0	-45.72	9.11	.225	3.87	8.50	9.34
-140.0	-42.67	10.16	.234	4.69	9.32	10.44
-130.0	-39.62	11.40	.243	5.74	10.23	11.73
-120.0	-36.58	12.87	.252	7.08	11.22	13.27
-110.0	-33.53	14.62	.261	8.83	12.27	15.11
-100.0	-30.48	16.72	.267	11.09	13.28	17.31
-90.0	-27.43	19.19	.268	14.04	14.06	19.87
-80.0	-24.38	22.02	.257	17.78	14.16	22.73
-70.0	-21.34	24.93	.229	22.17	12.74	25.57
-60.0	-18.29	27.22	.175	26.20	8.77	27.63
-50.0	-15.24	27.72	.091	27.70	2.78	27.84
-40.0	-12.19	25.95	.030	25.62	4.17	25.96
-30.0	-9.14	23.95	.166	23.31	6.80	24.28
-20.0	-6.10	24.95	.210	24.30	7.71	25.49
-10.0	-3.05	27.93	.175	26.40	10.34	28.35
.0	.00	29.55	.147	25.55	15.47	29.87
10.0	3.05	28.76	.136	21.64	19.34	29.02
20.0	6.10	26.93	.132	17.56	20.72	27.16
30.0	9.14	25.43	.138	14.32	21.30	25.67
40.0	12.19	23.80	.160	10.92	21.49	24.10
50.0	15.24	20.92	.200	7.23	20.07	21.33
60.0	18.29	16.29	.268	4.57	16.23	16.86
70.0	21.34	11.10	.394	6.68	9.89	11.93
80.0	24.38	25.11	.094	25.11	2.37	25.22
90.0	27.43	113.95	.001	109.76	30.63	113.95
100.0	30.48	227.80	.009	90.01	209.27	227.80
110.0	33.53	59.10	.062	58.96	5.55	59.22
120.0	36.58	11.38	.621	8.39	10.44	13.39
130.0	39.62	19.25	.219	10.64	16.59	19.71
140.0	42.67	25.82	.278	18.72	19.18	26.80

150.0	45.72	29.92	.317	25.06	18.91	31.39
160.0	48.77	31.34	.305	29.16	14.95	32.76
170.0	51.82	29.95	.277	29.56	9.58	31.08
180.0	54.86	26.88	.253	26.87	6.86	27.73
190.0	57.91	23.39	.234	22.95	7.09	24.02
200.0	60.96	20.14	.220	19.13	7.70	20.62
210.0	64.01	17.35	.209	15.86	7.89	17.72
220.0	67.06	15.02	.199	13.23	7.72	15.32
230.0	70.10	13.11	.192	11.14	7.36	13.35
240.0	73.15	11.53	.185	9.47	6.91	11.73
250.0	76.20	10.22	.180	8.14	6.44	10.38
260.0	79.25	9.12	.175	7.07	5.98	9.26
270.0	82.30	8.19	.171	6.18	5.55	8.31
280.0	85.34	7.40	.167	5.46	5.15	7.50
290.0	88.39	6.72	.164	4.85	4.78	6.81
300.0	91.44	6.13	.162	4.33	4.45	6.21

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*                               *
*         AUDIBLE NOISE         *
*   GENERATED ACOUSTIC POWER    *
*       (dB above 1uW/m)        *
*                               *
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BNDL #	Type	Summer Fair	L5 RAIN	L50 RAIN
1	AC	******	******	******
2	AC	******	******	******
3	AC	******	******	******
4	AC	******	******	******
5	AC	******	******	******
6	AC	******	******	******
7	AC	******	******	******
8	AC	******	******	******
9	AC	******	******	******
10	AC	******	-97.19	******
11	AC	******	-79.90	-99.49
12	AC	******	-87.62	******
13	AC	******	-94.96	******
14	AC	******	-81.12	******
15	AC	******	-89.10	******
16	AC	******	******	******
17	AC	******	-80.01	-99.64
18	AC	******	-77.67	-96.37
19	AC	-49.44	-36.62	-41.42
20	AC	-37.66	-29.07	-31.26
21	AC	******	******	******
22	AC	-49.44	-36.62	-41.42
23	AC	-37.66	-29.07	-31.26
24	AC	******	******	******
25	AC	-90.81	-67.45	-80.64
26	AC	-88.11	-65.83	-78.30
27	AC	-95.89	-70.50	-85.07
28	AC	-93.49	-69.06	-82.98
29	AC	-87.68	-65.57	-77.92
30	AC	-93.95	-69.34	-83.38
31	AC	******	******	******
32	AC	******	******	******
33	AC	******	******	******

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*                                        *
*              AUDIBLE NOISE             *
*                                        *
* Microphone is   5.00 feet  above ground *
*          Altitude        0. ft         *
*                                        *
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<---------- HVTRC CALCULATION METHOD ---------->

LATERAL DISTANCE (feet)	(meters)	L50 FAIR (dB(A))	L5 RAIN (dB(A))	L50 RAIN (dB(A))	Leq(24) (dB(A))	Ldn (dB(A))
-300.0	-91.44	56.7	65.7	63.2	61.9	69.3
-290.0	-88.39	56.8	65.8	63.4	62.0	69.4
-280.0	-85.34	57.0	66.0	63.5	62.2	69.6
-270.0	-82.30	57.2	66.2	63.7	62.4	69.8
-260.0	-79.25	57.4	66.4	63.9	62.6	70.0
-250.0	-76.20	57.5	66.6	64.1	62.8	70.2
-240.0	-73.15	57.7	66.8	64.3	62.9	70.3
-230.0	-70.10	57.9	66.9	64.5	63.1	70.5
-220.0	-67.06	58.1	67.1	64.6	63.3	70.7
-210.0	-64.01	58.3	67.3	64.8	63.5	70.9
-200.0	-60.96	58.5	67.5	65.1	63.7	71.1
-190.0	-57.91	58.7	67.8	65.3	63.9	71.3
-180.0	-54.86	59.0	68.0	65.5	64.2	71.6
-170.0	-51.82	59.2	68.2	65.7	64.4	71.8
-160.0	-48.77	59.4	68.4	65.9	64.6	72.0
-150.0	-45.72	59.6	68.6	66.2	64.8	72.2
-140.0	-42.67	59.9	68.9	66.4	65.1	72.5
-130.0	-39.62	60.1	69.1	66.6	65.3	72.7
-120.0	-36.58	60.4	69.4	66.9	65.6	73.0
-110.0	-33.53	60.6	69.7	67.2	65.8	73.2
-100.0	-30.48	60.9	69.9	67.4	66.1	73.5
-90.0	-27.43	61.2	70.2	67.7	66.4	73.8
-80.0	-24.38	61.5	70.5	68.0	66.7	74.1
-70.0	-21.34	61.8	70.8	68.3	67.0	74.4
-60.0	-18.29	62.1	71.2	68.7	67.3	74.7
-50.0	-15.24	62.5	71.5	69.0	67.7	75.1
-40.0	-12.19	62.8	71.9	69.4	68.1	75.4
-30.0	-9.14	63.2	72.2	69.8	68.4	75.8
-20.0	-6.10	63.6	72.7	70.2	68.9	76.2
-10.0	-3.05	64.1	73.1	70.6	69.3	76.7
.0	.00	64.6	73.6	71.1	69.8	77.2
10.0	3.05	65.1	74.1	71.6	70.3	77.7
20.0	6.10	65.7	74.7	72.2	70.9	78.3
30.0	9.14	66.3	75.4	72.9	71.6	78.9
40.0	12.19	67.1	76.1	73.6	72.3	79.7
50.0	15.24	68.0	77.0	74.5	73.2	80.6
60.0	18.29	69.0	78.0	75.6	74.2	81.6
70.0	21.34	70.4	79.4	76.9	75.6	83.0
80.0	24.38	72.3	81.3	78.8	77.5	84.9
90.0	27.43	75.5	84.6	82.1	80.8	88.1
100.0	30.48	78.5	87.6	85.0	83.7	91.1
110.0	33.53	74.0	83.0	80.5	79.2	86.6
120.0	36.58	71.5	80.5	78.0	76.7	84.1
130.0	39.62	69.8	78.8	76.3	75.0	82.4
140.0	42.67	68.6	77.6	75.1	73.8	81.2
150.0	45.72	67.6	76.6	74.1	72.8	80.2
160.0	48.77	66.8	75.8	73.3	72.0	79.4
170.0	51.82	66.1	75.1	72.6	71.3	78.7
180.0	54.86	65.4	74.5	72.0	70.7	78.0

190.0	57.91	64.9	73.9	71.4	70.1	77.5
200.0	60.96	64.4	73.4	70.9	69.6	77.0
210.0	64.01	63.9	72.9	70.4	69.1	76.5
220.0	67.06	63.5	72.5	70.0	68.7	76.1
230.0	70.10	63.1	72.1	69.6	68.3	75.7
240.0	73.15	62.7	71.7	69.2	67.9	75.3
250.0	76.20	62.3	71.4	68.9	67.6	74.9
260.0	79.25	62.0	71.0	68.5	67.2	74.6
270.0	82.30	61.7	70.7	68.2	66.9	74.3
280.0	85.34	61.4	70.4	67.9	66.6	74.0
290.0	88.39	61.1	70.1	67.6	66.3	73.7
300.0	91.44	60.8	69.8	67.3	66.0	73.4

RESULTS OF ENVIRO PROGRAM

STUDY FILE NAME: C:\BV-USERS\C_AFTERC.I01

Section C 69/115/230 kV after

****
* BUNDLE INFORMATION *
****

BNDL #	CIRC #	VOLTAGE (kV)	VOLTAGE ANGLE (DEG)	LOAD (AMPS)	CURRENT ANGLE (DEG)	# OF COND	COORDINATES X (FT)	Y (FT)	PHASE
1	1	72.0	.0	328.0	.0	1	-40.5	59.8	A
2	1	72.0	240.0	328.0	240.0	1	-49.5	52.8	B
3	1	72.0	120.0	328.0	120.0	1	-40.5	45.8	C
4	2	72.0	.0	232.5	.0	1	.5	59.8	A
5	2	72.0	240.0	232.5	240.0	1	.5	52.8	B
6	2	72.0	120.0	232.5	120.0	1	.5	45.8	C
7	2	72.0	.0	232.5	.0	1	9.5	59.8	A
8	2	72.0	240.0	232.5	240.0	1	9.5	52.8	B
9	2	72.0	120.0	232.5	120.0	1	9.5	45.8	C
10	3	145.0	.0	306.5	.0	1	51.1	1.8	A
11	3	145.0	240.0	306.5	240.0	1	51.1	.9	B
12	3	145.0	120.0	306.5	120.0	1	51.1	.0	C
13	3	145.0	.0	306.5	.0	1	52.9	1.8	A
14	3	145.0	240.0	306.5	240.0	1	52.9	.9	B
15	3	145.0	120.0	306.5	120.0	1	52.9	.0	C
16	4	242.0	.0	714.5	.0	1	97.1	1.8	A
17	4	242.0	240.0	714.5	240.0	1	97.1	.9	B
18	4	242.0	120.0	714.5	120.0	1	97.1	.0	C
19	4	242.0	.0	714.5	.0	1	98.9	1.8	A
20	4	242.0	240.0	714.5	240.0	1	98.9	.9	B
21	4	242.0	120.0	714.5	120.0	1	98.9	.0	C
22	5	72.0	.0	423.0	.0	1	149.5	59.8	A
23	5	72.0	240.0	423.0	240.0	1	140.5	52.8	B
24	5	72.0	120.0	423.0	120.0	1	149.5	45.8	C

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* MINIMUM GROUND CLEARANCE = .000 FT. *
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****
* SUBCONDUCTOR INFORMATION - REGULAR BUNDLES *
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BNDL #	DIAMETER (IN)	SPACING (IN)	DC RESIST. (OHMS/MI)	AC RESIST. (OHMS/MI)	AC REACT. (OHMS/MI)
1	1.124	.000	.09750	.10100	.403000
2	1.124	.000	.09750	.10100	.403000
3	1.124	.000	.09750	.10100	.403000
4	1.124	.000	.09750	.10100	.403000
5	1.124	.000	.09750	.10100	.403000
6	1.124	.000	.09750	.10100	.403000
7	1.124	.000	.09750	.10100	.403000
8	1.124	.000	.09750	.10100	.403000
9	1.124	.000	.09750	.10100	.403000

10	1.526	.000	.03250	.03430	.276200
11	1.526	.000	.03250	.03430	.276200
12	1.526	.000	.03250	.03430	.276200
13	1.526	.000	.03250	.03430	.276200
14	1.526	.000	.03250	.03430	.276200
15	1.526	.000	.03250	.03430	.276200
16	2.159	.000	.01660	.01990	.239000
17	2.159	.000	.01660	.01990	.239000
18	2.159	.000	.01660	.01990	.239000
19	2.159	.000	.01660	.01990	.239000
20	2.159	.000	.01660	.01990	.239000
21	2.159	.000	.01660	.01990	.239000
22	1.124	.000	.09750	.10100	.403000
23	1.124	.000	.09750	.10100	.403000
24	1.124	.000	.09750	.10100	.403000

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*                                *
* MAXIMUM SURFACE GRADIENT (kV/cm) *
*                                *
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BNDL #	Type	ACrms	PEAK(+)	PEAK(-)
1	AC	5.03	7.12	-7.12
2	AC	5.36	7.58	-7.58
3	AC	5.24	7.42	-7.42
4	AC	4.90	6.93	-6.93
5	AC	5.92	8.37	-8.37
6	AC	5.11	7.22	-7.22
7	AC	4.89	6.92	-6.92
8	AC	5.90	8.34	-8.34
9	AC	5.16	7.30	-7.30
10	AC	13.14	18.58	-18.58
11	AC	16.27	23.01	-23.01
12	AC	5.36	7.58	-7.58
13	AC	13.14	18.58	-18.58
14	AC	16.27	23.01	-23.01
15	AC	5.36	7.58	-7.58
16	AC	17.68	25.00	-25.00
17	AC	22.17	31.36	-31.36
18	AC	6.06	8.57	-8.57
19	AC	17.68	25.00	-25.00
20	AC	22.17	31.36	-31.36
21	AC	6.06	8.57	-8.57
22	AC	5.01	7.09	-7.09
23	AC	5.40	7.64	-7.64
24	AC	5.34	7.55	-7.55

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*************************************
*                                   *
*     AC  ELECTRIC FIELD PROFILE    *
*    at   9.08 feet above ground    *
*                                   *
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LATERAL DISTANCE (feet)	(meters)	MAXIMUM FIELD (kV/m)	MINOR/MAJOR ELLIPSE AXES (ratio)	VERTICAL (kV/m)	HORIZONTAL (kV/m)	SPACE POTENTIAL (kV)
-300.0	-91.44	.019	.007	.019	.001	.052
-290.0	-88.39	.020	.008	.020	.001	.055

-280.0	-85.34	.021	.009	.021	.001	.058
-270.0	-82.30	.022	.010	.022	.001	.061
-260.0	-79.25	.024	.011	.024	.001	.065
-250.0	-76.20	.025	.013	.025	.001	.070
-240.0	-73.15	.027	.014	.027	.002	.074
-230.0	-70.10	.029	.016	.029	.002	.079
-220.0	-67.06	.031	.019	.031	.002	.085
-210.0	-64.01	.033	.022	.033	.002	.091
-200.0	-60.96	.035	.025	.035	.002	.098
-190.0	-57.91	.038	.030	.038	.003	.105
-180.0	-54.86	.041	.036	.041	.003	.113
-170.0	-51.82	.044	.043	.044	.004	.122
-160.0	-48.77	.048	.053	.048	.004	.132
-150.0	-45.72	.051	.066	.051	.005	.142
-140.0	-42.67	.056	.084	.055	.006	.153
-130.0	-39.62	.060	.108	.060	.007	.165
-120.0	-36.58	.064	.141	.064	.010	.177
-110.0	-33.53	.069	.187	.069	.014	.189
-100.0	-30.48	.075	.253	.074	.019	.202
-90.0	-27.43	.082	.341	.082	.029	.220
-80.0	-24.38	.095	.438	.094	.044	.252
-70.0	-21.34	.124	.452	.119	.066	.327
-60.0	-18.29	.185	.345	.173	.091	.478
-50.0	-15.24	.270	.225	.258	.100	.700
-40.0	-12.19	.348	.137	.342	.080	.922
-30.0	-9.14	.397	.072	.395	.051	1.079
-20.0	-6.10	.435	.025	.433	.038	1.194
-10.0	-3.05	.477	.014	.477	.023	1.291
.0	.00	.490	.052	.489	.045	1.282
10.0	3.05	.426	.184	.404	.154	1.034
20.0	6.10	.323	.601	.240	.291	.637
30.0	9.14	.613	.277	.309	.556	1.281
40.0	12.19	1.596	.076	.429	1.542	4.057
50.0	15.24	3.850	.008	3.392	1.821	11.132
60.0	18.29	2.050	.029	.082	2.050	7.211
70.0	21.34	1.056	.004	1.029	.234	4.104
80.0	24.38	1.519	.007	1.178	.959	5.091
90.0	27.43	4.003	.003	.295	3.992	11.874
100.0	30.48	7.110	.007	6.379	3.140	19.673
110.0	33.53	2.730	.016	.742	2.627	7.325
120.0	36.58	1.060	.027	.668	.823	2.697
130.0	39.62	.459	.049	.289	.357	1.039
140.0	42.67	.188	.414	.084	.186	.319
150.0	45.72	.168	.210	.152	.080	.373
160.0	48.77	.190	.061	.190	.015	.485
170.0	51.82	.173	.175	.172	.037	.458
180.0	54.86	.142	.237	.140	.041	.385
190.0	57.91	.118	.243	.117	.033	.323
200.0	60.96	.102	.205	.102	.024	.281
210.0	64.01	.091	.156	.091	.016	.251
220.0	67.06	.083	.116	.082	.012	.228
230.0	70.10	.075	.087	.075	.009	.207
240.0	73.15	.068	.067	.068	.007	.188
250.0	76.20	.062	.052	.062	.006	.171
260.0	79.25	.056	.042	.056	.005	.156
270.0	82.30	.051	.034	.051	.005	.142
280.0	85.34	.047	.028	.047	.004	.130
290.0	88.39	.043	.024	.043	.003	.119
300.0	91.44	.039	.020	.039	.003	.109

AC CURRENTS IN EACH BUNDLE:

BNDL #	----- AC CURRENTS (Amperes) ----- REAL	IMAGINARY	TOTAL	BUNDLE POSITION X-COORD	Y-COORD
1	328.00	.00	328.00	-40.50	59.80
2	-164.00	-284.06	328.00	-49.50	52.80
3	-164.00	284.06	328.00	-40.50	45.80
4	232.50	.00	232.50	.50	59.80
5	-116.25	-201.35	232.50	.50	52.80
6	-116.25	201.35	232.50	.50	45.80
7	232.50	.00	232.50	9.50	59.80
8	-116.25	-201.35	232.50	9.50	52.80
9	-116.25	201.35	232.50	9.50	45.80
10	306.50	.00	306.50	51.10	1.80
11	-153.25	-265.44	306.50	51.10	.90
12	-153.25	265.44	306.50	51.10	.00
13	306.50	.00	306.50	52.90	1.80
14	-153.25	-265.44	306.50	52.90	.90
15	-153.25	265.44	306.50	52.90	.00
16	714.50	.00	714.50	97.10	1.80
17	-357.25	-618.78	714.50	97.10	.90
18	-357.25	618.78	714.50	97.10	.00
19	714.50	.00	714.50	98.90	1.80
20	-357.25	-618.78	714.50	98.90	.90
21	-357.25	618.78	714.50	98.90	.00
22	423.00	.00	423.00	149.50	59.80
23	-211.50	-366.33	423.00	140.50	52.80
24	-211.50	366.33	423.00	149.50	45.80

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*************************************
*                                   *
*       MAGNETIC FIELD PROFILE      *
*     at   9.08 feet  above ground  *
*                                   *
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LATERAL DISTANCE (feet)	(meters)	<---------- AC MAGNETIC FIELD ----------> MAJOR AXIS (mG)	MINOR/ MAJOR (RATIO)	VERTICAL COMP (mG)	HORIZONTAL COMP (mG)	RMS RESULTANT (mG)
-300.0	-91.44	1.01	.412	.47	.99	1.10
-290.0	-88.39	1.08	.413	.51	1.06	1.17
-280.0	-85.34	1.16	.414	.55	1.13	1.26
-270.0	-82.30	1.25	.416	.60	1.21	1.35
-260.0	-79.25	1.35	.418	.66	1.30	1.46
-250.0	-76.20	1.45	.420	.72	1.40	1.58
-240.0	-73.15	1.57	.422	.79	1.51	1.71
-230.0	-70.10	1.71	.425	.88	1.64	1.86
-220.0	-67.06	1.86	.428	.98	1.78	2.03
-210.0	-64.01	2.04	.431	1.09	1.93	2.22
-200.0	-60.96	2.24	.435	1.23	2.11	2.45
-190.0	-57.91	2.48	.440	1.39	2.32	2.70
-180.0	-54.86	2.75	.445	1.59	2.55	3.01
-170.0	-51.82	3.07	.451	1.84	2.82	3.36
-160.0	-48.77	3.45	.458	2.14	3.13	3.79
-150.0	-45.72	3.90	.465	2.51	3.49	4.30
-140.0	-42.67	4.45	.473	2.99	3.91	4.92
-130.0	-39.62	5.11	.482	3.60	4.39	5.68

-120.0	-36.58	5.94	.491	4.39	4.95	6.61
-110.0	-33.53	6.97	.498	5.42	5.59	7.78
-100.0	-30.48	8.26	.502	6.79	6.27	9.25
-90.0	-27.43	9.89	.500	8.62	6.92	11.06
-80.0	-24.38	11.89	.487	11.01	7.32	13.22
-70.0	-21.34	14.17	.458	13.86	7.14	15.59
-60.0	-18.29	16.35	.413	16.34	6.78	17.69
-50.0	-15.24	17.56	.355	16.50	8.67	18.64
-40.0	-12.19	17.04	.285	13.16	11.86	17.72
-30.0	-9.14	15.24	.189	8.47	13.00	15.51
-20.0	-6.10	14.00	.073	5.06	13.10	14.04
-10.0	-3.05	14.45	.013	2.11	14.30	14.46
.0	.00	15.62	.023	3.43	15.25	15.63
10.0	3.05	16.42	.063	11.09	12.15	16.45
20.0	6.10	17.94	.103	17.51	4.32	18.04
30.0	9.14	24.18	.095	23.09	7.54	24.29
40.0	12.19	44.35	.043	41.56	15.60	44.39
50.0	15.24	84.57	.033	50.47	67.91	84.61
60.0	18.29	39.85	.041	37.92	12.36	39.88
70.0	21.34	30.86	.087	2.78	30.85	30.98
80.0	24.38	44.52	.014	25.29	36.64	44.52
90.0	27.43	108.29	.015	108.16	5.42	108.30
100.0	30.48	199.25	.002	96.75	174.18	199.25
110.0	33.53	77.99	.059	72.45	29.22	78.12
120.0	36.58	34.62	.083	27.58	21.13	34.74
130.0	39.62	20.65	.114	19.06	8.28	20.78
140.0	42.67	15.98	.317	15.85	5.44	16.76
150.0	45.72	14.04	.638	12.04	11.51	16.65
160.0	48.77	12.50	.884	11.11	12.45	16.69
170.0	51.82	12.39	.769	12.09	9.91	15.63
180.0	54.86	11.54	.661	11.52	7.64	13.83
190.0	57.91	10.18	.596	9.81	6.64	11.84
200.0	60.96	8.76	.555	7.91	6.15	10.02
210.0	64.01	7.49	.529	6.28	5.69	8.47
220.0	67.06	6.41	.510	5.00	5.18	7.20
230.0	70.10	5.52	.497	4.02	4.67	6.16
240.0	73.15	4.78	.487	3.28	4.19	5.32
250.0	76.20	4.18	.479	2.72	3.75	4.63
260.0	79.25	3.68	.473	2.29	3.36	4.07
270.0	82.30	3.26	.468	1.95	3.02	3.60
280.0	85.34	2.90	.463	1.68	2.72	3.20
290.0	88.39	2.61	.460	1.47	2.47	2.87
300.0	91.44	2.35	.456	1.29	2.24	2.59

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*                               *
*         AUDIBLE NOISE         *
*   GENERATED ACOUSTIC POWER    *
*       (dB above 1uW/m)        *
*                               *
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BNDL #	Type	Summer Fair	L5 RAIN	L50 RAIN
1	AC	******	******	******
2	AC	******	******	******
3	AC	******	******	******
4	AC	******	******	******
5	AC	******	******	******
6	AC	******	******	******
7	AC	******	******	******
8	AC	******	******	******

9	AC	******	******	******
10	AC	-77.97	-56.32	-67.16
11	AC	-62.48	-46.58	-53.76
12	AC	******	******	******
13	AC	-77.98	-56.32	-67.17
14	AC	-62.48	-46.57	-53.76
15	AC	******	******	******
16	AC	-49.55	-36.69	-41.52
17	AC	-37.66	-29.07	-31.26
18	AC	******	******	******
19	AC	-49.55	-36.69	-41.52
20	AC	-37.66	-29.07	-31.26
21	AC	******	******	******
22	AC	******	******	******
23	AC	******	******	******
24	AC	******	******	******

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*****************************************
*                                       *
*              AUDIBLE NOISE            *
*                                       *
* Microphone is   5.00 feet  above ground *
*          Altitude        0. ft        *
*                                       *
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<---------- HVTRC CALCULATION METHOD ---------->

LATERAL DISTANCE (feet)	(meters)	L50 FAIR (dB(A))	L5 RAIN (dB(A))	L50 RAIN (dB(A))	Leq(24) (dB(A))	Ldn (dB(A))
-300.0	-91.44	56.7	65.8	63.2	61.9	69.3
-290.0	-88.39	56.8	65.9	63.4	62.1	69.5
-280.0	-85.34	57.0	66.1	63.6	62.2	69.6
-270.0	-82.30	57.2	66.3	63.7	62.4	69.8
-260.0	-79.25	57.4	66.5	63.9	62.6	70.0
-250.0	-76.20	57.6	66.6	64.1	62.8	70.2
-240.0	-73.15	57.7	66.8	64.3	63.0	70.4
-230.0	-70.10	57.9	67.0	64.5	63.2	70.6
-220.0	-67.06	58.1	67.2	64.7	63.4	70.7
-210.0	-64.01	58.3	67.4	64.9	63.6	70.9
-200.0	-60.96	58.5	67.6	65.1	63.8	71.2
-190.0	-57.91	58.7	67.8	65.3	64.0	71.4
-180.0	-54.86	59.0	68.0	65.5	64.2	71.6
-170.0	-51.82	59.2	68.3	65.7	64.4	71.8
-160.0	-48.77	59.4	68.5	65.9	64.6	72.0
-150.0	-45.72	59.6	68.7	66.2	64.9	72.3
-140.0	-42.67	59.9	69.0	66.4	65.1	72.5
-130.0	-39.62	60.1	69.2	66.7	65.4	72.7
-120.0	-36.58	60.4	69.5	66.9	65.6	73.0
-110.0	-33.53	60.7	69.7	67.2	65.9	73.3
-100.0	-30.48	60.9	70.0	67.5	66.1	73.5
-90.0	-27.43	61.2	70.3	67.7	66.4	73.8
-80.0	-24.38	61.5	70.6	68.0	66.7	74.1
-70.0	-21.34	61.8	70.9	68.4	67.0	74.4
-60.0	-18.29	62.2	71.2	68.7	67.4	74.8
-50.0	-15.24	62.5	71.6	69.0	67.7	75.1
-40.0	-12.19	62.9	72.0	69.4	68.1	75.5
-30.0	-9.14	63.2	72.4	69.8	68.5	75.9
-20.0	-6.10	63.7	72.8	70.2	68.9	76.3
-10.0	-3.05	64.1	73.2	70.7	69.3	76.7
.0	.00	64.6	73.7	71.1	69.8	77.2

10.0	3.05	65.1	74.3	71.7	70.4	77.7
20.0	6.10	65.7	74.9	72.3	70.9	78.3
30.0	9.14	66.4	75.6	72.9	71.6	79.0
40.0	12.19	67.2	76.4	73.7	72.4	79.8
50.0	15.24	68.1	77.7	74.7	73.4	80.8
60.0	18.29	69.1	78.4	75.7	74.3	81.7
70.0	21.34	70.4	79.5	77.0	75.6	83.0
80.0	24.38	72.3	81.4	78.9	77.5	84.9
90.0	27.43	75.5	84.6	82.1	80.8	88.1
100.0	30.48	78.5	87.6	85.0	83.7	91.1
110.0	33.53	74.0	83.0	80.5	79.2	86.6
120.0	36.58	71.5	80.5	78.0	76.7	84.1
130.0	39.62	69.8	78.8	76.3	75.0	82.4
140.0	42.67	68.6	77.6	75.1	73.8	81.2
150.0	45.72	67.6	76.6	74.1	72.8	80.2
160.0	48.77	66.8	75.8	73.3	72.0	79.4
170.0	51.82	66.1	75.1	72.6	71.3	78.7
180.0	54.86	65.4	74.5	72.0	70.7	78.1
190.0	57.91	64.9	73.9	71.4	70.1	77.5
200.0	60.96	64.4	73.4	70.9	69.6	77.0
210.0	64.01	63.9	73.0	70.4	69.1	76.5
220.0	67.06	63.5	72.5	70.0	68.7	76.1
230.0	70.10	63.1	72.1	69.6	68.3	75.7
240.0	73.15	62.7	71.8	69.2	67.9	75.3
250.0	76.20	62.3	71.4	68.9	67.6	75.0
260.0	79.25	62.0	71.1	68.5	67.2	74.6
270.0	82.30	61.7	70.7	68.2	66.9	74.3
280.0	85.34	61.4	70.4	67.9	66.6	74.0
290.0	88.39	61.1	70.1	67.6	66.3	73.7
300.0	91.44	60.8	69.9	67.3	66.0	73.4

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*                       *
*     AUDIBLE NOISE     *
*    (other methods)    *
*                       *
* Altitude        0. ft *
*                       *
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LATERAL DISTANCE (feet)	(meters)	<------ BPA METHOD -------> FAIR WEATHER dB(A)	L5 RAIN dB(A)	L50 RAIN dB(A)	Ldn dB(A)	<- CRIEPI --> AVERAGE FAIR dB(A)	L5 RAIN dB(A)	EdF L5 RAIN dB(A)	ENEL L5 RAIN dB(A)	IREQ L5 RAIN dB(A)
-300.0	-91.44	41.3	69.8	66.3	.0	.0	.0	59.9	.0	.0
-290.0	-88.39	41.4	69.9	66.4	.0	.0	.0	60.0	.0	.0
-280.0	-85.34	41.6	70.1	66.6	.0	.0	.0	60.1	.0	.0
-270.0	-82.30	41.7	70.2	66.7	.0	.0	.0	60.2	.0	.0
-260.0	-79.25	41.8	70.3	66.8	.0	.0	.0	60.3	.0	.0
-250.0	-76.20	42.0	70.5	67.0	.0	.0	.0	60.4	.0	.0
-240.0	-73.15	42.1	70.6	67.1	.0	.0	.0	60.6	.0	.0
-230.0	-70.10	42.3	70.8	67.3	.0	.0	.0	60.7	.0	.0
-220.0	-67.06	42.4	70.9	67.4	.0	.0	.0	60.8	.0	.0
-210.0	-64.01	42.6	71.1	67.6	.0	.0	.0	61.0	.0	.0
-200.0	-60.96	42.7	71.2	67.7	.0	.0	.0	61.1	.0	.0
-190.0	-57.91	42.9	71.4	67.9	.0	.0	.0	61.3	.0	.0
-180.0	-54.86	43.1	71.6	68.1	.0	.0	.0	61.4	.0	.0
-170.0	-51.82	43.3	71.8	68.3	.0	.0	.0	61.6	.0	.0
-160.0	-48.77	43.4	71.9	68.4	.0	.0	.0	61.8	.0	.0
-150.0	-45.72	43.6	72.1	68.6	.0	.0	.0	61.9	.0	.0
-140.0	-42.67	43.8	72.3	68.8	.0	.0	.0	62.1	.0	.0
-130.0	-39.62	44.1	72.6	69.1	.0	.0	.0	62.3	.0	.0

-120.0	-36.58	44.3	72.8	69.3	.0	.0	.0	62.5	.0	.0
-110.0	-33.53	44.5	73.0	69.5	.0	.0	.0	62.7	.0	.0
-100.0	-30.48	44.8	73.3	69.8	.0	.0	.0	62.9	.0	.0
-90.0	-27.43	45.0	73.5	70.0	.0	.0	.0	63.1	.0	.0
-80.0	-24.38	45.3	73.8	70.3	.0	.0	.0	63.4	.0	.0
-70.0	-21.34	45.6	74.1	70.6	.0	.0	.0	63.6	.0	.0
-60.0	-18.29	45.9	74.4	70.9	.0	.0	.0	63.9	.0	.0
-50.0	-15.24	46.2	74.7	71.2	.0	.0	.0	64.2	.0	.0
-40.0	-12.19	46.5	75.0	71.5	.0	.0	.0	64.5	.0	.0
-30.0	-9.14	46.9	75.4	71.9	.0	.0	.0	64.8	.0	.0
-20.0	-6.10	47.3	75.8	72.3	.0	.0	.0	65.2	.0	.0
-10.0	-3.05	47.8	76.3	72.8	.0	.0	.0	65.6	.0	.0
.0	.00	48.2	76.7	73.2	.0	.0	.0	66.0	.0	.0
10.0	3.05	48.8	77.3	73.8	.0	.0	.0	66.5	.0	.0
20.0	6.10	49.4	77.9	74.4	.0	.0	.0	67.0	.0	.0
30.0	9.14	50.1	78.6	75.1	.0	.0	.0	67.7	.0	.0
40.0	12.19	50.9	79.4	75.9	.0	.0	.0	68.5	.0	.0
50.0	15.24	52.0	80.5	77.0	.0	.0	.0	69.7	.0	.0
60.0	18.29	53.0	81.5	78.0	.0	.0	.0	70.3	.0	.0
70.0	21.34	54.4	82.9	79.4	.0	.0	.0	71.4	.0	.0
80.0	24.38	56.5	85.0	81.5	.0	.0	.0	73.2	.0	.0
90.0	27.43	60.1	88.6	85.1	.0	.0	.0	76.3	.0	.0
100.0	30.48	63.4	91.9	88.4	.0	.0	.0	79.3	.0	.0
110.0	33.53	58.4	86.9	83.4	.0	.0	.0	74.8	.0	.0
120.0	36.58	55.5	84.0	80.5	.0	.0	.0	72.3	.0	.0
130.0	39.62	53.7	82.2	78.7	.0	.0	.0	70.7	.0	.0
140.0	42.67	52.4	80.9	77.4	.0	.0	.0	69.6	.0	.0
150.0	45.72	51.4	79.9	76.4	.0	.0	.0	68.6	.0	.0
160.0	48.77	50.5	79.0	75.5	.0	.0	.0	67.9	.0	.0
170.0	51.82	49.7	78.2	74.7	.0	.0	.0	67.2	.0	.0
180.0	54.86	49.1	77.6	74.1	.0	.0	.0	66.7	.0	.0
190.0	57.91	48.5	77.0	73.5	.0	.0	.0	66.2	.0	.0
200.0	60.96	48.0	76.5	73.0	.0	.0	.0	65.7	.0	.0
210.0	64.01	47.6	76.1	72.6	.0	.0	.0	65.3	.0	.0
220.0	67.06	47.1	75.6	72.1	.0	.0	.0	65.0	.0	.0
230.0	70.10	46.8	75.3	71.8	.0	.0	.0	64.6	.0	.0
240.0	73.15	46.4	74.9	71.4	.0	.0	.0	64.3	.0	.0
250.0	76.20	46.1	74.6	71.1	.0	.0	.0	64.0	.0	.0
260.0	79.25	45.7	74.2	70.7	.0	.0	.0	63.7	.0	.0
270.0	82.30	45.4	73.9	70.4	.0	.0	.0	63.5	.0	.0
280.0	85.34	45.2	73.7	70.2	.0	.0	.0	63.2	.0	.0
290.0	88.39	44.9	73.4	69.9	.0	.0	.0	63.0	.0	.0
300.0	91.44	44.7	73.2	69.7	.0	.0	.0	62.8	.0	.0

Audible noise prediction methods do not apply to all line geometries, voltages, or weather conditions. If a prediction method does not apply, the appropriate output data column will be zeros.

RESULTS OF ENVIRO PROGRAM

STUDY FILE NAME: C:\BV-USERS\D_BEFORE.I01

Section D 69/115/230 kV before

BUNDLE INFORMATION

BNDL #	CIRC #	VOLTAGE (kV)	VOLTAGE ANGLE (DEG)	LOAD (AMPS)	CURRENT ANGLE (DEG)	# OF COND	COORDINATES X (FT)	Y (FT)	PHASE
1	1	242.0	.0	714.5	.0	2	35.0	76.0	A
2	1	242.0	240.0	714.5	240.0	2	35.0	61.0	B
3	1	242.0	120.0	714.5	120.0	2	35.0	46.0	C
4	1	242.0	.0	714.5	.0	2	55.0	76.0	A
5	1	242.0	240.0	714.5	240.0	2	55.0	61.0	B
6	1	242.0	120.0	714.5	120.0	2	55.0	46.0	C
7	2	145.0	.0	731.0	.0	1	55.0	98.0	A
8	2	145.0	240.0	731.0	240.0	1	75.0	98.0	B
9	2	145.0	120.0	731.0	120.0	1	95.0	98.0	C
10	3	145.0	.0	450.0	.0	1	95.0	78.0	A
11	3	145.0	240.0	450.0	240.0	1	95.0	63.0	B
12	3	145.0	120.0	450.0	120.0	1	95.0	48.0	C
13	4	145.0	.0	581.0	.0	1	115.0	48.0	A
14	4	145.0	240.0	581.0	240.0	1	115.0	63.0	B
15	4	145.0	120.0	581.0	120.0	1	115.0	78.0	C

MINIMUM GROUND CLEARANCE = 46.000 FT.

SUBCONDUCTOR INFORMATION - REGULAR BUNDLES

BNDL #	DIAMETER (IN)	SPACING (IN)	DC RESIST. (OHMS/MI)	AC RESIST. (OHMS/MI)	AC REACT. (OHMS/MI)
1	1.162	18.000	.10220	.10400	.393000
2	1.162	18.000	.10220	.10400	.393000
3	1.162	18.000	.10220	.10400	.393000
4	1.162	18.000	.10220	.10400	.393000
5	1.162	18.000	.10220	.10400	.393000
6	1.162	18.000	.10220	.10400	.393000
7	1.245	.000	.08900	.09100	.385000
8	1.245	.000	.08900	.09100	.385000
9	1.245	.000	.08900	.09100	.385000
10	.728	.000	.14520	.15000	.456000
11	.728	.000	.14520	.15000	.456000
12	.728	.000	.14520	.15000	.456000
13	.728	.000	.14520	.15000	.456000
14	.728	.000	.14520	.15000	.456000
15	.728	.000	.14520	.15000	.456000

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*                                    *
* MAXIMUM SURFACE GRADIENT (kV/cm) *
*                                    *
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BNDL #	Type	ACrms	PEAK(+)	PEAK(-)
1	AC	10.51	14.86	-14.86
2	AC	12.68	17.93	-17.93
3	AC	11.06	15.64	-15.64
4	AC	10.70	15.14	-15.14
5	AC	12.57	17.78	-17.78
6	AC	10.97	15.51	-15.51
7	AC	5.77	8.16	-8.16
8	AC	9.71	13.73	-13.73
9	AC	9.03	12.77	-12.77
10	AC	15.14	21.41	-21.41
11	AC	14.46	20.44	-20.44
12	AC	14.05	19.87	-19.87
13	AC	14.99	21.20	-21.20
14	AC	14.69	20.78	-20.78
15	AC	13.95	19.73	-19.73

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*                                    *
*     AC  ELECTRIC FIELD PROFILE     *
*    at   3.28 feet above ground     *
*                                    *
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LATERAL DISTANCE (feet)	(meters)	MAXIMUM FIELD (kV/m)	MINOR/MAJOR ELLIPSE AXES (ratio)	VERTICAL (kV/m)	HORIZONTAL (kV/m)	SPACE POTENTIAL (kV)
-300.0	-91.44	.042	.001	.042	.001	.042
-290.0	-88.39	.044	.001	.044	.001	.044
-280.0	-85.34	.047	.001	.047	.001	.047
-270.0	-82.30	.050	.001	.050	.001	.050
-260.0	-79.25	.053	.001	.053	.001	.053
-250.0	-76.20	.056	.000	.056	.001	.056
-240.0	-73.15	.060	.000	.060	.001	.060
-230.0	-70.10	.064	.000	.064	.001	.064
-220.0	-67.06	.069	.000	.069	.002	.069
-210.0	-64.01	.074	.000	.074	.002	.074
-200.0	-60.96	.079	.000	.079	.002	.079
-190.0	-57.91	.085	.000	.085	.002	.085
-180.0	-54.86	.091	.000	.091	.002	.091
-170.0	-51.82	.098	.000	.098	.002	.098
-160.0	-48.77	.106	.000	.106	.003	.106
-150.0	-45.72	.114	.000	.114	.003	.114
-140.0	-42.67	.123	.001	.123	.003	.123
-130.0	-39.62	.133	.001	.133	.003	.132
-120.0	-36.58	.142	.001	.142	.003	.142
-110.0	-33.53	.152	.002	.152	.003	.152
-100.0	-30.48	.162	.004	.162	.003	.161
-90.0	-27.43	.170	.006	.170	.002	.170
-80.0	-24.38	.175	.010	.175	.002	.175
-70.0	-21.34	.176	.017	.176	.003	.175
-60.0	-18.29	.168	.033	.168	.007	.168
-50.0	-15.24	.150	.073	.150	.014	.149
-40.0	-12.19	.122	.193	.122	.025	.121
-30.0	-9.14	.131	.286	.130	.043	.131
-20.0	-6.10	.262	.115	.255	.070	.258

-10.0	-3.05	.519	.042	.508	.108	.512
.0	.00	.917	.015	.904	.156	.909
10.0	3.05	1.468	.004	1.454	.202	1.457
20.0	6.10	2.126	.000	2.115	.220	2.113
30.0	9.14	2.755	.001	2.750	.180	2.741
40.0	12.19	3.168	.001	3.167	.083	3.153
50.0	15.24	3.235	.002	3.235	.038	3.222
60.0	18.29	2.959	.002	2.956	.135	2.947
70.0	21.34	2.461	.001	2.454	.181	2.451
80.0	24.38	1.899	.011	1.891	.183	1.891
90.0	27.43	1.369	.032	1.359	.172	1.360
100.0	30.48	.898	.074	.887	.156	.889
110.0	33.53	.535	.150	.527	.122	.529
120.0	36.58	.347	.187	.345	.073	.345
130.0	39.62	.280	.106	.280	.034	.278
140.0	42.67	.223	.034	.222	.022	.221
150.0	45.72	.161	.018	.160	.019	.160
160.0	48.77	.112	.063	.111	.015	.111
170.0	51.82	.082	.090	.081	.010	.082
180.0	54.86	.068	.077	.068	.006	.068
190.0	57.91	.062	.048	.062	.003	.062
200.0	60.96	.059	.023	.059	.002	.059
210.0	64.01	.055	.007	.055	.001	.055
220.0	67.06	.051	.003	.051	.001	.051
230.0	70.10	.047	.010	.047	.001	.047
240.0	73.15	.043	.014	.043	.001	.043
250.0	76.20	.040	.017	.040	.001	.040
260.0	79.25	.037	.019	.037	.001	.037
270.0	82.30	.034	.020	.034	.001	.034
280.0	85.34	.031	.020	.031	.001	.031
290.0	88.39	.029	.020	.029	.001	.029
300.0	91.44	.027	.020	.027	.001	.027

AC CURRENTS IN EACH BUNDLE:

BNDL #	----- AC CURRENTS (Amperes) ----- REAL	IMAGINARY	TOTAL	BUNDLE POSITION X-COORD	Y-COORD
1	714.50	.00	714.50	35.00	76.00
2	-357.25	-618.78	714.50	35.00	61.00
3	-357.25	618.78	714.50	35.00	46.00
4	714.50	.00	714.50	55.00	76.00
5	-357.25	-618.78	714.50	55.00	61.00
6	-357.25	618.78	714.50	55.00	46.00
7	731.00	.00	731.00	55.00	98.00
8	-365.50	-633.06	731.00	75.00	98.00
9	-365.50	633.06	731.00	95.00	98.00
10	450.00	.00	450.00	95.00	78.00
11	-225.00	-389.71	450.00	95.00	63.00
12	-225.00	389.71	450.00	95.00	48.00
13	581.00	.00	581.00	115.00	48.00
14	-290.50	-503.16	581.00	115.00	63.00
15	-290.50	503.16	581.00	115.00	78.00

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*                                   *
*       MAGNETIC FIELD PROFILE      *
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*     at   3.28 feet  above ground    *
*                                     *
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LATERAL DISTANCE (feet)	LATERAL DISTANCE (meters)	AC MAGNETIC FIELD MAJOR AXIS (mG)	MINOR/ MAJOR (RATIO)	VERTICAL COMP (mG)	HORIZONTAL COMP (mG)	RMS RESULTANT (mG)
-300.0	-91.44	2.27	.004	.35	2.25	2.27
-290.0	-88.39	2.41	.005	.34	2.39	2.41
-280.0	-85.34	2.56	.007	.32	2.54	2.56
-270.0	-82.30	2.73	.008	.30	2.71	2.73
-260.0	-79.25	2.91	.009	.27	2.90	2.91
-250.0	-76.20	3.11	.010	.23	3.10	3.11
-240.0	-73.15	3.33	.011	.19	3.32	3.33
-230.0	-70.10	3.57	.013	.13	3.57	3.57
-220.0	-67.06	3.83	.014	.08	3.83	3.83
-210.0	-64.01	4.13	.015	.07	4.13	4.13
-200.0	-60.96	4.46	.017	.16	4.46	4.46
-190.0	-57.91	4.83	.018	.29	4.82	4.83
-180.0	-54.86	5.25	.020	.46	5.23	5.25
-170.0	-51.82	5.71	.021	.67	5.67	5.71
-160.0	-48.77	6.24	.023	.93	6.17	6.24
-150.0	-45.72	6.84	.025	1.25	6.73	6.85
-140.0	-42.67	7.53	.027	1.66	7.35	7.53
-130.0	-39.62	8.32	.029	2.17	8.04	8.33
-120.0	-36.58	9.23	.031	2.81	8.80	9.24
-110.0	-33.53	10.29	.033	3.62	9.64	10.30
-100.0	-30.48	11.53	.036	4.64	10.56	11.54
-90.0	-27.43	12.98	.038	5.94	11.55	12.99
-80.0	-24.38	14.70	.041	7.61	12.59	14.71
-70.0	-21.34	16.74	.044	9.75	13.63	16.76
-60.0	-18.29	19.18	.047	12.49	14.59	19.20
-50.0	-15.24	22.12	.050	16.00	15.31	22.14
-40.0	-12.19	25.65	.052	20.45	15.53	25.68
-30.0	-9.14	29.90	.054	26.02	14.82	29.94
-20.0	-6.10	34.98	.055	32.72	12.51	35.03
-10.0	-3.05	40.94	.054	40.27	7.69	41.00
.0	.00	47.69	.049	47.66	2.75	47.74
10.0	3.05	54.78	.040	52.69	15.16	54.82
20.0	6.10	61.30	.026	51.96	32.56	61.32
30.0	9.14	65.95	.009	42.59	50.35	65.95
40.0	12.19	67.75	.009	25.13	62.91	67.75
50.0	15.24	66.52	.025	4.26	66.40	66.54
60.0	18.29	62.73	.037	15.66	60.79	62.78
70.0	21.34	57.46	.038	29.35	49.45	57.50
80.0	24.38	52.16	.021	37.40	36.37	52.17
90.0	27.43	47.41	.010	41.50	22.92	47.41
100.0	30.48	42.37	.046	41.43	9.10	42.42
110.0	33.53	35.95	.081	35.75	4.78	36.07
120.0	36.58	28.22	.116	25.81	11.88	28.41
130.0	39.62	20.38	.147	15.81	13.20	20.60
140.0	42.67	13.68	.163	8.82	10.69	13.86
150.0	45.72	8.72	.135	5.00	7.24	8.80
160.0	48.77	5.49	.004	3.25	4.42	5.49
170.0	51.82	3.66	.283	2.75	2.63	3.80
180.0	54.86	2.99	.519	2.90	1.72	3.37
190.0	57.91	3.24	.407	3.23	1.34	3.50
200.0	60.96	3.56	.279	3.52	1.13	3.70
210.0	64.01	3.75	.198	3.71	.95	3.83
220.0	67.06	3.82	.147	3.79	.76	3.87
230.0	70.10	3.81	.114	3.79	.57	3.83

240.0	73.15	3.73	.090	3.73	.41	3.75
250.0	76.20	3.62	.073	3.62	.28	3.63
260.0	79.25	3.49	.061	3.49	.22	3.49
270.0	82.30	3.34	.051	3.34	.23	3.35
280.0	85.34	3.19	.044	3.18	.29	3.19
290.0	88.39	3.04	.038	3.02	.35	3.04
300.0	91.44	2.89	.033	2.86	.41	2.89

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*********************************
*                               *
*         AUDIBLE NOISE         *
*   GENERATED ACOUSTIC POWER    *
*       (dB above 1uW/m)        *
*                               *
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BNDL #	Type	Summer Fair	L5 RAIN	L50 RAIN
1	AC	******	-73.08	-90.31
2	AC	-86.33	-62.25	-75.13
3	AC	-98.76	-69.94	-85.91
4	AC	******	-71.93	-88.69
5	AC	-87.03	-62.69	-75.74
6	AC	-99.55	-70.43	-86.60
7	AC	******	******	******
8	AC	******	-78.08	-96.95
9	AC	******	-83.22	******
10	AC	-84.69	-63.77	-75.31
11	AC	-88.16	-65.86	-78.34
12	AC	-90.35	-67.17	-80.25
13	AC	-85.42	-64.21	-75.95
14	AC	-86.92	-65.11	-77.26
15	AC	-90.95	-67.53	-80.77

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*****************************************
*                                       *
*              AUDIBLE NOISE            *
*                                       *
* Microphone is   5.00 feet  above ground *
*          Altitude        0. ft        *
*                                       *
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<---------- HVTRC CALCULATION METHOD ---------->

LATERAL DISTANCE (feet)	(meters)	L50 FAIR (dB(A))	L5 RAIN (dB(A))	L50 RAIN (dB(A))	Leq(24) (dB(A))	Ldn (dB(A))
-300.0	-91.44	13.3	36.4	23.6	22.1	29.9
-290.0	-88.39	13.5	36.6	23.8	22.2	30.0
-280.0	-85.34	13.6	36.8	24.0	22.4	30.2
-270.0	-82.30	13.8	36.9	24.1	22.6	30.4
-260.0	-79.25	14.0	37.1	24.3	22.8	30.6
-250.0	-76.20	14.2	37.3	24.5	23.0	30.8
-240.0	-73.15	14.4	37.5	24.7	23.2	30.9
-230.0	-70.10	14.6	37.7	24.9	23.4	31.1
-220.0	-67.06	14.8	37.9	25.1	23.6	31.3
-210.0	-64.01	15.0	38.1	25.3	23.8	31.5
-200.0	-60.96	15.2	38.3	25.5	24.0	31.8
-190.0	-57.91	15.4	38.5	25.7	24.2	32.0
-180.0	-54.86	15.6	38.8	25.9	24.4	32.2

-170.0	-51.82	15.8	39.0	26.2	24.6	32.4
-160.0	-48.77	16.0	39.2	26.4	24.9	32.7
-150.0	-45.72	16.3	39.5	26.6	25.1	32.9
-140.0	-42.67	16.5	39.7	26.9	25.4	33.1
-130.0	-39.62	16.8	40.0	27.1	25.6	33.4
-120.0	-36.58	17.0	40.2	27.4	25.9	33.7
-110.0	-33.53	17.3	40.5	27.7	26.1	33.9
-100.0	-30.48	17.6	40.8	28.0	26.4	34.2
-90.0	-27.43	17.8	41.1	28.2	26.7	34.5
-80.0	-24.38	18.1	41.4	28.5	27.0	34.8
-70.0	-21.34	18.4	41.7	28.9	27.3	35.1
-60.0	-18.29	18.8	42.1	29.2	27.7	35.4
-50.0	-15.24	19.1	42.4	29.5	28.0	35.8
-40.0	-12.19	19.4	42.8	29.9	28.4	36.1
-30.0	-9.14	19.8	43.2	30.3	28.7	36.5
-20.0	-6.10	20.2	43.5	30.6	29.1	36.9
-10.0	-3.05	20.6	43.9	31.0	29.5	37.3
.0	.00	20.9	44.4	31.4	29.9	37.7
10.0	3.05	21.3	44.7	31.8	30.3	38.1
20.0	6.10	21.7	45.1	32.2	30.6	38.4
30.0	9.14	22.0	45.4	32.5	31.0	38.8
40.0	12.19	22.3	45.7	32.8	31.2	39.0
50.0	15.24	22.6	45.9	33.0	31.4	39.2
60.0	18.29	22.8	46.0	33.1	31.6	39.4
70.0	21.34	23.0	46.0	33.2	31.7	39.5
80.0	24.38	23.1	46.1	33.3	31.8	39.6
90.0	27.43	23.2	46.1	33.4	31.8	39.6
100.0	30.48	23.3	46.0	33.4	31.8	39.6
110.0	33.53	23.2	45.8	33.3	31.7	39.5
120.0	36.58	23.0	45.6	33.1	31.5	39.3
130.0	39.62	22.7	45.3	32.8	31.2	39.0
140.0	42.67	22.4	44.9	32.4	30.9	38.6
150.0	45.72	22.0	44.5	32.0	30.5	38.2
160.0	48.77	21.6	44.1	31.6	30.1	37.8
170.0	51.82	21.1	43.7	31.2	29.6	37.4
180.0	54.86	20.7	43.3	30.8	29.2	37.0
190.0	57.91	20.3	42.9	30.4	28.8	36.6
200.0	60.96	19.9	42.6	30.0	28.5	36.2
210.0	64.01	19.6	42.2	29.6	28.1	35.9
220.0	67.06	19.2	41.9	29.3	27.8	35.5
230.0	70.10	18.9	41.6	29.0	27.4	35.2
240.0	73.15	18.6	41.2	28.6	27.1	34.9
250.0	76.20	18.3	40.9	28.3	26.8	34.6
260.0	79.25	18.0	40.7	28.0	26.5	34.3
270.0	82.30	17.7	40.4	27.8	26.2	34.0
280.0	85.34	17.4	40.1	27.5	26.0	33.7
290.0	88.39	17.1	39.8	27.2	25.7	33.5
300.0	91.44	16.9	39.6	27.0	25.4	33.2

RESULTS OF ENVIRO PROGRAM

STUDY FILE NAME: C:\BV-USERS\D_AFTERC.I01

Section D 69/115/230 kV before

BUNDLE INFORMATION

BNDL #	CIRC #	VOLTAGE (kV)	VOLTAGE ANGLE (DEG)	LOAD (AMPS)	CURRENT ANGLE (DEG)	# OF COND	COORDINATES X (FT)	COORDINATES Y (FT)	PHASE
1	1	242.0	.0	1000.5	.0	2	35.0	76.0	A
2	1	242.0	240.0	1000.5	240.0	2	35.0	61.0	B
3	1	242.0	120.0	1000.5	120.0	2	35.0	46.0	C
4	1	242.0	.0	1000.5	.0	2	55.0	76.0	A
5	1	242.0	240.0	1000.5	240.0	2	55.0	61.0	B
6	1	242.0	120.0	1000.5	120.0	2	55.0	46.0	C
7	2	145.0	.0	613.0	.0	1	55.0	98.0	A
8	2	145.0	240.0	613.0	240.0	1	75.0	98.0	B
9	2	145.0	120.0	613.0	120.0	1	95.0	98.0	C

MINIMUM GROUND CLEARANCE = 46.000 FT.

SUBCONDUCTOR INFORMATION - REGULAR BUNDLES

BNDL #	DIAMETER (IN)	SPACING (IN)	DC RESIST. (OHMS/MI)	AC RESIST. (OHMS/MI)	AC REACT. (OHMS/MI)
1	1.162	18.000	.10220	.10400	.393000
2	1.162	18.000	.10220	.10400	.393000
3	1.162	18.000	.10220	.10400	.393000
4	1.162	18.000	.10220	.10400	.393000
5	1.162	18.000	.10220	.10400	.393000
6	1.162	18.000	.10220	.10400	.393000
7	1.245	.000	.08900	.09100	.385000
8	1.245	.000	.08900	.09100	.385000
9	1.245	.000	.08900	.09100	.385000

MAXIMUM SURFACE GRADIENT (kV/cm)

BNDL #	Type	ACrms	PEAK(+)	PEAK(-)
1	AC	10.53	14.90	-14.90
2	AC	12.68	17.93	-17.93
3	AC	11.06	15.65	-15.65
4	AC	10.77	15.24	-15.24
5	AC	12.60	17.82	-17.82

6	AC	11.00	15.55	-15.55
7	AC	5.89	8.33	-8.33
8	AC	9.56	13.51	-13.51
9	AC	8.82	12.48	-12.48

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*************************************
*                                   *
*     AC  ELECTRIC FIELD PROFILE    *
*    at   3.28 feet above ground    *
*                                   *
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LATERAL DISTANCE (feet)	(meters)	MAXIMUM FIELD (kV/m)	MINOR/MAJOR ELLIPSE AXES (ratio)	VERTICAL (kV/m)	HORIZONTAL (kV/m)	SPACE POTENTIAL (kV)
-300.0	-91.44	.040	.000	.040	.001	.040
-290.0	-88.39	.043	.000	.043	.001	.043
-280.0	-85.34	.045	.000	.045	.001	.045
-270.0	-82.30	.048	.000	.048	.001	.048
-260.0	-79.25	.051	.000	.051	.001	.051
-250.0	-76.20	.055	.000	.055	.001	.055
-240.0	-73.15	.058	.000	.058	.001	.058
-230.0	-70.10	.062	.000	.062	.001	.062
-220.0	-67.06	.067	.000	.067	.002	.067
-210.0	-64.01	.071	.000	.071	.002	.071
-200.0	-60.96	.077	.000	.077	.002	.077
-190.0	-57.91	.082	.000	.082	.002	.082
-180.0	-54.86	.089	.000	.089	.002	.089
-170.0	-51.82	.096	.000	.096	.002	.096
-160.0	-48.77	.103	.000	.103	.003	.103
-150.0	-45.72	.111	.000	.111	.003	.111
-140.0	-42.67	.120	.001	.120	.003	.120
-130.0	-39.62	.129	.001	.129	.003	.129
-120.0	-36.58	.138	.002	.138	.003	.138
-110.0	-33.53	.148	.003	.148	.003	.148
-100.0	-30.48	.157	.004	.157	.003	.157
-90.0	-27.43	.165	.006	.165	.002	.165
-80.0	-24.38	.170	.010	.170	.002	.170
-70.0	-21.34	.170	.017	.170	.003	.170
-60.0	-18.29	.163	.034	.163	.007	.162
-50.0	-15.24	.144	.076	.144	.014	.143
-40.0	-12.19	.116	.203	.116	.025	.116
-30.0	-9.14	.129	.284	.127	.043	.128
-20.0	-6.10	.262	.109	.255	.069	.258
-10.0	-3.05	.519	.039	.508	.107	.512
.0	.00	.915	.014	.902	.155	.907
10.0	3.05	1.462	.003	1.448	.201	1.452
20.0	6.10	2.114	.001	2.102	.217	2.101
30.0	9.14	2.731	.001	2.726	.175	2.717
40.0	12.19	3.124	.001	3.123	.074	3.109
50.0	15.24	3.161	.003	3.160	.051	3.146
60.0	18.29	2.842	.006	2.838	.152	2.829
70.0	21.34	2.299	.009	2.291	.194	2.289
80.0	24.38	1.717	.010	1.708	.180	1.711
90.0	27.43	1.229	.009	1.221	.138	1.226
100.0	30.48	.873	.005	.867	.096	.871
110.0	33.53	.631	.001	.627	.064	.630
120.0	36.58	.470	.006	.468	.043	.470
130.0	39.62	.362	.010	.360	.030	.361
140.0	42.67	.286	.013	.285	.021	.286
150.0	45.72	.231	.015	.230	.016	.231
160.0	48.77	.189	.016	.189	.013	.189

170.0	51.82	.156	.017	.156	.010	.156
180.0	54.86	.129	.018	.129	.008	.129
190.0	57.91	.108	.019	.108	.007	.108
200.0	60.96	.090	.020	.090	.006	.090
210.0	64.01	.076	.022	.076	.005	.076
220.0	67.06	.064	.024	.064	.004	.064
230.0	70.10	.054	.025	.054	.003	.054
240.0	73.15	.046	.027	.046	.003	.046
250.0	76.20	.040	.029	.040	.002	.040
260.0	79.25	.035	.030	.035	.002	.035
270.0	82.30	.031	.031	.031	.002	.031
280.0	85.34	.027	.031	.027	.001	.027
290.0	88.39	.025	.031	.025	.001	.025
300.0	91.44	.023	.030	.023	.001	.023

AC CURRENTS IN EACH BUNDLE:

BNDL	----- AC CURRENTS (Amperes) -----			BUNDLE POSITION	
#	REAL	IMAGINARY	TOTAL	X-COORD	Y-COORD
1	1000.50	.00	1000.50	35.00	76.00
2	-500.25	-866.46	1000.50	35.00	61.00
3	-500.25	866.46	1000.50	35.00	46.00
4	1000.50	.00	1000.50	55.00	76.00
5	-500.25	-866.46	1000.50	55.00	61.00
6	-500.25	866.46	1000.50	55.00	46.00
7	613.00	.00	613.00	55.00	98.00
8	-306.50	-530.87	613.00	75.00	98.00
9	-306.50	530.87	613.00	95.00	98.00

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*************************************
*                                   *
*       MAGNETIC FIELD PROFILE      *
*     at   3.28 feet  above ground  *
*                                   *
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LATERAL DISTANCE (feet)	(meters)	MAJOR AXIS (mG)	<---------- AC MAGNETIC FIELD ----------> MINOR/ MAJOR (RATIO)	VERTICAL COMP (mG)	HORIZONTAL COMP (mG)	RMS RESULTANT (mG)
-300.0	-91.44	2.95	.003	.08	2.95	2.95
-290.0	-88.39	3.13	.004	.12	3.13	3.13
-280.0	-85.34	3.33	.005	.18	3.32	3.33
-270.0	-82.30	3.54	.006	.24	3.53	3.54
-260.0	-79.25	3.78	.007	.31	3.77	3.78
-250.0	-76.20	4.04	.009	.39	4.02	4.04
-240.0	-73.15	4.32	.010	.49	4.30	4.32
-230.0	-70.10	4.64	.011	.61	4.60	4.64
-220.0	-67.06	4.99	.012	.75	4.93	4.99
-210.0	-64.01	5.38	.013	.91	5.30	5.38
-200.0	-60.96	5.81	.015	1.11	5.71	5.81
-190.0	-57.91	6.30	.016	1.34	6.15	6.30
-180.0	-54.86	6.84	.017	1.62	6.65	6.84
-170.0	-51.82	7.46	.019	1.96	7.20	7.46
-160.0	-48.77	8.15	.020	2.37	7.80	8.15

-150.0	-45.72	8.95	.022	2.87	8.48	8.95
-140.0	-42.67	9.85	.024	3.48	9.22	9.86
-130.0	-39.62	10.90	.026	4.23	10.05	10.90
-120.0	-36.58	12.11	.028	5.16	10.96	12.11
-110.0	-33.53	13.51	.030	6.31	11.95	13.52
-100.0	-30.48	15.15	.032	7.76	13.03	15.16
-90.0	-27.43	17.09	.035	9.57	14.17	17.10
-80.0	-24.38	19.39	.037	11.87	15.34	19.40
-70.0	-21.34	22.13	.040	14.78	16.49	22.14
-60.0	-18.29	25.41	.043	18.49	17.47	25.44
-50.0	-15.24	29.38	.046	23.19	18.09	29.41
-40.0	-12.19	34.18	.048	29.11	17.98	34.22
-30.0	-9.14	39.99	.050	36.46	16.56	40.04
-20.0	-6.10	46.98	.050	45.23	12.91	47.04
-10.0	-3.05	55.24	.049	54.99	5.98	55.31
.0	.00	64.68	.044	64.27	7.77	64.74
10.0	3.05	74.70	.034	69.97	26.28	74.74
20.0	6.10	84.02	.020	67.36	50.24	84.04
30.0	9.14	90.78	.001	52.52	74.04	90.78
40.0	12.19	93.38	.019	26.47	89.57	93.40
50.0	15.24	91.30	.040	5.66	91.20	91.38
60.0	18.29	84.77	.062	31.37	78.93	84.94
70.0	21.34	74.81	.085	47.22	58.36	75.07
80.0	24.38	63.31	.104	51.48	37.44	63.66
90.0	27.43	52.22	.119	48.06	21.35	52.59
100.0	30.48	42.65	.127	41.53	11.10	42.99
110.0	33.53	34.93	.128	34.76	5.62	35.21
120.0	36.58	28.93	.122	28.93	3.52	29.14
130.0	39.62	24.34	.111	24.27	3.27	24.49
140.0	42.67	20.82	.097	20.63	3.45	20.92
150.0	45.72	18.08	.082	17.77	3.64	18.14
160.0	48.77	15.91	.069	15.49	3.76	15.94
170.0	51.82	14.14	.056	13.63	3.83	14.16
180.0	54.86	12.67	.046	12.08	3.85	12.68
190.0	57.91	11.43	.038	10.77	3.84	11.44
200.0	60.96	10.36	.031	9.65	3.80	10.37
210.0	64.01	9.44	.026	8.67	3.73	9.44
220.0	67.06	8.62	.022	7.82	3.64	8.63
230.0	70.10	7.91	.018	7.08	3.53	7.91
240.0	73.15	7.27	.016	6.42	3.42	7.27
250.0	76.20	6.71	.013	5.84	3.30	6.71
260.0	79.25	6.20	.011	5.33	3.17	6.20
270.0	82.30	5.75	.010	4.87	3.05	5.75
280.0	85.34	5.34	.008	4.47	2.92	5.34
290.0	88.39	4.96	.007	4.10	2.80	4.96
300.0	91.44	4.63	.006	3.78	2.67	4.63

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*                               *
*         AUDIBLE NOISE         *
*   GENERATED ACOUSTIC POWER    *
*       (dB above 1uW/m)        *
*                               *
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BNDL #	Type	Summer Fair	L5 RAIN	L50 RAIN
1	AC	******	-72.93	-90.10
2	AC	-86.33	-62.25	-75.13
3	AC	-98.70	-69.91	-85.86
4	AC	******	-71.52	-88.12
5	AC	-86.85	-62.57	-75.58

6	AC	-99.27	-70.26	-86.36
7	AC	******	******	******
8	AC	******	-79.19	-98.50
9	AC	******	-84.98	******

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*****************************************
*                                       *
*              AUDIBLE NOISE            *
*                                       *
* Microphone is   5.00 feet  above ground *
*          Altitude        0. ft        *
*                                       *
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<---------- HVTRC CALCULATION METHOD ---------->

LATERAL DISTANCE (feet)	(meters)	L50 FAIR (dB(A))	L5 RAIN (dB(A))	L50 RAIN (dB(A))	Leq(24) (dB(A))	Ldn (dB(A))
-300.0	-91.44	8.7	33.6	20.1	18.6	26.4
-290.0	-88.39	8.9	33.8	20.3	18.8	26.6
-280.0	-85.34	9.1	34.0	20.5	19.0	26.8
-270.0	-82.30	9.3	34.2	20.7	19.2	27.0
-260.0	-79.25	9.5	34.4	20.9	19.4	27.2
-250.0	-76.20	9.7	34.6	21.1	19.6	27.4
-240.0	-73.15	9.9	34.8	21.3	19.8	27.6
-230.0	-70.10	10.1	35.0	21.5	20.0	27.8
-220.0	-67.06	10.3	35.2	21.7	20.2	28.0
-210.0	-64.01	10.5	35.4	21.9	20.4	28.2
-200.0	-60.96	10.7	35.6	22.1	20.6	28.5
-190.0	-57.91	11.0	35.9	22.4	20.9	28.7
-180.0	-54.86	11.2	36.1	22.6	21.1	28.9
-170.0	-51.82	11.4	36.4	22.9	21.3	29.2
-160.0	-48.77	11.7	36.6	23.1	21.6	29.4
-150.0	-45.72	12.0	36.9	23.4	21.9	29.7
-140.0	-42.67	12.2	37.1	23.6	22.1	30.0
-130.0	-39.62	12.5	37.4	23.9	22.4	30.2
-120.0	-36.58	12.8	37.7	24.2	22.7	30.5
-110.0	-33.53	13.1	38.0	24.5	23.0	30.8
-100.0	-30.48	13.4	38.3	24.8	23.3	31.1
-90.0	-27.43	13.7	38.6	25.1	23.6	31.5
-80.0	-24.38	14.1	39.0	25.5	24.0	31.8
-70.0	-21.34	14.4	39.3	25.8	24.3	32.2
-60.0	-18.29	14.8	39.7	26.2	24.7	32.5
-50.0	-15.24	15.2	40.1	26.6	25.1	32.9
-40.0	-12.19	15.6	40.5	27.0	25.5	33.3
-30.0	-9.14	16.0	40.9	27.4	25.9	33.7
-20.0	-6.10	16.4	41.4	27.9	26.3	34.2
-10.0	-3.05	16.9	41.8	28.3	26.8	34.6
.0	.00	17.3	42.2	28.7	27.2	35.0
10.0	3.05	17.7	42.6	29.1	27.6	35.4
20.0	6.10	18.0	43.0	29.4	27.9	35.8
30.0	9.14	18.3	43.2	29.7	28.2	36.0
40.0	12.19	18.4	43.4	29.8	28.3	36.1
50.0	15.24	18.4	43.4	29.8	28.3	36.1
60.0	18.29	18.2	43.2	29.7	28.2	36.0
70.0	21.34	18.0	43.0	29.4	27.9	35.7
80.0	24.38	17.7	42.6	29.1	27.6	35.4
90.0	27.43	17.3	42.2	28.7	27.2	35.0
100.0	30.48	16.8	41.8	28.3	26.7	34.6
110.0	33.53	16.4	41.3	27.8	26.3	34.1
120.0	36.58	16.0	40.9	27.4	25.9	33.7

130.0	39.62	15.6	40.5	27.0	25.5	33.3
140.0	42.67	15.2	40.1	26.6	25.1	32.9
150.0	45.72	14.8	39.7	26.2	24.7	32.5
160.0	48.77	14.4	39.3	25.8	24.3	32.1
170.0	51.82	14.1	39.0	25.5	24.0	31.8
180.0	54.86	13.7	38.6	25.1	23.6	31.4
190.0	57.91	13.4	38.3	24.8	23.3	31.1
200.0	60.96	13.1	38.0	24.5	23.0	30.8
210.0	64.01	12.8	37.7	24.2	22.7	30.5
220.0	67.06	12.5	37.4	23.9	22.4	30.2
230.0	70.10	12.2	37.1	23.6	22.1	29.9
240.0	73.15	11.9	36.9	23.3	21.8	29.7
250.0	76.20	11.7	36.6	23.1	21.6	29.4
260.0	79.25	11.4	36.4	22.8	21.3	29.2
270.0	82.30	11.2	36.1	22.6	21.1	28.9
280.0	85.34	10.9	35.9	22.4	20.8	28.7
290.0	88.39	10.7	35.6	22.1	20.6	28.4
300.0	91.44	10.5	35.4	21.9	20.4	28.2

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*                       *
*     AUDIBLE NOISE     *
*    (other methods)    *
*                       *
* Altitude        0. ft *
*                       *
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LATERAL DISTANCE (feet)	(meters)	<------ BPA METHOD -------> FAIR WEATHER dB(A)	L5 RAIN dB(A)	L50 RAIN dB(A)	Ldn dB(A)	<- CRIEPI --> AVERAGE FAIR dB(A)	L5 RAIN dB(A)	EdF L5 RAIN dB(A)	ENEL L5 RAIN dB(A)	IREQ L5 RAIN dB(A)
-300.0	-91.44	.0	27.4	23.9	.0	.0	.0	36.0	34.0	.0
-290.0	-88.39	.0	27.5	24.0	.0	.0	.0	36.1	34.1	.0
-280.0	-85.34	.0	27.7	24.2	.0	.0	.0	36.2	34.2	.0
-270.0	-82.30	.0	27.8	24.3	.0	.0	.0	36.3	34.4	.0
-260.0	-79.25	.0	28.0	24.5	.0	.0	.0	36.5	34.5	.0
-250.0	-76.20	.0	28.1	24.6	.0	.0	.0	36.6	34.7	.0
-240.0	-73.15	.0	28.3	24.8	.0	.0	.0	36.8	34.8	.0
-230.0	-70.10	.0	28.5	25.0	.0	.0	.0	36.9	34.9	.0
-220.0	-67.06	.1	28.6	25.1	.0	.0	.0	37.1	35.1	.0
-210.0	-64.01	.3	28.8	25.3	.0	.0	.0	37.2	35.3	.0
-200.0	-60.96	.5	29.0	25.5	.0	.0	.0	37.4	35.4	.0
-190.0	-57.91	.7	29.2	25.7	.0	.0	.0	37.6	35.6	.0
-180.0	-54.86	.9	29.4	25.9	.0	.0	.0	37.7	35.8	.0
-170.0	-51.82	1.1	29.6	26.1	.0	.0	.0	37.9	36.0	.0
-160.0	-48.77	1.4	29.9	26.4	.0	.0	.0	38.1	36.2	.0
-150.0	-45.72	1.6	30.1	26.6	.0	.0	.0	38.3	36.4	.0
-140.0	-42.67	1.8	30.3	26.8	.0	.0	.0	38.5	36.6	.0
-130.0	-39.62	2.1	30.6	27.1	.0	.0	.0	38.7	36.8	.0
-120.0	-36.58	2.3	30.8	27.3	.0	.0	.0	39.0	37.0	.0
-110.0	-33.53	2.6	31.1	27.6	.0	.0	.0	39.2	37.3	.0
-100.0	-30.48	2.9	31.4	27.9	.0	.0	.0	39.5	37.5	.0
-90.0	-27.43	3.2	31.7	28.2	.0	.0	.0	39.7	37.8	.0
-80.0	-24.38	3.5	32.0	28.5	.0	.0	.0	40.0	38.1	.0
-70.0	-21.34	3.9	32.4	28.9	.0	.0	.0	40.3	38.4	.0
-60.0	-18.29	4.2	32.7	29.2	.0	.0	.0	40.6	38.7	.0
-50.0	-15.24	4.6	33.1	29.6	.0	.0	.0	41.0	39.0	.0
-40.0	-12.19	5.0	33.5	30.0	.0	.0	.0	41.3	39.4	.0
-30.0	-9.14	5.4	33.9	30.4	.0	.0	.0	41.7	39.7	.0
-20.0	-6.10	5.9	34.4	30.9	.0	.0	.0	42.1	40.1	.0
-10.0	-3.05	6.3	34.8	31.3	.0	.0	.0	42.5	40.5	.0

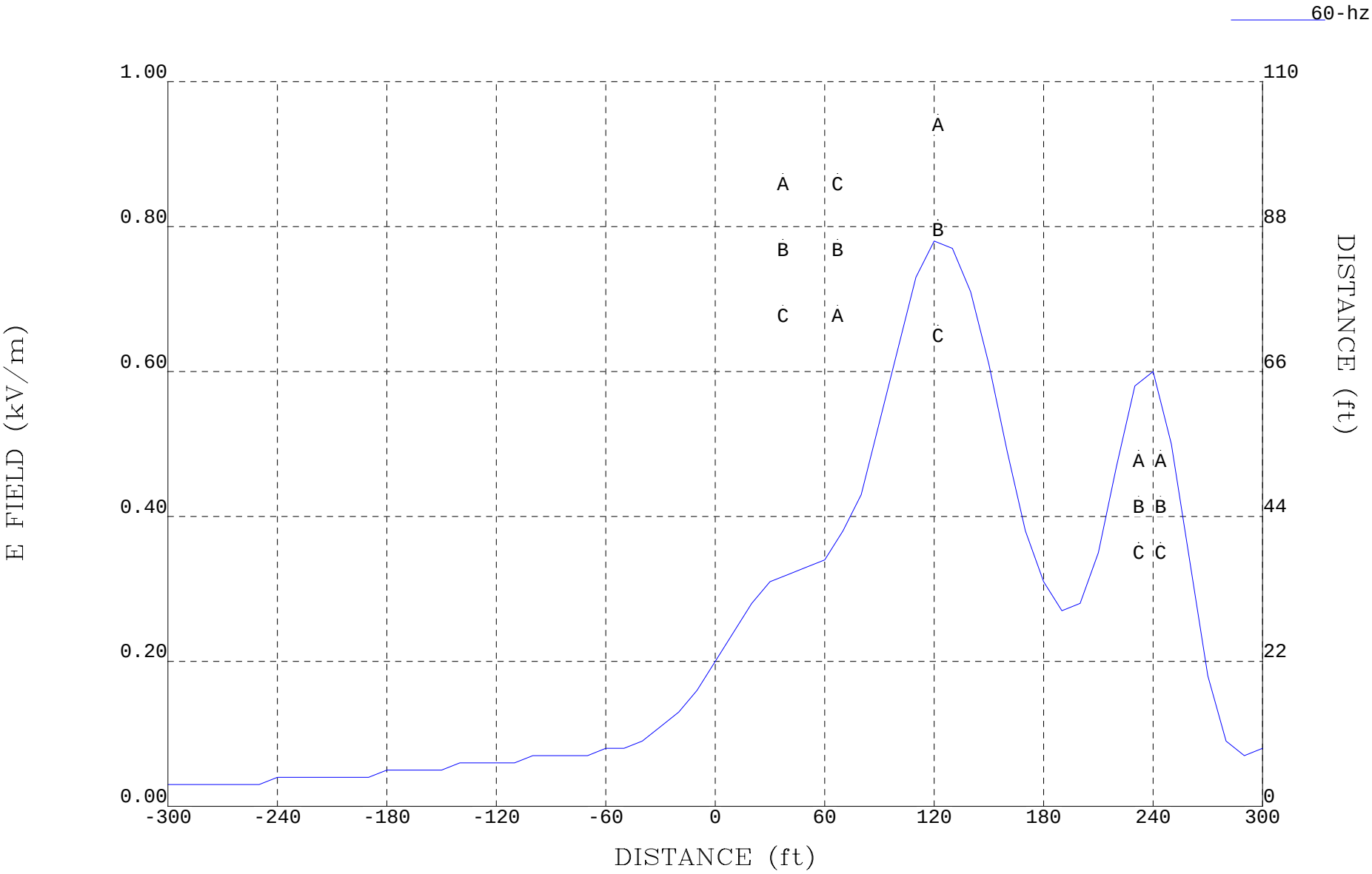
.0	.00	6.8	35.3	31.8	.0	.0	.0	42.9	40.9	.0
10.0	3.05	7.2	35.7	32.2	.0	.0	.0	43.2	41.3	.0
20.0	6.10	7.5	36.0	32.5	.0	.0	.0	43.6	41.6	.0
30.0	9.14	7.8	36.3	32.8	.0	.0	.0	43.8	41.8	.0
40.0	12.19	8.0	36.5	33.0	.0	.0	.0	44.0	42.0	.0
50.0	15.24	8.0	36.5	33.0	.0	.0	.0	44.0	42.0	.0
60.0	18.29	7.8	36.3	32.8	.0	.0	.0	43.8	41.8	.0
70.0	21.34	7.5	36.0	32.5	.0	.0	.0	43.6	41.6	.0
80.0	24.38	7.2	35.7	32.2	.0	.0	.0	43.2	41.3	.0
90.0	27.43	6.8	35.3	31.8	.0	.0	.0	42.9	40.9	.0
100.0	30.48	6.3	34.8	31.3	.0	.0	.0	42.5	40.5	.0
110.0	33.53	5.9	34.4	30.9	.0	.0	.0	42.1	40.1	.0
120.0	36.58	5.5	34.0	30.5	.0	.0	.0	41.7	39.8	.0
130.0	39.62	5.0	33.5	30.0	.0	.0	.0	41.3	39.4	.0
140.0	42.67	4.6	33.1	29.6	.0	.0	.0	41.0	39.0	.0
150.0	45.72	4.3	32.8	29.3	.0	.0	.0	40.7	38.7	.0
160.0	48.77	3.9	32.4	28.9	.0	.0	.0	40.4	38.4	.0
170.0	51.82	3.6	32.1	28.6	.0	.0	.0	40.1	38.1	.0
180.0	54.86	3.2	31.7	28.2	.0	.0	.0	39.8	37.8	.0
190.0	57.91	2.9	31.4	27.9	.0	.0	.0	39.5	37.6	.0
200.0	60.96	2.6	31.1	27.6	.0	.0	.0	39.2	37.3	.0
210.0	64.01	2.4	30.9	27.4	.0	.0	.0	39.0	37.1	.0
220.0	67.06	2.1	30.6	27.1	.0	.0	.0	38.8	36.8	.0
230.0	70.10	1.8	30.3	26.8	.0	.0	.0	38.6	36.6	.0
240.0	73.15	1.6	30.1	26.6	.0	.0	.0	38.3	36.4	.0
250.0	76.20	1.4	29.9	26.4	.0	.0	.0	38.1	36.2	.0
260.0	79.25	1.2	29.7	26.2	.0	.0	.0	37.9	36.0	.0
270.0	82.30	.9	29.4	25.9	.0	.0	.0	37.8	35.8	.0
280.0	85.34	.7	29.2	25.7	.0	.0	.0	37.6	35.6	.0
290.0	88.39	.5	29.0	25.5	.0	.0	.0	37.4	35.5	.0
300.0	91.44	.4	28.9	25.4	.0	.0	.0	37.2	35.3	.0

Audible noise prediction methods do not apply to all line geometries, voltages, or weather conditions. If a prediction method does not apply, the appropriate output data column will be zeros.

EMF Analysis - Graphical Output

Section A 69/115/230 kV before

Electric Field Profile - (C:\BV-USERS\A_BEFORE.EMF)

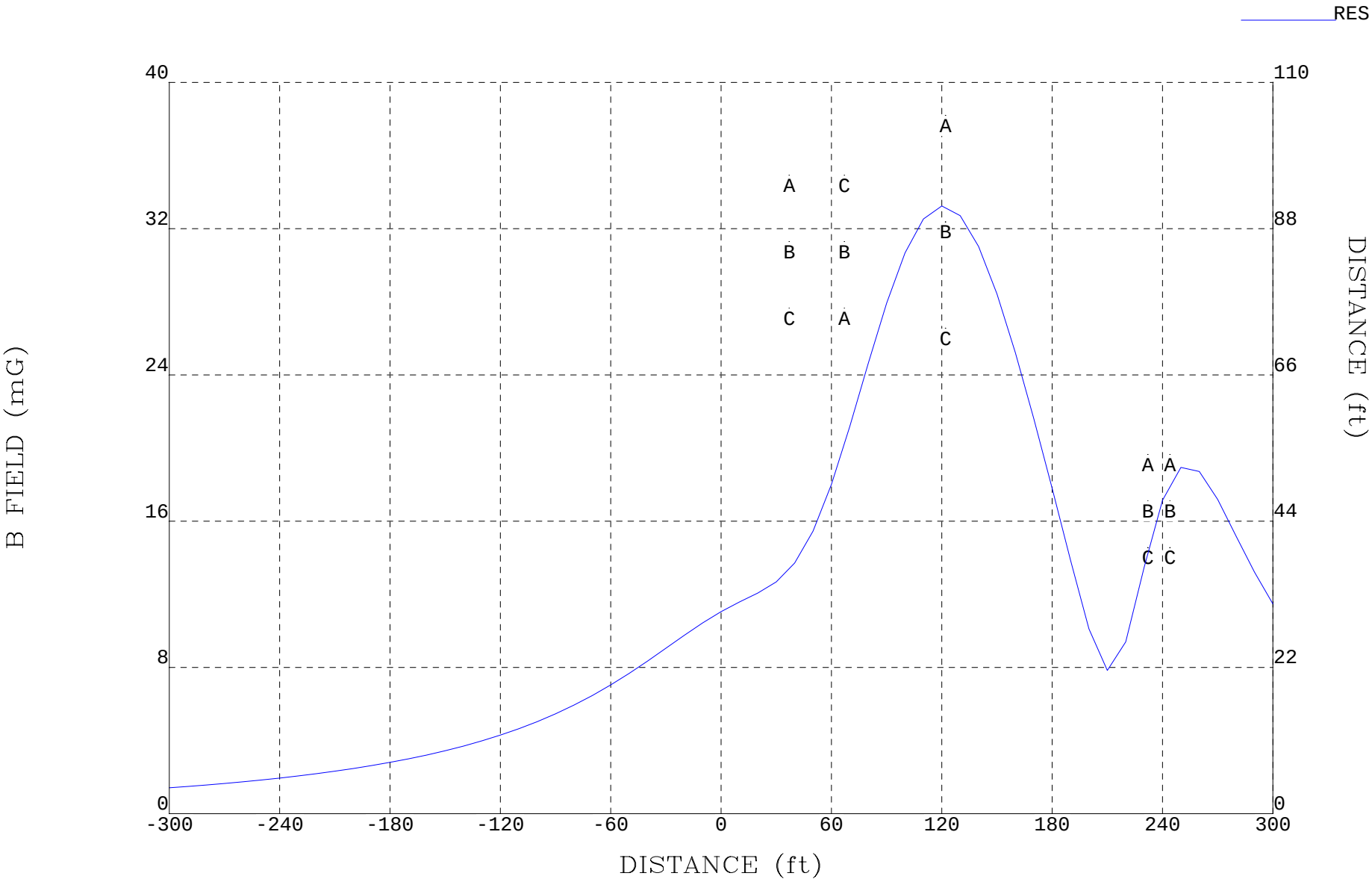


Min Value: 0.0 kV/m at -300.0 ft

Max Value: 0.8 kV/m at 120.0 ft

Section A 69/115/230 kV before

Magnetic Field Profile - (C:\BV-USERS\A_BEFORE.EMF)

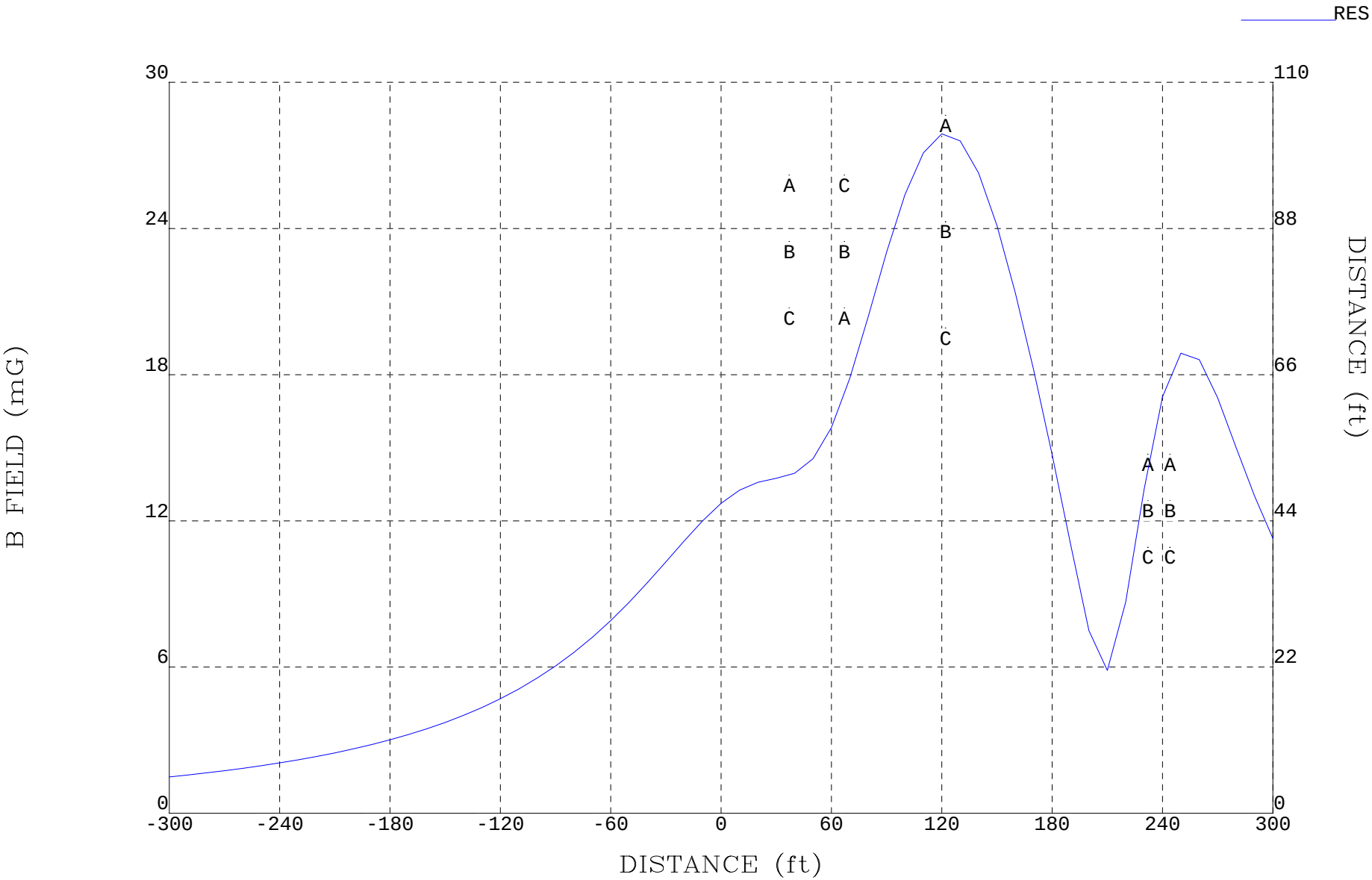


Min RES: 1.4 mG at -300.0 ft

Max RES: 33.2 mG at 120.0 ft

Section A 69/115/230 kV after

Magnetic Field Profile - (C:\BV-USERS\A_AFTERC.EMF)

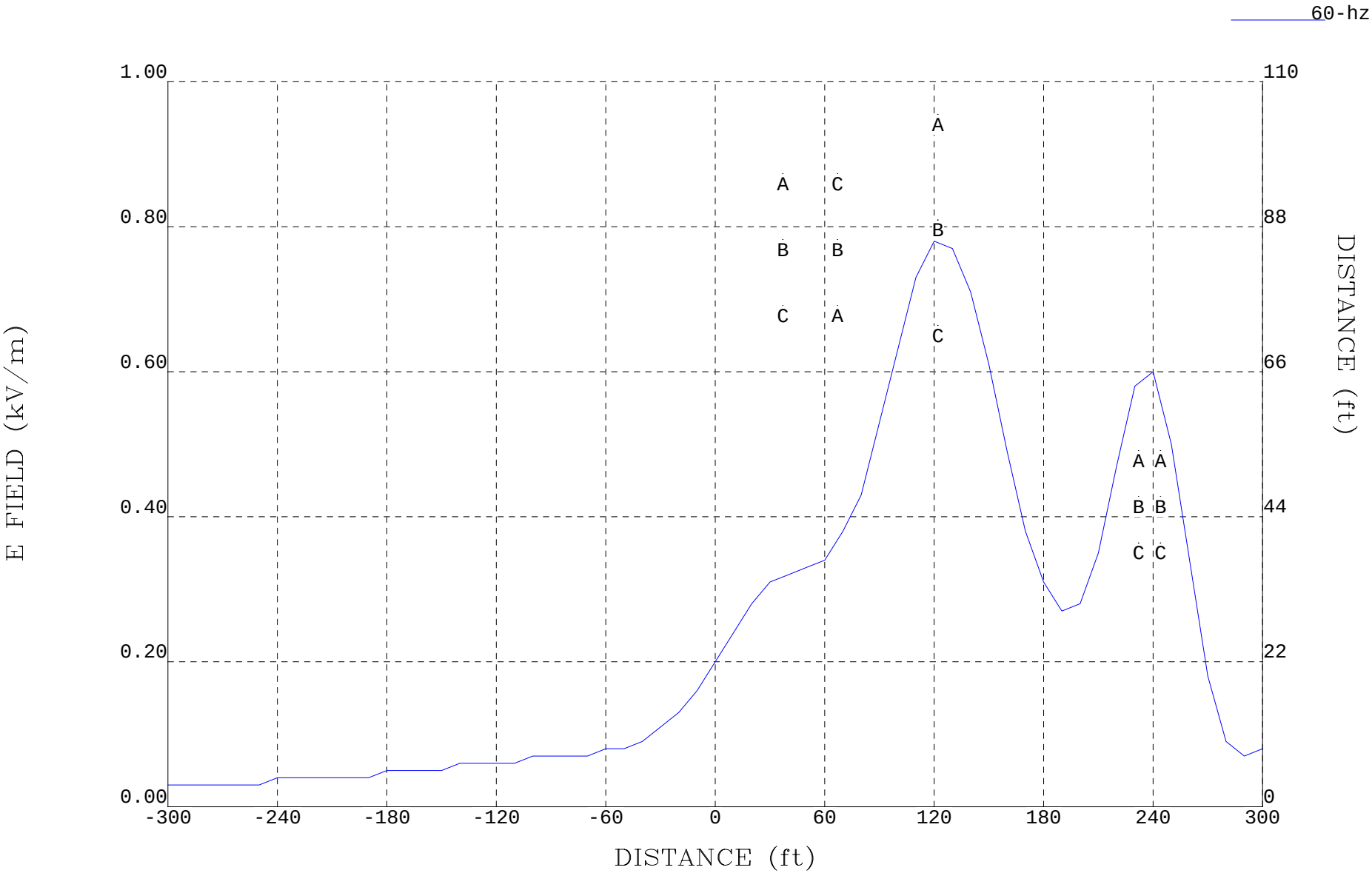


Min RES: 1.5 mG at -300.0 ft

Max RES: 27.9 mG at 120.0 ft

Section A 69/115/230 kV after

Electric Field Profile - (C:\BV-USERS\A_AFTERC.EMF)

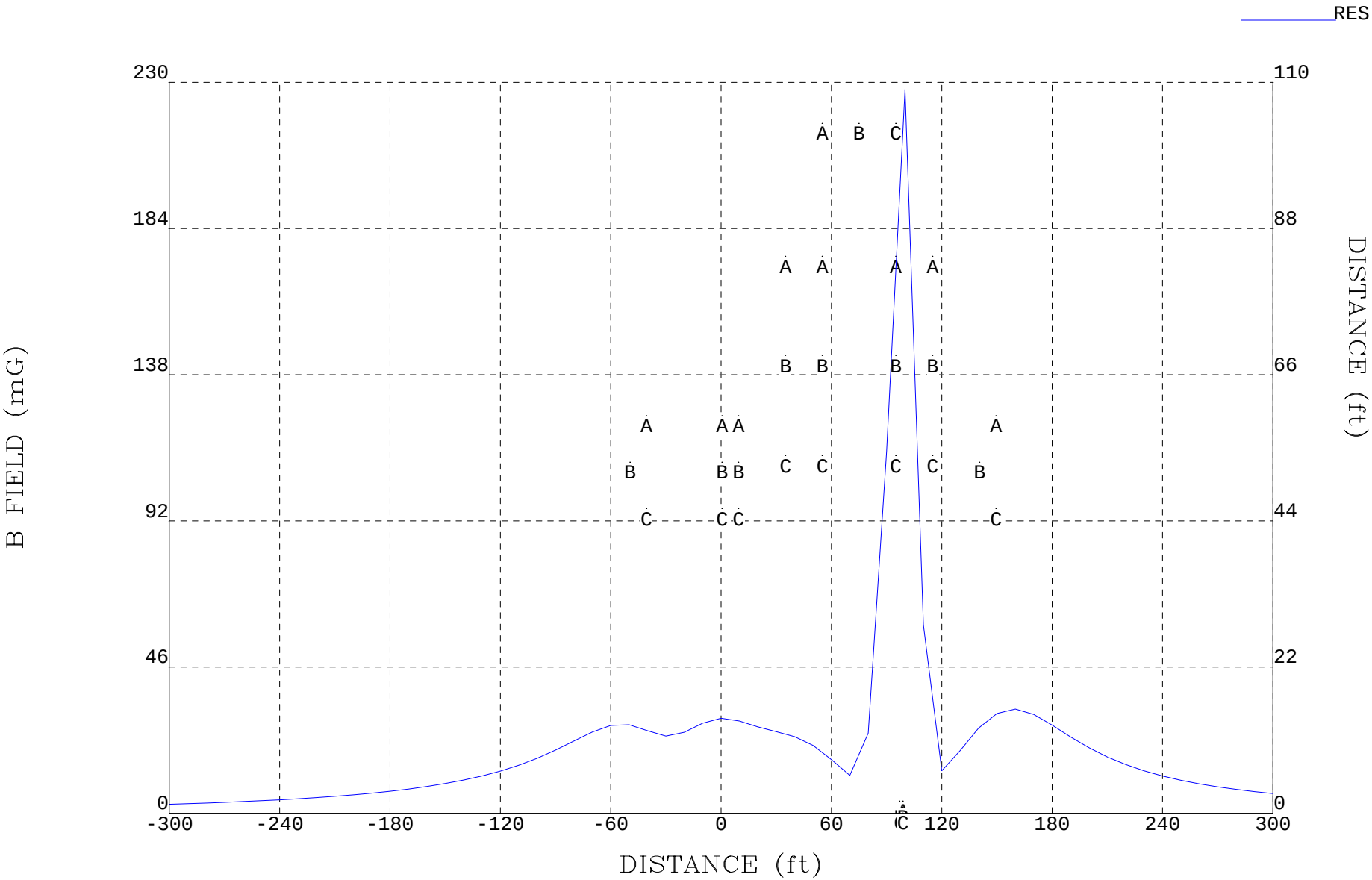


Min Value: 0.0 kV/m at -300.0 ft

Max Value: 0.8 kV/m at 120.0 ft

Section C 69/115/230 kV before

Magnetic Field Profile - (C:\BV-USERS\C_BEFORE.EMF)

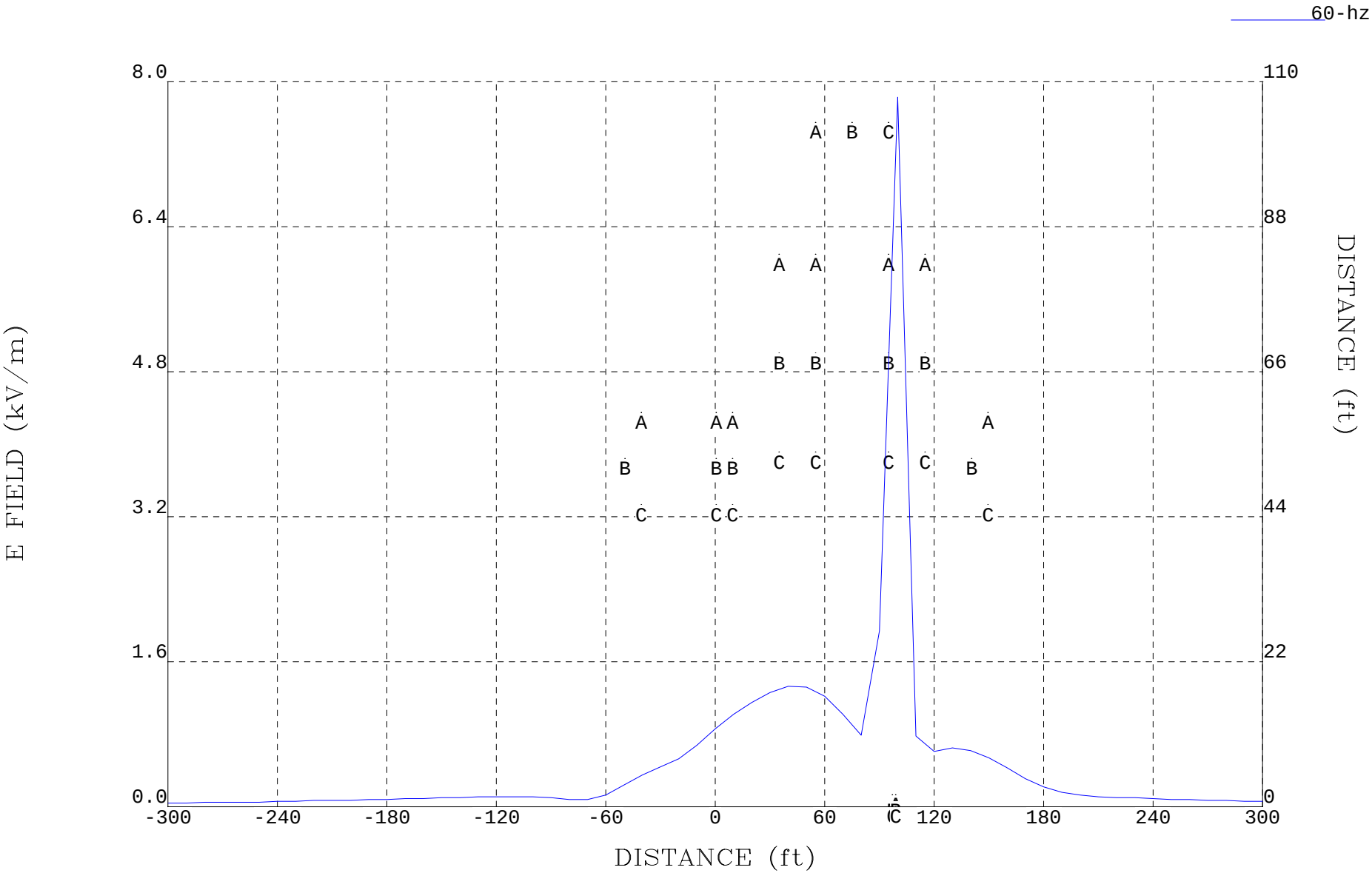


Min RES: 2.8 mG at -300.0 ft

Max RES: 227.8 mG at 100.0 ft

Section C 69/115/230 kV before

Electric Field Profile - (C:\BV-USERS\C_BEFORE.EMF)

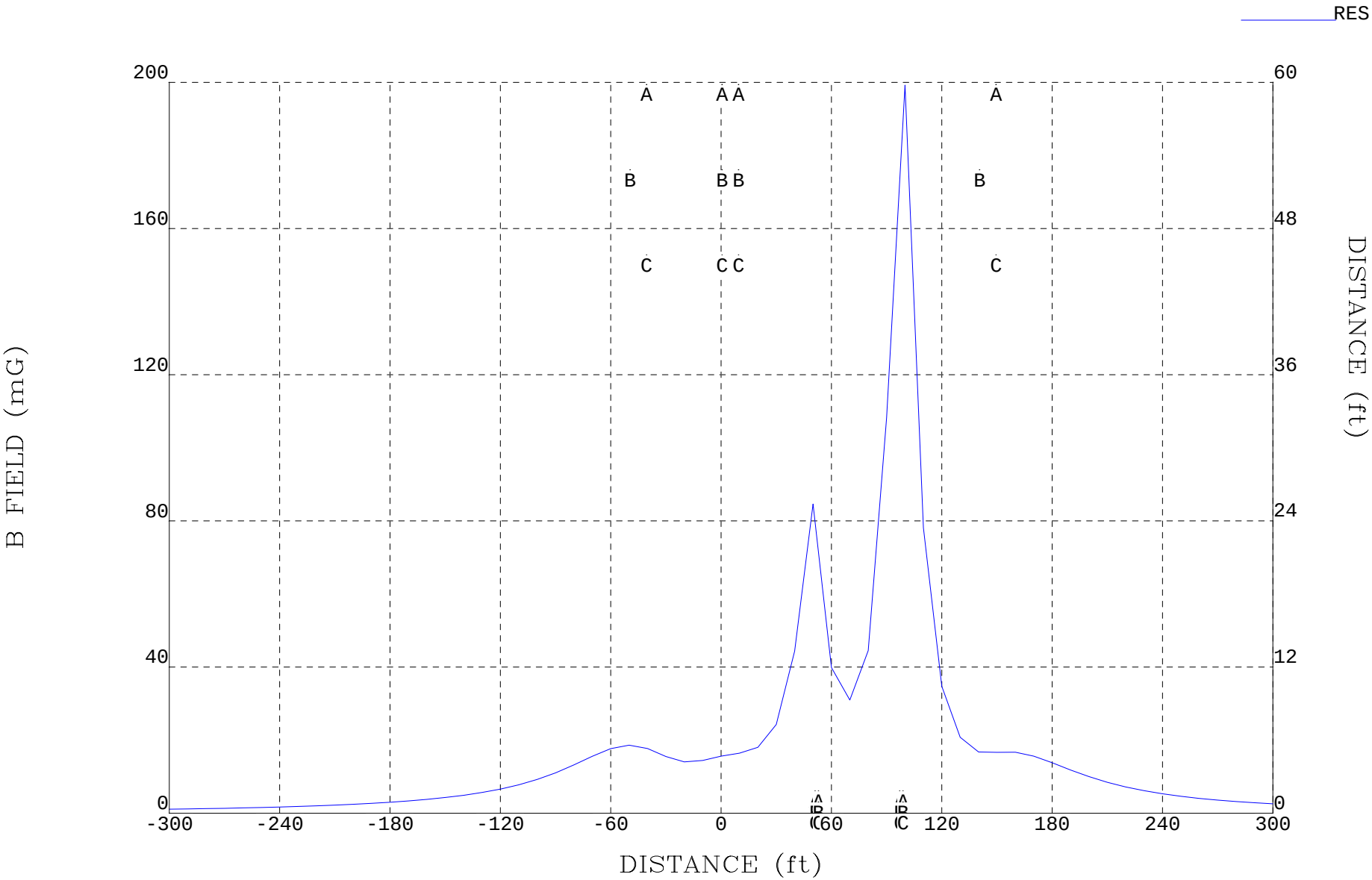


Min Value: 0.0 kV/m at -300.0 ft

Max Value: 7.8 kV/m at 100.0 ft

Section C 69/115/230 kV after

Magnetic Field Profile - (C:\BV-USERS\C_AFTERC.EMF)

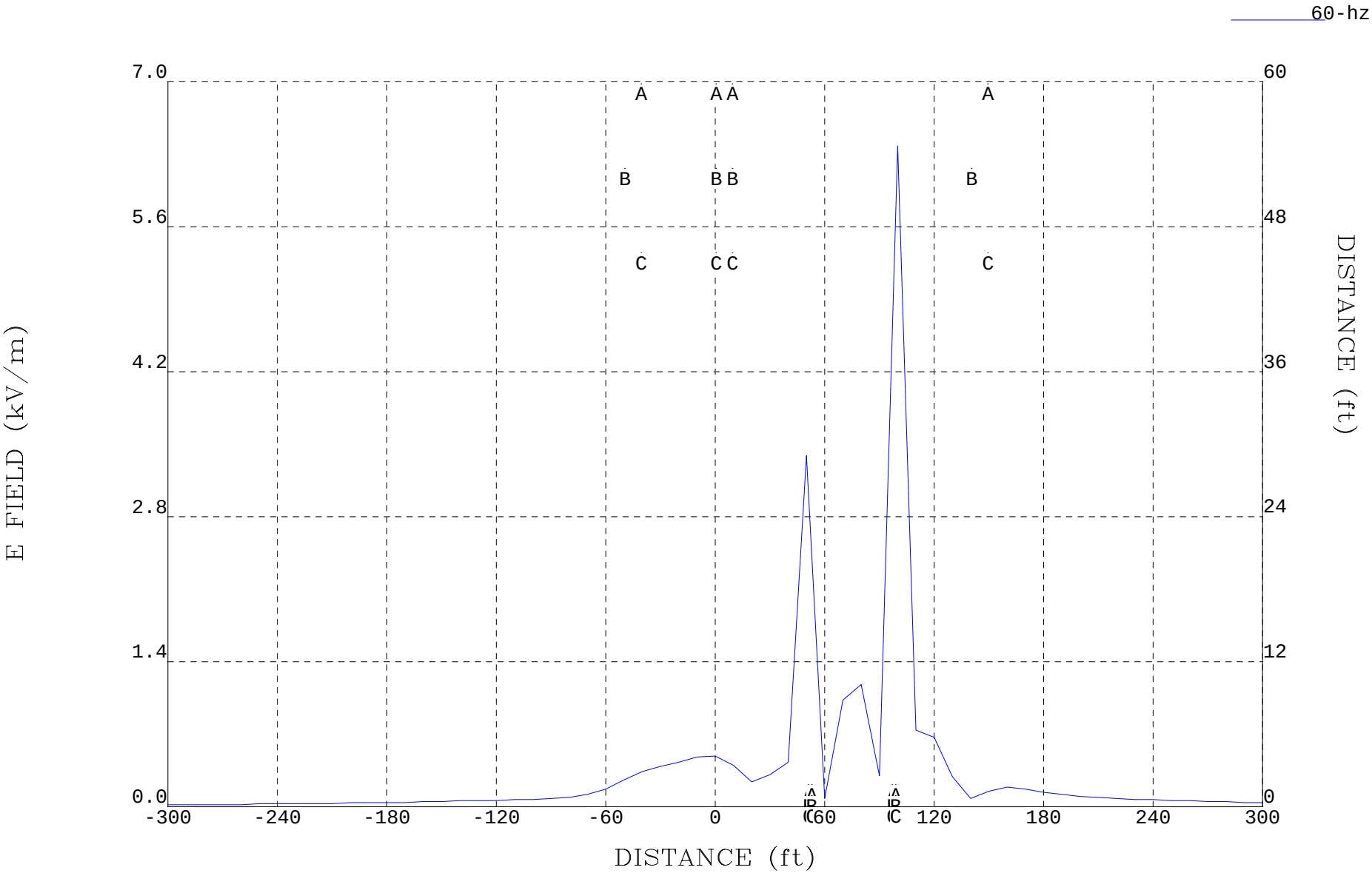


Min RES: 1.1 mG at -300.0 ft

Max RES: 199.3 mG at 100.0 ft

Section C 69/115/230 kV after

Electric Field Profile - (C:\BV-USERS\C_AFTERC.EMF)

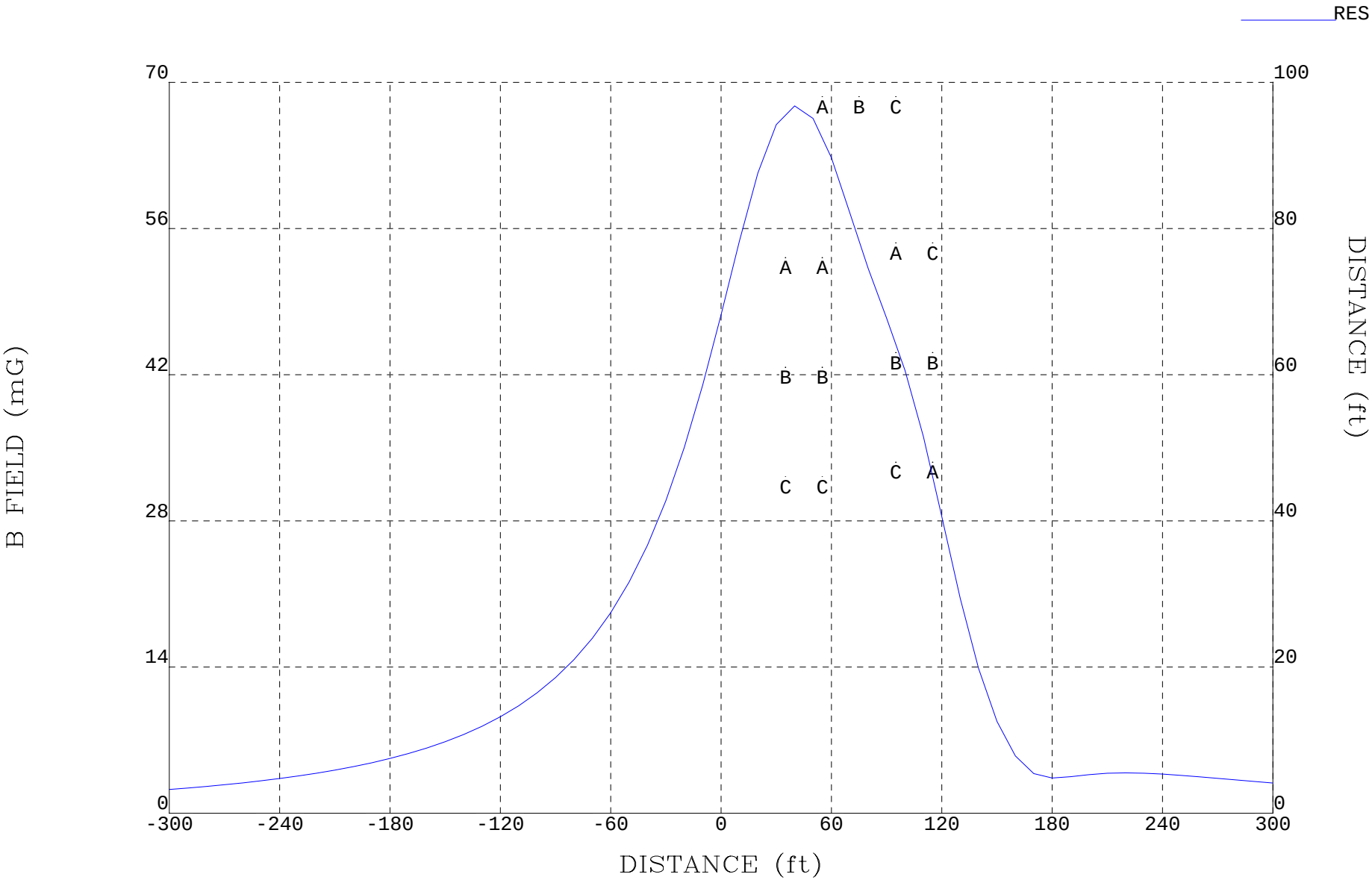


Min Value: 0.0 kV/m at -300.0 ft

Max Value: 6.4 kV/m at 100.0 ft

Section D 69/115/230 kV before

Magnetic Field Profile - (C:\BV-USERS\D_BEFORE.EMF)

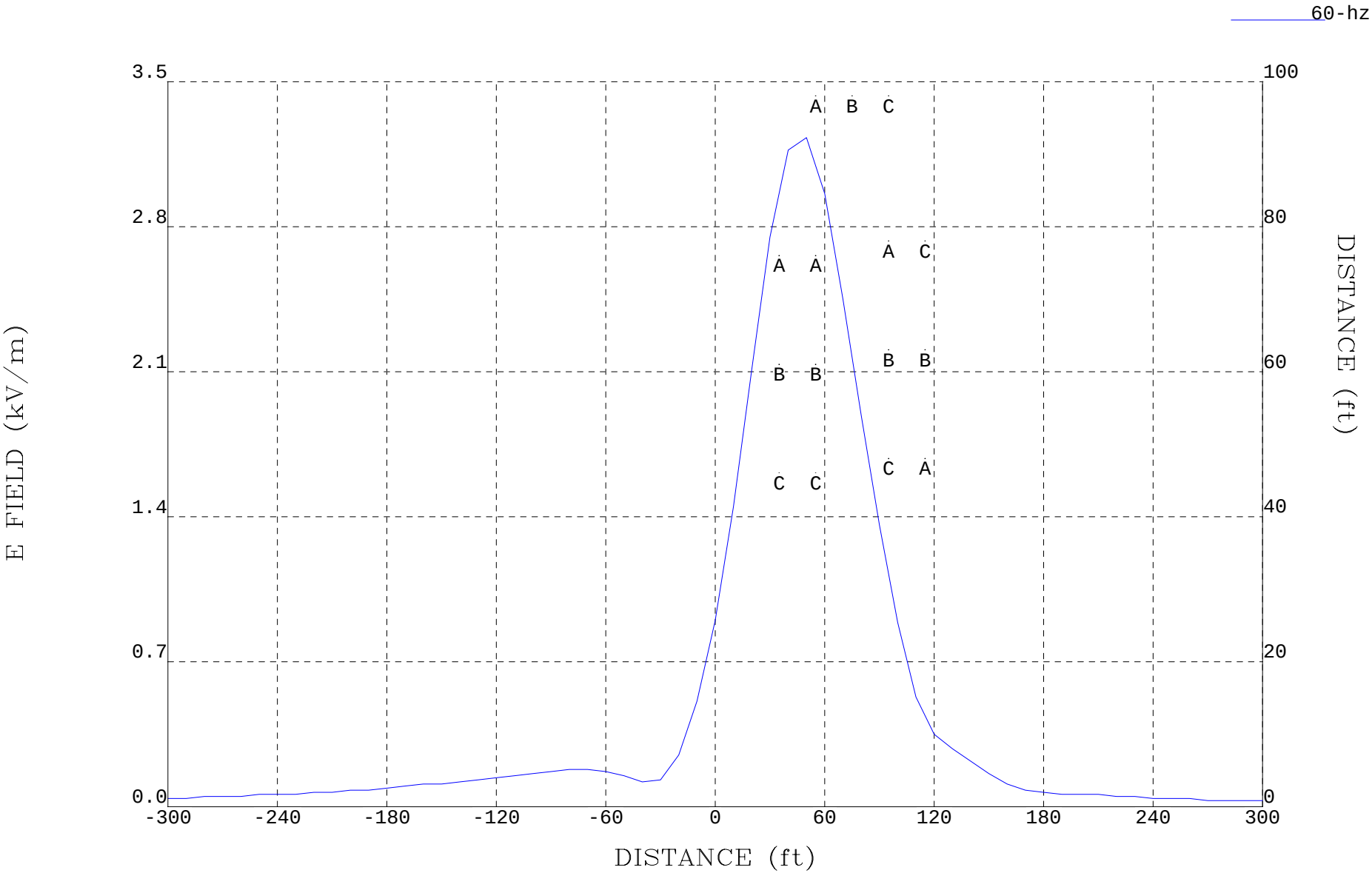


Min RES: 2.3 mG at -300.0 ft

Max RES: 67.7 mG at 40.0 ft

Section D 69/115/230 kV before

Electric Field Profile - (C:\BV-USERS\D_BEFORE.EMF)

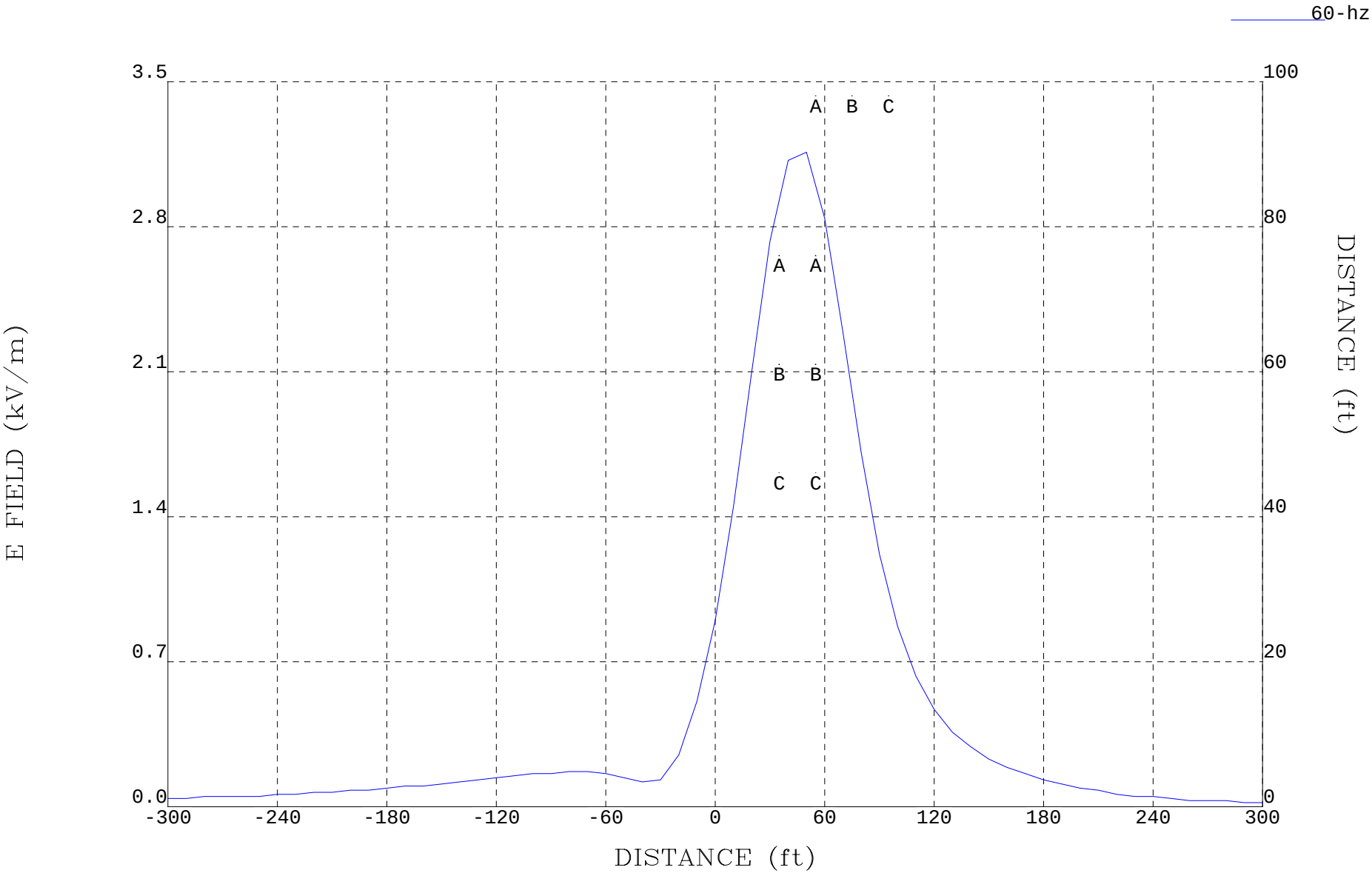


Min Value: 0.0 kV/m at 270.0 ft

Max Value: 3.2 kV/m at 50.0 ft

Section D 69/115/230 kV before

Electric Field Profile - (C:\BV-USERS\D_AFTERC.EMF)

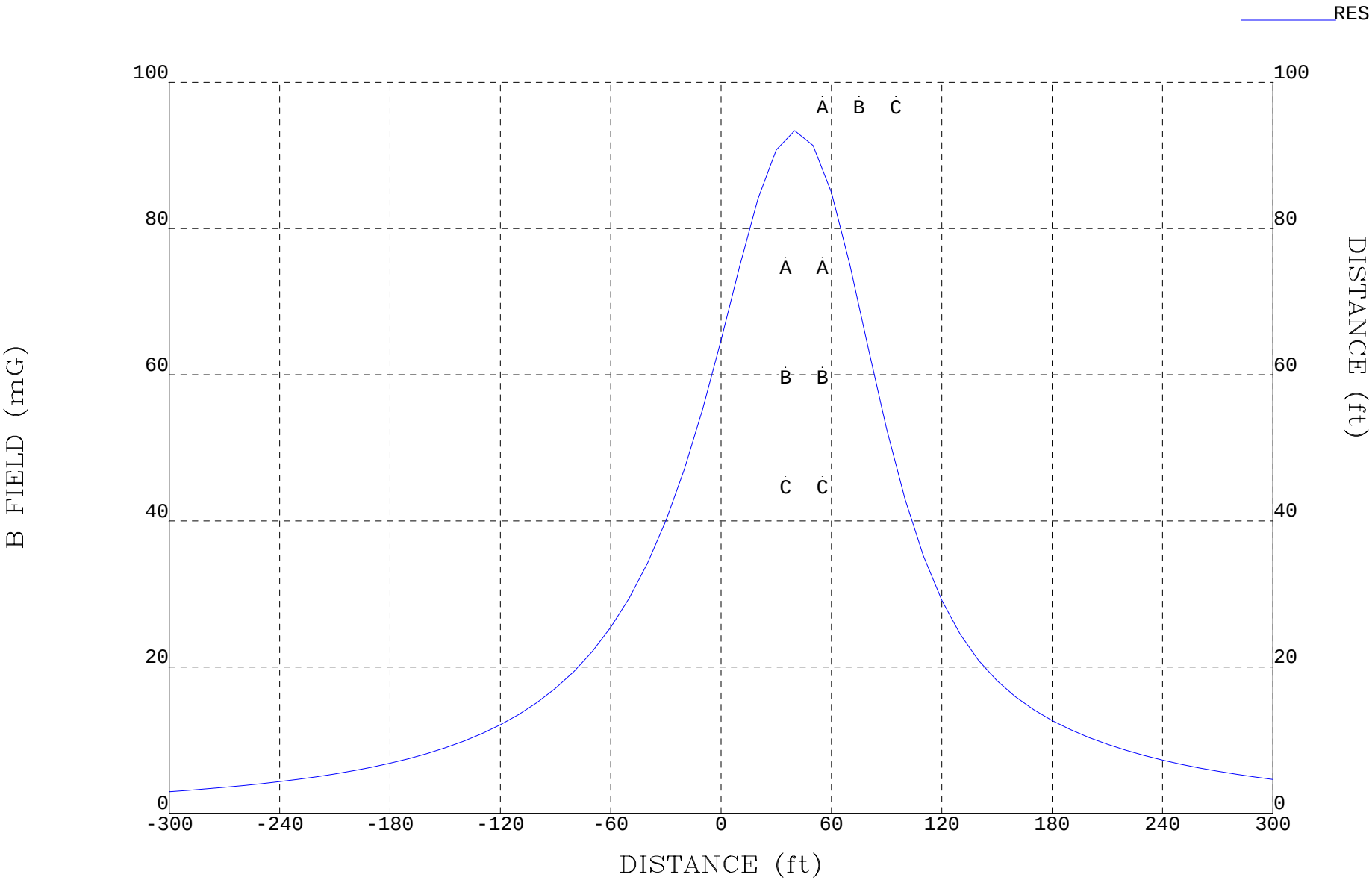


Min Value: 0.0 kV/m at 290.0 ft

Max Value: 3.2 kV/m at 50.0 ft

Section D 69/115/230 kV before

Magnetic Field Profile - (C:\BV-USERS\D_AFTERC.EMF)



Min RES: 2.9 mG at -300.0 ft

Max RES: 93.4 mG at 40.0 ft