

Subcontractor Report

State Electricity Regulatory Policy and Distributed Resources: Distribution System Cost Methodologies for Distributed Generation Appendices

W. Shirley, R. Cowart, R. Sedano, F. Weston,
C. Harrington, and D. Moskovitz
*The Regulatory Assistance Project
Gardiner, Maine
Montpelier, Vermont*



NREL

National Renewable Energy Laboratory

1617 Cole Boulevard
Golden, Colorado 80401-3393

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Contract No. DE-AC36-99-GO10337

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Appendix A

List of Companies in Study

	Company
1	Alabama Power Company
2	Alaska Electric Light and Power Company
3	Appalachian Power Company
4	Arizona Public Service Company
5	Atlantic City Electric Company
6	Bangor Hydro-Electric Company
7	Baltimore Gas and Electric Company
8	Black Hills Corporation
9	Blackstone Valley Electric Company
10	Boston Edison Company
11	Central Hudson Gas and Electric Corporation
12	Citizens' Electric Company
13	Cambridge Electric Light Company
14	Carolina Power and Light Company
15	Central Illinois Light Company
16	Central Illinois Public Service Company
17	Central Maine Power Company
18	Central Power and Light Company
19	Central Vermont Public Service Corporation
20	Chugach Electric Association Inc.
21	The Cincinnati Gas and Electric Company
22	Cleco Utility Group Inc.
23	The Cleveland Electric Illuminating Company
24	Columbus Southern Power Company
25	Commonwealth Edison Company
26	Commonwealth Electric Company
27	Concord Electric Company
28	The Connecticut Light and Power Company
29	Connecticut Valley Electric Company Inc.
30	Consolidated Edison Company of New York Inc.
31	Consumers Energy Company
32	Delmarva Power and Light Company
33	Duke Energy Corporation
34	Eastern Edison Company

	Company
35	El Paso Electric Company
36	Entergy Arkansas Inc.
37	Entergy Gulf States Inc.
38	Entergy Louisiana Inc.
39	Entergy Mississippi Inc.
40	Entergy New Orleans Inc.
41	Exeter and Hampton Electric Company
42	Fitchburg Gas and Electric Light Company
43	Florida Power and Light Company
44	Florida Power Corporation
45	Green Mountain Power Corporation
46	Gulf Power Company
47	Hawaiian Electric Company Inc.
48	IES Utilities Inc.
49	Idaho Power Company
50	Illinois Power Company
51	Indiana Michigan Power Company
52	Indianapolis Power and Light Company
53	Interstate Power Company
54	Jersey Central Power and Light Company
55	Kansas City Power and Light Company
56	Kansas Gas and Electric Company
57	Kentucky Power Company
58	Kentucky Utilities Company
59	Kingsport Power Company
60	Lockhart Power Company
61	Louisville Gas and Electric Company
62	MDU Resources Group Inc.
63	Monongahela Power Company
64	Madison Gas and Electric Company
65	Maine Public Service Company
66	Maine Public Service Company
67	Minnesota Power Inc.
68	The Montana Power Company
69	Mt. Carmel Public Utility Company
70	New Hampshire Electric Cooperative Inc.
71	Newport Electric Corporation

	Company
72	Niagara Mohawk Power Corporation
73	Northern Indiana Public Service Company
74	Northern States Power Company (Wisconsin)
75	Northwestern Public Service
76	Ohio Edison Company
77	Ohio Power Company
78	Oklahoma Gas and Electric Company
79	Otter Tail Power Company
80	Pacific Gas and Electric Company
81	PP&L Inc.
82	PSI Energy Inc.
83	PacifiCorp
84	Pennsylvania Electric Company
85	Pennsylvania Power Company
86	Portland General Electric Company
87	Potomac Electric Power Company
88	Public Service Company of Colorado
89	Public Service Company of New Hampshire
90	Public Service Company of New Mexico
91	Public Service Electric and Gas Company
92	Puget Sound Energy Inc.
93	Rockland Electric Company
94	San Diego Gas and Electric Company
95	Savannah Electric and Power Company
96	Sierra Pacific Power Company
97	South Beloit Water, Gas, and Electric Company
98	South Carolina Electric and Gas Company
99	Southern Indiana Gas and Electric Company
100	Southwestern Electric Power Company
101	Southwestern Public Service Company
102	St. Joseph Light and Power Company
103	Superior Water, Light, and Power Company
104	The Potomac Edison Company
105	TXU Electric Company
106	Tampa Electric Company
107	The Dayton Power and Light Company
108	The Detroit Edison Company

	Company
109	The Empire District Electric Company
110	The United Illuminating Company
111	The Toledo Edison Company
112	Tucson Electric Power Company
113	Union Electric Company
114	Upper Peninsula Power Company
115	Utilicorp United Inc.
116	Virginia Electric and Power Company
117	West Penn Power Company
118	West Texas Utilities Company
119	Western Massachusetts Electric Company
120	Western Resources Inc.
121	Wheeling Power Company
122	Wisconsin Electric Power Company
123	Wisconsin Power and Light Company
124	Wisconsin Public Service Corporation

Appendix B

Transformers and Substations Plant Investment per Megawatt of System Peak

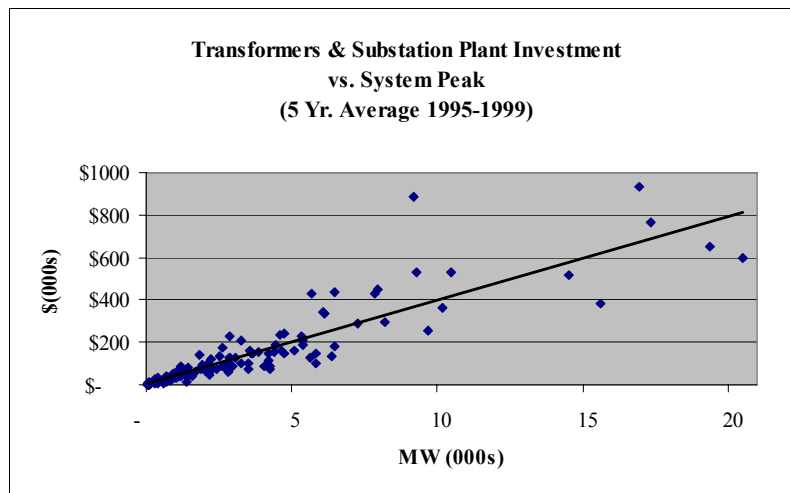
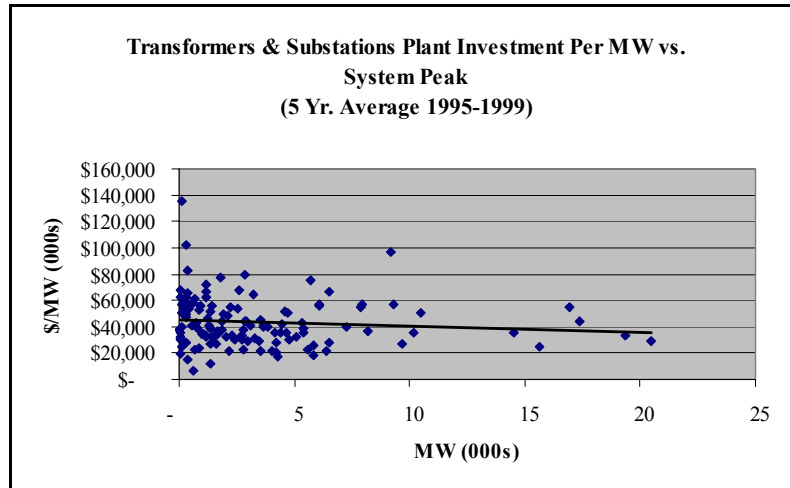
Rank	Company	Transformers and Substations Plant Investment per Megawatt of System Peak	Transformers and Substations Plant Investment	System Peak
1	Newport Electric Corporation	\$ 134,768	\$ 13,800,194	102.4
2	Cambridge Electric Light Company	\$ 101,817	\$ 29,282,502	287.6
3	Consolidated Edison Company of New York Inc.	\$ 96,377	\$ 886,227,981	9,195.4
4	Chugach Electric Association Inc.	\$ 82,719	\$ 32,442,295	392.2
5	Boston Edison Company	\$ 79,773	\$ 227,432,867	2,851.0
6	Monongahela Power Company	\$ 77,301	\$ 140,146,302	1,813.0
7	Potomac Electric Power Company	\$ 75,400	\$ 428,921,955	5,688.6
8	Hawaiian Electric Company Inc.	\$ 71,976	\$ 85,723,725	1,191.0
9	Fitchburg Gas and Electric Light Company	\$ 67,880	\$ 5,878,428	86.6
10	Pennsylvania Electric Company	\$ 67,460	\$ 175,234,441	2,597.6
11	PP&L Inc.	\$ 66,983	\$ 434,775,613	6,490.8
12	Utilicorp United Inc.	\$ 66,599	\$ 76,695,671	1,151.6
13	St. Joseph Light and Power Company	\$ 65,721	\$ 23,725,259	361.0
14	West Penn Power Company	\$ 64,808	\$ 209,952,211	3,239.6
15	Central Illinois Light Company	\$ 62,663	\$ 73,955,441	1,180.2
16	Bangor Hydro Electric Company	\$ 62,112	\$ 17,366,403	279.6
17	Alaska Electric Light and Power Company	\$ 62,051	\$ 3,884,371	62.6
18	Commonwealth Electric Company	\$ 61,071	\$ 43,396,908	710.6
19	Blackstone Valley Electric Company	\$ 59,806	\$ 16,039,840	268.2
20	Otter Tail Power Company	\$ 58,060	\$ 36,090,182	621.6
21	Baltimore Gas and Electric Company	\$ 56,847	\$ 344,609,105	6,062.0
22	Public Service Electric and Gas Company	\$ 56,768	\$ 527,757,920	9,296.8
23	Upper Peninsula Power Company	\$ 56,708	\$ 7,995,885	141.0
24	Rockland Electric Company	\$ 56,660	\$ 20,102,958	354.8
25	PacifiCorp	\$ 56,627	\$ 449,503,282	7,938.0
26	Central Vermont Public Service Corporation	\$ 55,846	\$ 23,008,703	412.0
27	The Montana Power Company	\$ 55,817	\$ 79,494,194	1,424.2
28	Niagara Mohawk Power Corporation	\$ 55,464	\$ 338,560,535	6,104.2
29	Central Hudson Gas and Electric Corporation	\$ 55,435	\$ 51,188,985	923.4
30	Pacific Gas and Electric Company	\$ 54,955	\$ 931,769,877	16,955.2
31	Union Electric Company	\$ 54,473	\$ 428,521,140	7,866.6
32	Metropolitan Edison Company	\$ 54,393	\$ 121,286,007	2,229.8

Rank	Company	Transformers and Substations Plant Investment per Megawatt of System Peak	Transformers and Substations Plant Investment	System Peak
33	New Hampshire Electric Cooperative Inc.	\$ 53,734	\$ 8,844,680	164.6
34	MDU Resources Group Inc.	\$ 53,517	\$ 21,781,239	407.0
35	The Potomac Edison Company	\$ 53,202	\$ 134,249,492	2,523.4
36	The Empire District Electric Company	\$ 52,087	\$ 46,127,987	885.6
37	El Paso Electric Company	\$ 51,703	\$ 71,649,718	1,385.8
38	Public Service Company of Colorado	\$ 51,385	\$ 236,938,490	4,611.0
39	Concord Electric Company	\$ 50,927	\$ 4,797,326	94.2
40	Jersey Central Power and Light Company	\$ 50,767	\$ 239,801,084	4,723.6
41	The Detroit Edison Company	\$ 50,560	\$ 529,997,371	10,482.6
42	Central Illinois Public Service Company	\$ 49,895	\$ 95,090,214	1,905.8
43	Green Mountain Power Corporation	\$ 48,966	\$ 15,355,608	313.6
44	Gulf Power Company	\$ 48,684	\$ 102,772,336	2,111.0
45	Black Hills Corporation	\$ 47,540	\$ 15,745,365	331.2
46	Public Service Company of New Mexico	\$ 45,938	\$ 57,670,294	1,255.4
47	San Diego Gas and Electric Company	\$ 45,232	\$ 160,964,220	3,558.6
48	Northern Indiana Public Service Company	\$ 44,391	\$ 126,976,142	2,860.4
49	Delmarva Power and Light Company	\$ 44,266	\$ 127,813,728	2,887.4
50	Florida Power and Light Company	\$ 44,030	\$ 764,223,367	17,356.8
51	IES Utilities Inc.	\$ 43,830	\$ 82,567,673	1,883.8
52	Western Massachusetts Electric Company	\$ 42,852	\$ 32,096,017	749.0
53	Wisconsin Electric Power Company	\$ 42,625	\$ 227,270,417	5,331.8
54	The Connecticut Light and Power Company	\$ 41,463	\$ 184,816,131	4,457.4
55	Eastern Edison Company	\$ 41,339	\$ 22,761,006	550.6
56	Kansas City Power and Light Company	\$ 40,806	\$ 125,406,520	3,073.2
57	Sierra Pacific Power Company	\$ 40,706	\$ 53,820,815	1,322.2
58	Portland General Electric Company	\$ 40,455	\$ 147,805,975	3,653.6
59	Maine Public Service Company	\$ 40,030	\$ 4,075,060	101.8
60	South Carolina Electric and Gas Company	\$ 39,866	\$ 153,148,993	3,841.6
61	Illinois Power Company	\$ 39,746	\$ 144,316,939	3,631.0
62	Consumers Energy Company	\$ 39,661	\$ 288,301,333	7,269.2
63	Central Maine Power Company	\$ 38,436	\$ 51,519,993	1,340.4
64	PSI Energy Inc.	\$ 38,352	\$ 206,343,222	5,380.2
65	Savannah Electric and Power Company	\$ 38,190	\$ 31,659,842	829.0
66	Indianapolis Power and Light Company	\$ 37,977	\$ 106,320,120	2,799.6
67	Connecticut Valley Electric Company Inc.	\$ 37,540	\$ 1,058,615	28.2
68	The Toledo Edison Company	\$ 37,385	\$ 70,671,806	1,890.4

Rank	Company	Transformers and Substations Plant Investment per Megawatt of System Peak	Transformers and Substations Plant Investment	System Peak
69	Tucson Electric Power Company	\$ 36,569	\$ 61,692,106	1,687.0
70	Florida Power Corporation	\$ 36,355	\$ 297,503,464	8,183.4
71	Puget Sound Energy Inc.	\$ 35,930	\$ 157,292,750	4,377.8
72	Alabama Power Company	\$ 35,690	\$ 364,124,645	10,202.4
73	The Cleveland Electric Illuminating Company	\$ 35,465	\$ 148,207,904	4,179.0
74	Virginia Electric and Power Company	\$ 35,390	\$ 513,637,986	14,513.6
75	Entergy Louisiana Inc.	\$ 35,341	\$ 189,829,681	5,371.4
76	Superior Water, Light, and Power Company	\$ 35,263	\$ 3,046,694	86.4
77	The Cincinnati Gas and Electric Company	\$ 35,055	\$ 162,506,853	4,635.8
78	Wisconsin Public Service Corporation	\$ 34,381	\$ 56,556,041	1,645.0
79	Interstate Power Company	\$ 34,335	\$ 33,874,961	986.6
80	Southern Indiana Gas and Electric Company	\$ 34,106	\$ 35,933,603	1,053.6
81	Commonwealth Edison Company	\$ 33,765	\$ 654,229,939	19,376.0
82	Entergy Mississippi Inc.	\$ 33,672	\$ 91,472,676	2,716.6
83	Wisconsin Power and Light Company	\$ 33,535	\$ 76,391,824	2,278.0
84	Entergy New Orleans Inc.	\$ 33,350	\$ 40,306,888	1,208.6
85	Minnesota Power Inc.	\$ 32,468	\$ 47,006,879	1,447.8
86	Idaho Power Company	\$ 32,212	\$ 84,942,020	2,637.0
87	West Texas Utilities Company	\$ 31,962	\$ 47,610,028	1,489.6
88	The United Illuminating Company	\$ 31,954	\$ 37,009,694	1,158.2
89	Oklahoma Gas and Electric Company	\$ 31,950	\$ 162,572,698	5,088.4
90	Atlantic City Electric Company	\$ 31,943	\$ 65,401,066	2,047.4
91	South Beloit Water, Gas, and Electric Company	\$ 31,690	\$ 1,521,127	48.0
92	Lockhart Power Company	\$ 31,421	\$ 2,375,405	75.6
93	Tampa Electric Company	\$ 30,745	\$ 100,653,987	3,273.8
94	Arizona Public Service Company	\$ 30,499	\$ 144,777,767	4,747.0
95	Western Resources Inc.	\$ 30,331	\$ 82,415,514	2,717.2
96	Mt. Carmel Public Utility Company	\$ 30,295	\$ 1,108,804	36.6
97	Louisville Gas and Electric Company	\$ 29,858	\$ 72,214,245	2,418.6
98	The Dayton Power and Light Company	\$ 29,492	\$ 87,490,587	2,966.6
99	TXU Electric Company	\$ 29,155	\$ 597,255,038	20,485.4
100	Columbus Southern Power Company	\$ 28,538	\$ 99,439,280	3,484.4
101	Wheeling Power Company	\$ 28,367	\$ 8,203,809	289.2
102	Appalachian Power Company	\$ 28,181	\$ 183,045,192	6,495.4
103	Southwestern Electric Power Company	\$ 27,563	\$ 115,445,945	4,188.4
104	Kentucky Power Company	\$ 27,138	\$ 37,608,382	1,385.8

Rank	Company	Transformers and Substations Plant Investment per Megawatt of System Peak	Transformers and Substations Plant Investment	System Peak
105	Cleco Utility Group Inc.	\$ 26,858	\$ 42,940,474	1,598.8
106	Carolina Power and Light Company	\$ 26,420	\$ 255,365,484	9,665.6
107	Entergy Arkansas Inc.	\$ 25,593	\$ 149,409,972	5,838.0
108	Duke Energy Corporation	\$ 24,482	\$ 382,289,649	15,615.4
109	Exeter and Hampton Electric Company	\$ 24,461	\$ 2,622,196	107.2
110	Pennsylvania Power Company	\$ 23,394	\$ 19,889,922	850.2
111	Ohio Edison Company	\$ 22,739	\$ 127,560,660	5,609.8
112	Northern States Power Company (Wisconsin)	\$ 22,209	\$ 62,082,879	2,795.4
113	Northwestern Public Service	\$ 22,177	\$ 15,399,721	694.4
114	Southwestern Public Service Company	\$ 21,932	\$ 89,033,824	4,059.6
115	Kentucky Utilities Company	\$ 21,501	\$ 75,532,862	3,513.0
116	Entergy Gulf States Inc.	\$ 21,396	\$ 136,701,173	6,389.2
117	Kansas Gas and Electric Company	\$ 21,091	\$ 45,869,665	2,174.8
118	Central Power and Light Company	\$ 20,693	\$ 87,451,761	4,226.2
119	Citizens' Electric Company	\$ 18,991	\$ 710,276	37.4
120	Ohio Power Company	\$ 17,830	\$ 103,604,981	5,810.8
121	Indiana Michigan Power Company	\$ 16,972	\$ 72,426,124	4,267.4
122	Kingsport Power Company	\$ 14,780	\$ 5,932,598	401.4
123	Public Service Company of New Hampshire	\$ 12,216	\$ 16,601,599	1,359.0
124	Madison Gas and Electric Company	\$ 6,712	\$ 4,048,678	603.2

Statistical Summary		
Standard Deviation	\$	18,903
Average	\$	43,063
Correlation		0.89



Appendix C

Lines and Feeders Plant Investment per Megawatt of System Peak

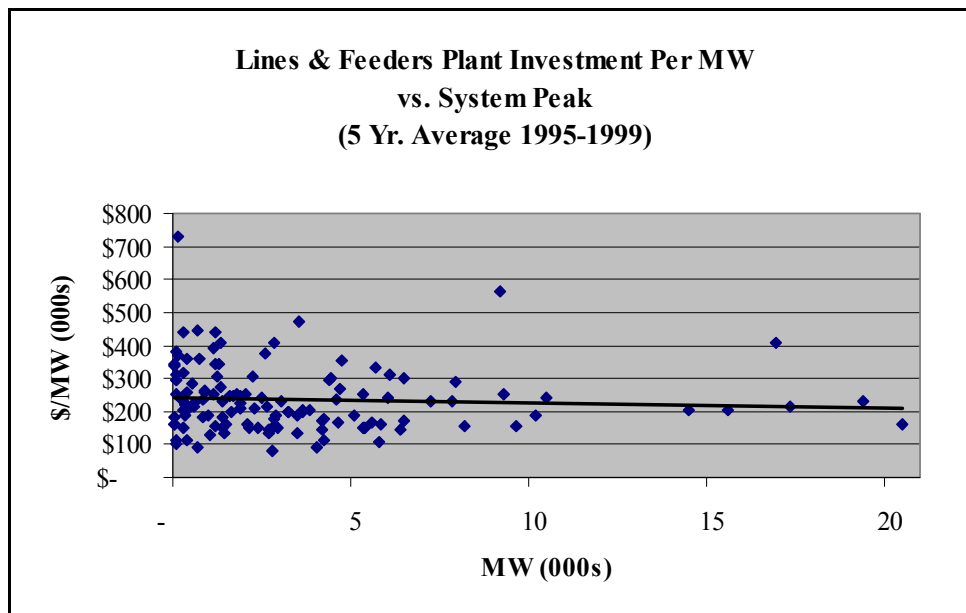
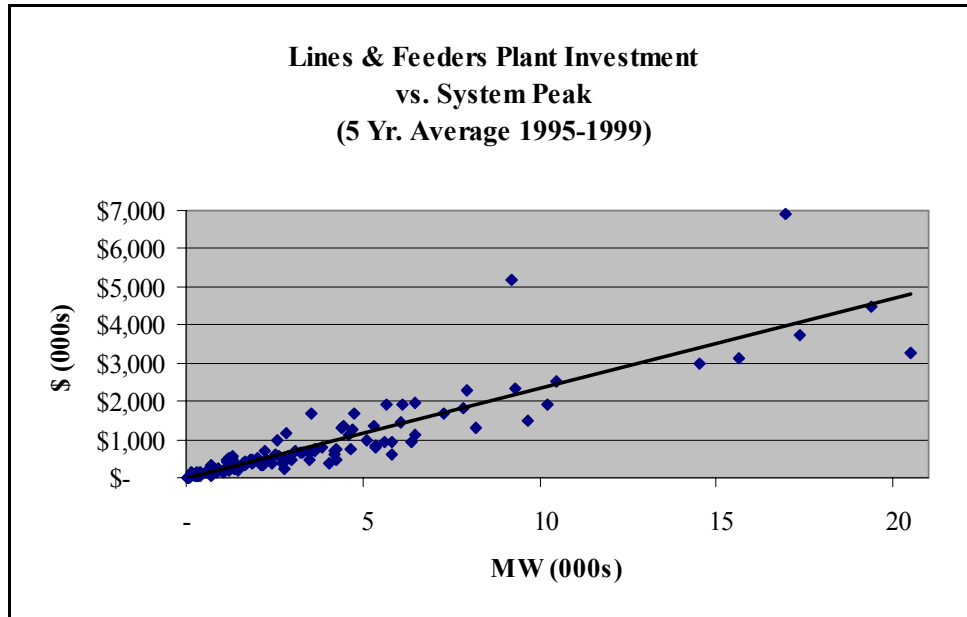
Rank	Company	Lines and Feeders Plant Investment per Megawatt of System Peak	Lines and Feeders Plant Investment	System Peak
1	New Hampshire Electric Cooperative Inc.	\$ 732,359	\$ 120,546,369	165
2	Consolidated Edison Company of New York Inc.	\$ 561,676	\$5,164,834,180	9,195
3	San Diego Gas and Electric Company	\$ 473,140	\$1,683,716,175	3,559
4	Commonwealth Electric Company	\$ 443,330	\$ 315,030,315	711
5	Bangor Hydro Electric Company	\$ 440,338	\$ 123,118,487	280
6	Hawaiian Electric Company Inc.	\$ 439,279	\$ 523,181,868	1,191
7	Boston Edison Company	\$ 409,559	\$1,167,653,610	2,851
8	Central Maine Power Company	\$ 408,423	\$ 547,450,024	1,340
9	Pacific Gas and Electric Company	\$ 408,353	\$6,923,701,722	16,955
10	Utilicorp United Inc.	\$ 394,455	\$ 454,254,468	1,152
11	Newport Electric Corporation	\$ 380,109	\$ 38,923,145	102
12	Pennsylvania Electric Company	\$ 373,906	\$ 971,257,547	2,598
13	Upper Peninsula Power Company	\$ 371,541	\$ 52,387,258	141
14	Central Vermont Public Service Corporation	\$ 361,893	\$ 149,099,913	412
15	Western Massachusetts Electric Company	\$ 357,637	\$ 267,870,079	749
16	Arizona Public Service Company	\$ 351,932	\$1,670,623,090	4,747
17	Sierra Pacific Power Company	\$ 345,162	\$ 456,373,233	1,322
18	Central Illinois Light Company	\$ 343,375	\$ 405,251,400	1,180
19	Alaska Electric Light and Power Company	\$ 342,116	\$ 21,416,443	63
20	Connecticut Valley Electric Company Inc.	\$ 338,885	\$ 9,556,550	28
21	Potomac Electric Power Company	\$ 333,235	\$1,895,640,029	5,689
22	Green Mountain Power Corporation	\$ 316,822	\$ 99,355,392	314
23	Niagara Mohawk Power Corporation	\$ 313,868	\$1,915,911,627	6,104
24	Maine Public Service Company	\$ 310,351	\$ 31,593,704	102
25	Public Service Company of New Mexico	\$ 307,406	\$ 385,917,155	1,255
26	Metropolitan Edison Company	\$ 304,107	\$ 678,098,338	2,230
27	PP&L Inc.	\$ 300,383	\$1,949,727,817	6,491
28	The Connecticut Light and Power Company	\$ 298,669	\$1,331,288,341	4,457
29	Exeter and Hampton Electric Company	\$ 296,226	\$ 31,755,414	107
30	Fitchburg Gas and Electric Light Company	\$ 295,944	\$ 25,628,771	87
31	Puget Sound Energy Inc.	\$ 294,115	\$1,287,576,758	4,378

Rank	Company	Lines and Feeders Plant Investment per Megawatt of System Peak	Lines and Feeders Plant Investment	System Peak
32	PacifiCorp	\$ 288,250	\$2,288,127,120	7,938
33	Eastern Edison Company	\$ 283,348	\$ 156,011,335	551
34	Public Service Company of New Hampshire	\$ 271,570	\$ 369,063,847	1,359
35	Jersey Central Power and Light Company	\$ 268,456	\$1,268,079,809	4,724
36	Central Hudson Gas and Electric Corporation	\$ 261,193	\$ 241,185,851	923
37	The Empire District Electric Company	\$ 259,420	\$ 229,742,532	886
38	Chugach Electric Association Inc.	\$ 257,359	\$ 100,936,279	392
39	Concord Electric Company	\$ 253,407	\$ 23,870,893	94
40	Wisconsin Electric Power Company	\$ 253,317	\$1,350,633,223	5,332
41	The United Illuminating Company	\$ 251,305	\$ 291,061,098	1,158
42	Monongahela Power Company	\$ 251,140	\$ 455,316,463	1,813
43	Public Service Electric and Gas Company	\$ 250,302	\$2,327,007,762	9,297
44	Atlantic City Electric Company	\$ 250,116	\$ 512,087,318	2,047
45	Cleco Utility Group Inc.	\$ 247,522	\$ 395,737,916	1,599
46	Tucson Electric Power Company	\$ 246,747	\$ 416,261,951	1,687
47	IES Utilities Inc.	\$ 245,354	\$ 462,197,722	1,884
48	Baltimore Gas and Electric Company	\$ 242,126	\$1,467,770,801	6,062
49	The Detroit Edison Company	\$ 240,558	\$2,521,676,509	10,483
50	The Potomac Edison Company	\$ 239,281	\$ 603,800,750	2,523
51	Blackstone Valley Electric Company	\$ 238,734	\$ 64,028,370	268
52	Public Service Company of Colorado	\$ 237,952	\$1,097,197,042	4,611
53	Savannah Electric and Power Company	\$ 234,626	\$ 194,505,368	829
54	The Montana Power Company	\$ 231,990	\$ 330,399,575	1,424
55	Union Electric Company	\$ 231,396	\$1,820,303,275	7,867
56	Commonwealth Edison Company	\$ 231,093	\$4,477,667,166	19,376
57	Consumers Energy Company	\$ 229,255	\$1,666,498,769	7,269
58	Kansas City Power and Light Company	\$ 228,273	\$ 701,527,268	3,073
59	Otter Tail Power Company	\$ 226,771	\$ 140,960,576	622
60	Black Hills Corporation	\$ 225,563	\$ 74,706,422	331
61	Central Illinois Public Service Company	\$ 224,940	\$ 428,690,309	1,906
62	Rockland Electric Company	\$ 221,958	\$ 78,750,529	355
63	Madison Gas and Electric Company	\$ 216,618	\$ 130,664,035	603
64	Florida Power and Light Company	\$ 215,242	\$3,735,904,777	17,357
65	Idaho Power Company	\$ 212,167	\$ 559,485,164	2,637
66	The Toledo Edison Company	\$ 209,653	\$ 396,327,740	1,890

Rank	Company	Lines and Feeders Plant Investment per Megawatt of System Peak	Lines and Feeders Plant Investment	System Peak
67	Wisconsin Power and Light Company	\$ 208,359	\$ 474,641,672	2,278
68	Virginia Electric and Power Company	\$ 205,105	\$2,976,813,110	14,514
69	Cambridge Electric Light Company	\$ 204,888	\$ 58,925,851	288
70	Illinois Power Company	\$ 203,956	\$ 740,565,266	3,631
71	South Carolina Electric and Gas Company	\$ 203,696	\$ 782,520,100	3,842
72	MDU Resources Group Inc.	\$ 202,325	\$ 82,346,204	407
73	Duke Energy Corporation	\$ 201,475	\$3,146,107,003	15,615
74	Tampa Electric Company	\$ 200,427	\$ 656,157,732	3,274
75	West Penn Power Company	\$ 198,543	\$ 643,201,153	3,240
76	Wisconsin Public Service Corporation	\$ 198,256	\$ 326,130,830	1,645
77	Portland General Electric Company	\$ 197,905	\$ 723,064,460	3,654
78	Interstate Power Company	\$ 190,333	\$ 187,782,378	987
79	Columbus Southern Power Company	\$ 189,478	\$ 660,217,633	3,484
80	Oklahoma Gas and Electric Company	\$ 189,280	\$ 963,134,422	5,088
81	Alabama Power Company	\$ 189,111	\$1,929,385,106	10,202
82	Delmarva Power and Light Company	\$ 187,619	\$ 541,731,599	2,887
83	St. Joseph Light and Power Company	\$ 186,153	\$ 67,201,401	361
84	Pennsylvania Power Company	\$ 185,002	\$ 157,289,031	850
85	Kentucky Power Company	\$ 183,682	\$ 254,546,496	1,386
86	Mt. Carmel Public Utility Company	\$ 180,919	\$ 6,621,624	37
87	Central Power and Light Company	\$ 178,226	\$ 753,218,871	4,226
88	Northern Indiana Public Service Company	\$ 176,355	\$ 504,445,425	2,860
89	Appalachian Power Company	\$ 173,467	\$1,126,736,035	6,495
90	The Cleveland Electric Illuminating Company	\$ 171,681	\$ 717,456,947	4,179
91	Ohio Edison Company	\$ 166,622	\$ 934,717,192	5,610
92	The Cincinnati Gas and Electric Company	\$ 165,051	\$ 765,145,203	4,636
93	Citizens' Electric Company	\$ 160,779	\$ 6,013,131	37
94	Gulf Power Company	\$ 160,526	\$ 338,871,334	2,111
95	West Texas Utilities Company	\$ 160,461	\$ 239,022,097	1,490
96	Entergy Arkansas Inc.	\$ 159,235	\$ 929,615,560	5,838
97	South Beloit Water, Gas, and Electric Company	\$ 159,222	\$ 7,642,650	48
98	TXU Electric Company	\$ 158,486	\$3,246,649,138	20,485
99	Florida Power Corporation	\$ 157,648	\$1,290,100,456	8,183
100	Carolina Power and Light Company	\$ 156,623	\$1,513,852,692	9,666
101	Entergy New Orleans Inc.	\$ 154,078	\$ 186,218,909	1,209

Rank	Company	Lines and Feeders Plant Investment per Megawatt of System Peak	Lines and Feeders Plant Investment	System Peak
102	PSI Energy Inc.	\$ 152,497	\$ 820,465,950	5,380
103	El Paso Electric Company	\$ 151,943	\$ 210,562,292	1,386
104	The Dayton Power and Light Company	\$ 151,763	\$ 450,218,791	2,967
105	Indianapolis Power and Light Company	\$ 151,250	\$ 423,440,865	2,800
106	Entergy Louisiana Inc.	\$ 150,036	\$ 805,901,632	5,371
107	Kansas Gas and Electric Company	\$ 148,880	\$ 323,784,609	2,175
108	Wheeling Power Company	\$ 148,440	\$ 42,928,832	289
109	Louisville Gas and Electric Company	\$ 147,714	\$ 357,260,739	2,419
110	Southwestern Electric Power Company	\$ 147,379	\$ 617,281,006	4,188
111	Entergy Gulf States Inc.	\$ 145,449	\$ 929,302,250	6,389
112	Western Resources Inc.	\$ 143,303	\$ 389,383,750	2,717
113	Minnesota Power Inc.	\$ 135,946	\$ 196,822,419	1,448
114	Entergy Mississippi Inc.	\$ 132,647	\$ 360,348,502	2,717
115	Kentucky Utilities Company	\$ 132,055	\$ 463,908,911	3,513
116	Southern Indiana Gas and Electric Company	\$ 127,916	\$ 134,772,405	1,054
117	Superior Water, Light, and Power Company	\$ 114,934	\$ 9,930,289	86
118	Indiana Michigan Power Company	\$ 113,119	\$ 482,723,813	4,267
119	Kingsport Power Company	\$ 111,003	\$ 44,556,684	401
120	Ohio Power Company	\$ 108,150	\$ 628,435,937	5,811
121	Lockhart Power Company	\$ 102,673	\$ 7,762,089	76
122	Southwestern Public Service Company	\$ 91,505	\$ 371,473,884	4,060
123	Northwestern Public Service	\$ 88,950	\$ 61,766,931	694
124	Northern States Power Company (Wisconsin)	\$ 79,787	\$ 223,037,801	2,795

Statistical Summary	
Standard Deviation	\$ 100,906
Average	\$ 237,644
Correlation	0.89



Appendix D

Transformers and Substations Plant per Megawatt-Hour of System Energy

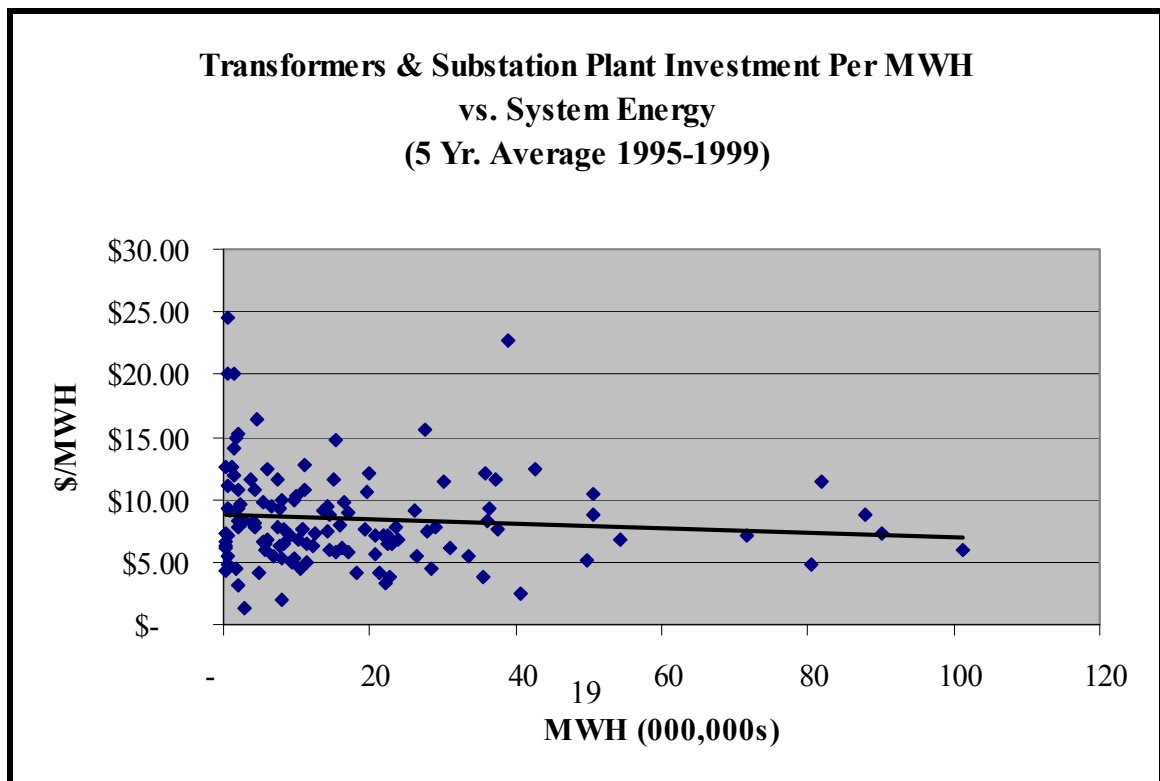
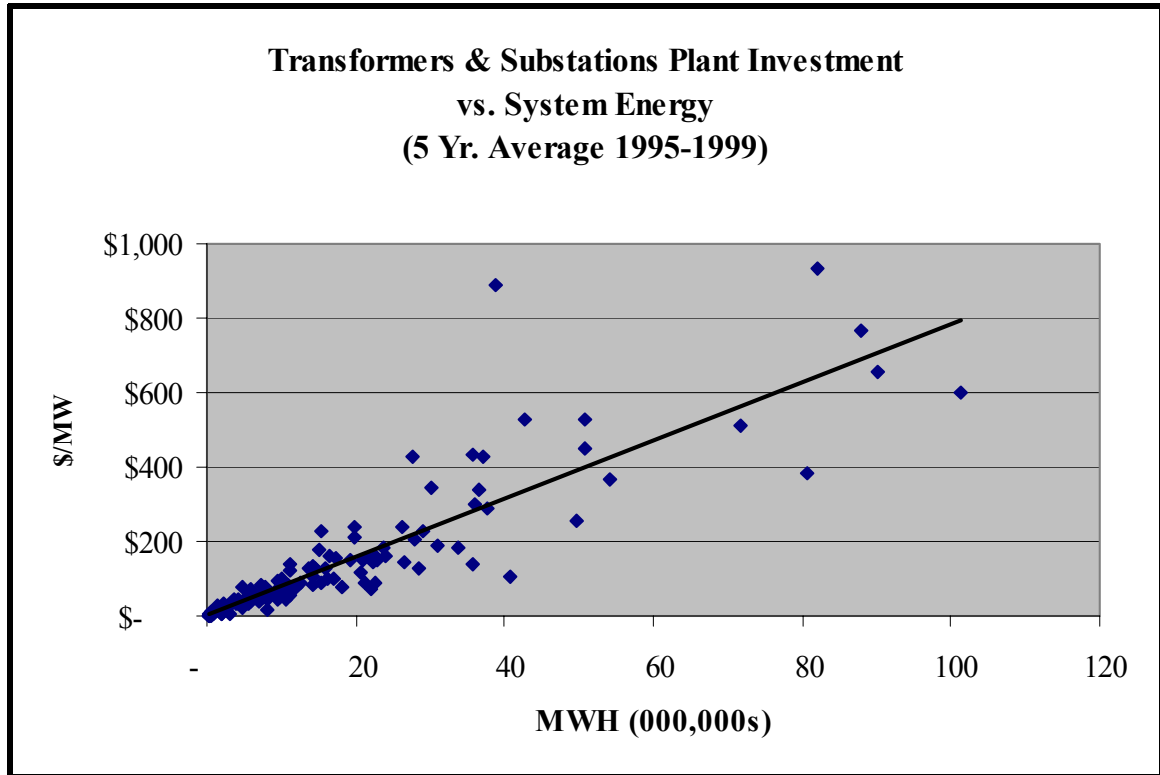
Rank	Company	Transformers and Substations Plant per Megawatt-Hour System Energy	Transformers and Substations Plant	System Energy
1	Newport Electric Corporation	\$ 24.45	\$ 13,800,194	564,402
2	Consolidated Edison Company of New York Inc.	\$ 24.45	\$ 13,800,194	564,402
3	Cambridge Electric Light Company	\$ 20.11	\$ 29,282,502	1,456,249
4	New Hampshire Electric Cooperative Inc.	\$ 19.99	\$ 8,844,680	442,482
5	Utilicorp United Inc.	\$ 16.43	\$ 76,695,671	4,668,133
6	Potomac Electric Power Company	\$ 15.57	\$ 428,921,955	27,543,193
7	Chugach Electric Association Inc.	\$ 15.28	\$ 32,442,295	2,123,200
8	St. Joseph Light and Power Company	\$ 14.92	\$ 23,725,259	1,589,636
9	Boston Edison Company	\$ 14.75	\$ 227,432,867	15,414,813
10	Rockland Electric Company	\$ 14.04	\$ 20,102,958	1,431,670
11	Monongahela Power Company	\$ 12.68	\$ 140,146,302	11,051,533
12	Northwestern Public Service	\$ 12.64	\$ 15,399,721	1,218,079
13	Alaska Electric Light and Power Company	\$ 12.62	\$ 3,884,371	307,743
14	Central Illinois Light Company	\$ 12.48	\$ 73,955,441	5,927,414
15	Public Service Electric and Gas Company	\$ 12.36	\$ 527,757,920	42,712,499
16	PP&L Inc.	\$ 12.14	\$ 434,775,613	35,823,128
17	Jersey Central Power and Light Company	\$ 12.07	\$ 239,801,084	19,859,873
18	Blackstone Valley Electric Company	\$ 12.01	\$ 16,039,840	1,335,580
19	Pennsylvania Electric Company	\$ 11.61	\$ 175,234,441	15,094,453
20	Hawaiian Electric Company Inc.	\$ 11.60	\$ 85,723,725	7,387,706
21	Commonwealth Electric Company	\$ 11.60	\$ 43,396,908	3,741,668
22	Union Electric Company	\$ 11.54	\$ 428,521,140	37,130,108
23	Baltimore Gas and Electric Company	\$ 11.39	\$ 344,609,105	30,246,999
24	Pacific Gas and Electric Company	\$ 11.37	\$ 931,769,877	81,970,667
25	Fitchburg Gas and Electric Light Company	\$ 11.17	\$ 5,878,428	526,049
26	The Empire District Electric Company	\$ 10.82	\$ 46,127,987	4,262,249
27	Metropolitan Edison Company	\$ 10.81	\$ 121,286,007	11,216,944
28	MDU Resources Group Inc.	\$ 10.80	\$ 21,781,239	2,016,859
29	West Penn Power Company	\$ 10.65	\$ 209,952,211	19,710,498
30	The Detroit Edison Company	\$ 10.46	\$ 529,997,371	50,677,248
31	Gulf Power Company	\$ 10.31	\$ 102,772,336	9,965,787
32	The Montana Power Company	\$ 10.01	\$ 79,494,194	7,941,894
33	Central Illinois Public Service Company	\$ 9.93	\$ 95,090,214	9,579,339

Rank	Company	Transformers and Substations Plant per Megawatt-Hour System Energy	Transformers and Substations Plant	System Energy
34	Central Hudson Gas and Electric Corporation	\$ 9.71	\$ 51,188,985	5,270,723
35	San Diego Gas and Electric Company	\$ 9.70	\$ 160,964,220	16,592,929
36	Central Vermont Public Service Corporation	\$ 9.56	\$ 23,008,703	2,407,001
37	Northern States Power Company (Wisconsin)	\$ 9.52	\$ 62,082,879	6,522,643
38	The Potomac Edison Company	\$ 9.50	\$ 134,249,492	14,130,894
39	Niagara Mohawk Power Corporation	\$ 9.29	\$ 338,560,535	36,454,413
40	Concord Electric Company	\$ 9.28	\$ 4,797,326	516,795
41	Bangor Hydro Electric Company	\$ 9.20	\$ 17,366,403	1,886,818
42	El Paso Electric Company	\$ 9.20	\$ 71,649,718	7,784,693
43	Kansas City Power and Light Company	\$ 9.17	\$ 125,406,520	13,673,569
44	Public Service Company of Colorado	\$ 9.05	\$ 236,938,490	26,191,057
45	Upper Peninsula Power Company	\$ 9.04	\$ 7,995,885	884,386
46	South Carolina Electric and Gas Company	\$ 8.91	\$ 153,148,993	17,184,133
47	PacifiCorp	\$ 8.86	\$ 449,503,282	50,728,090
48	Delmarva Power and Light Company	\$ 8.85	\$ 127,813,728	14,441,324
49	Florida Power and Light Company	\$ 8.70	\$ 764,223,367	87,791,495
50	Florida Power Corporation	\$ 8.27	\$ 297,503,464	35,982,053
51	Black Hills Corporation	\$ 8.24	\$ 15,745,365	1,911,552
52	Eastern Edison Company	\$ 8.23	\$ 22,761,006	2,764,324
53	Otter Tail Power Company	\$ 8.19	\$ 36,090,182	4,405,602
54	Savannah Electric and Power Company	\$ 8.19	\$ 31,659,842	3,867,179
55	Northern Indiana Public Service Company	\$ 7.93	\$ 126,976,142	16,019,258
56	Green Mountain Power Corporation	\$ 7.86	\$ 15,355,608	1,953,044
57	Wisconsin Electric Power Company	\$ 7.84	\$ 227,270,417	28,987,802
58	The Connecticut Light and Power Company	\$ 7.80	\$ 184,816,131	23,703,603
59	Public Service Company of New Mexico	\$ 7.79	\$ 57,670,294	7,402,096
60	Western Massachusetts Electric Company	\$ 7.74	\$ 32,096,017	4,147,032
61	Consumers Energy Company	\$ 7.68	\$ 288,301,333	37,548,269
62	Portland General Electric Company	\$ 7.63	\$ 147,805,975	19,376,560
63	Western Resources Inc.	\$ 7.63	\$ 82,415,514	10,806,857
64	Tucson Electric Power Company	\$ 7.59	\$ 61,692,106	8,130,333
65	IES Utilities Inc.	\$ 7.57	\$ 82,567,673	10,907,800
66	IES Utilities Inc.	\$ 7.57	\$ 82,567,673	10,907,800
67	PSI Energy Inc.	\$ 7.43	\$ 206,343,222	27,768,545
68	South Beloit Water, Gas, and Electric Company	\$ 7.34	\$ 1,521,127	207,209
69	Entergy Mississippi Inc.	\$ 7.31	\$ 91,472,676	12,513,733
70	Commonwealth Edison Company	\$ 7.26	\$ 654,229,939	90,055,263

Rank	Company	Transformers and Substations Plant per Megawatt-Hour System Energy	Transformers and Substations Plant	System Energy
71	Oklahoma Gas and Electric Company	\$ 7.19	\$ 162,572,698	22,597,867
72	Puget Sound Energy Inc.	\$ 7.19	\$ 157,292,750	21,877,894
73	Atlantic City Electric Company	\$ 7.17	\$ 65,401,066	9,115,446
74	Virginia Electric and Power Company	\$ 7.16	\$ 513,637,986	71,697,960
75	The Cleveland Electric Illuminating Company	\$ 7.12	\$ 148,207,904	20,816,451
76	Maine Public Service Company	\$ 7.06	\$ 4,075,060	577,058
77	The Toledo Edison Company	\$ 6.87	\$ 70,671,806	10,289,536
78	The Cincinnati Gas and Electric Company	\$ 6.79	\$ 162,506,853	23,944,957
79	Entergy New Orleans Inc.	\$ 6.72	\$ 40,306,888	5,997,337
80	Alabama Power Company	\$ 6.72	\$ 364,124,645	54,220,429
81	Southern Indiana Gas and Electric Company	\$ 6.66	\$ 35,933,603	5,396,955
82	Mt. Carmel Public Utility Company	\$ 6.64	\$ 1,108,804	166,990
83	Entergy Arkansas Inc.	\$ 6.50	\$ 149,409,972	22,981,319
84	Sierra Pacific Power Company	\$ 6.48	\$ 53,820,815	8,304,176
85	The United Illuminating Company	\$ 6.47	\$ 37,009,694	5,718,141
86	Arizona Public Service Company	\$ 6.45	\$ 144,777,767	22,453,926
87	Louisville Gas and Electric Company	\$ 6.38	\$ 72,214,245	11,310,389
88	Lockhart Power Company	\$ 6.34	\$ 2,375,405	374,666
89	Wisconsin Power and Light Company	\$ 6.29	\$ 76,391,824	12,139,395
90	West Texas Utilities Company	\$ 6.23	\$ 47,610,028	7,643,375
91	Tampa Electric Company	\$ 6.18	\$ 100,653,987	16,291,364
92	Connecticut Valley Electric Company Inc.	\$ 6.14	\$ 1,058,615	172,529
93	Entergy Louisiana Inc.	\$ 6.12	\$ 189,829,681	31,018,470
94	Interstate Power Company	\$ 6.01	\$ 33,874,961	5,635,900
95	Idaho Power Company	\$ 5.91	\$ 84,942,020	14,366,129
96	TXU Electric Company	\$ 5.90	\$ 597,255,038	101,259,002
97	Columbus Southern Power Company	\$ 5.82	\$ 99,439,280	17,095,324
98	The Dayton Power and Light Company	\$ 5.72	\$ 87,490,587	15,289,869
99	Southwestern Electric Power Company	\$ 5.57	\$ 115,445,945	20,742,046
100	Appalachian Power Company	\$ 5.43	\$ 183,045,192	33,689,762
101	Illinois Power Company	\$ 5.43	\$ 144,316,939	26,581,603
102	Kentucky Power Company	\$ 5.42	\$ 37,608,382	6,940,129
103	Superior Water, Light, and Power Company	\$ 5.40	\$ 3,046,694	563,818
104	Cleco Utility Group Inc.	\$ 5.38	\$ 42,940,474	7,987,460
105	Central Maine Power Company	\$ 5.29	\$ 51,519,993	9,731,463
106	Carolina Power and Light Company	\$ 5.14	\$ 255,365,484	49,685,053
107	Wisconsin Public Service Corporation	\$ 5.02	\$ 56,556,041	11,270,070

Rank	Company	Transformers and Substations Plant per Megawatt-Hour System Energy	Transformers and Substations Plant	System Energy
108	Kansas Gas and Electric Company	\$ 4.89	\$ 45,869,665	9,374,916
109	Duke Energy Corporation	\$ 4.75	\$ 382,289,649	80,553,222
110	Exeter and Hampton Electric Company	\$ 4.73	\$ 2,622,196	553,897
111	Ohio Edison Company	\$ 4.50	\$ 127,560,660	28,338,312
112	Wheeling Power Company	\$ 4.50	\$ 8,203,809	1,824,002
113	Minnesota Power Inc.	\$ 4.44	\$ 47,006,879	10,588,779
114	Citizens' Electric Company	\$ 4.28	\$ 710,276	166,105
115	Pennsylvania Power Company	\$ 4.20	\$ 19,889,922	4,737,775
116	Southwestern Public Service Company	\$ 4.17	\$ 89,033,824	21,342,420
117	Kentucky Utilities Company	\$ 4.16	\$ 75,532,862	18,151,113
118	Central Power and Light Company	\$ 3.85	\$ 87,451,761	22,711,782
119	Entergy Gulf States Inc.	\$ 3.83	\$ 136,701,173	35,657,841
120	Indiana Michigan Power Company	\$ 3.28	\$ 72,426,124	22,071,161
121	Kingsport Power Company	\$ 3.17	\$ 5,932,598	1,870,380
122	Ohio Power Company	\$ 2.55	\$ 103,604,981	40,686,911
123	Public Service Company of New Hampshire	\$ 2.05	\$ 16,601,599	8,093,376
124	Madison Gas and Electric Company	\$ 1.38	\$ 4,048,678	2,935,469

Statistical Summary		
Standard Deviation	\$	3.86
Average	\$	8.44
Correlation		0.88



Appendix E

Lines and Feeders Plant per Megawatt-Hour of System Energy

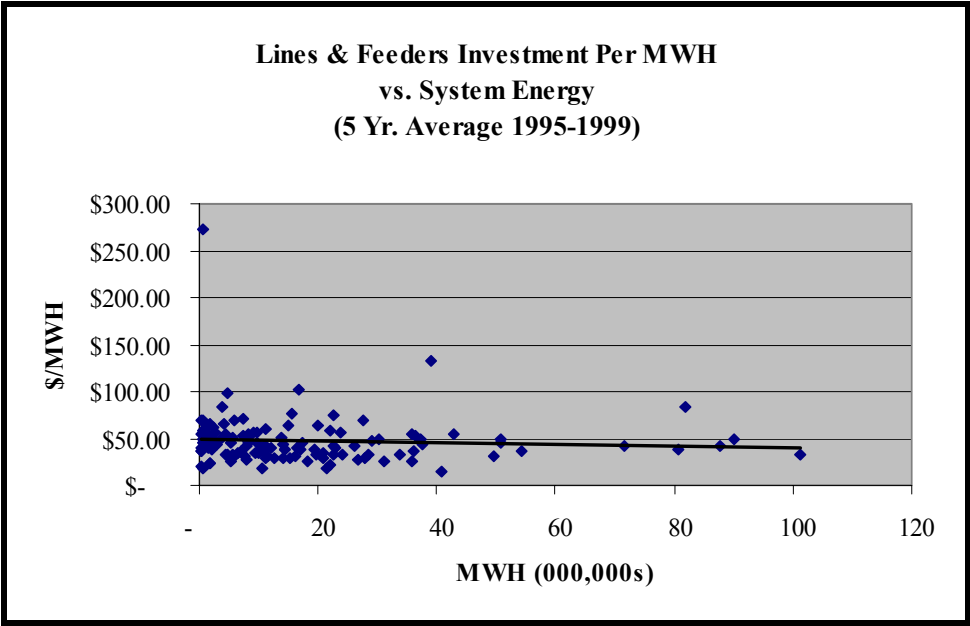
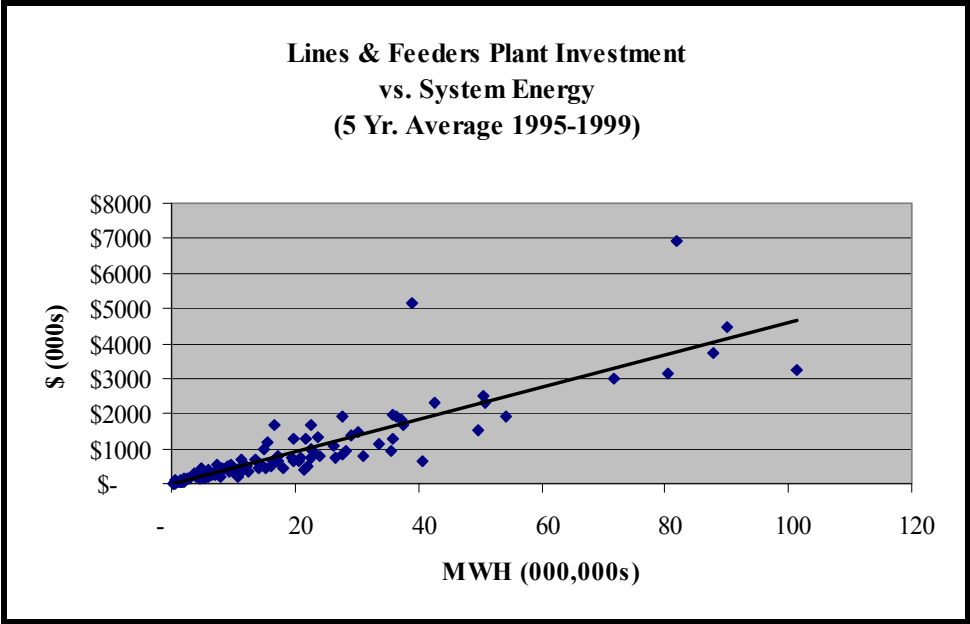
Rank	Company	Lines and Feeders Plant per Megawatt-Hour of System Energy	Lines and Feeders Plant	System Energy
1	New Hampshire Electric Cooperative Inc.	\$ 272.43	\$ 120,546,369	442,482
2	Consolidated Edison Company of New York Inc.	\$ 272.43	\$ 120,546,369	38,925,465
3	San Diego Gas and Electric Company	\$ 101.47	\$1,683,716,175	16,592,929
4	Utilicorp United Inc.	\$ 97.31	\$ 454,254,468	4,668,133
5	Pacific Gas and Electric Company	\$ 84.47	\$6,923,701,722	81,970,667
6	Commonwealth Electric Company	\$ 84.20	\$ 315,030,315	3,741,668
7	Boston Edison Company	\$ 75.75	\$1,167,653,610	15,414,813
8	Arizona Public Service Company	\$ 74.40	\$1,670,623,090	22,453,926
9	Hawaiian Electric Company Inc.	\$ 70.82	\$ 523,181,868	7,387,706
10	Alaska Electric Light and Power Company	\$ 69.59	\$ 21,416,443	307,743
11	Newport Electric Corporation	\$ 68.96	\$ 38,923,145	564,402
12	Potomac Electric Power Company	\$ 68.82	\$1,895,640,029	27,543,193
13	Central Illinois Light Company	\$ 68.37	\$ 405,251,400	5,927,414
14	Bangor Hydro Electric Company	\$ 65.25	\$ 123,118,487	1,886,818
15	Western Massachusetts Electric Company	\$ 64.59	\$ 267,870,079	4,147,032
16	Pennsylvania Electric Company	\$ 64.35	\$ 971,257,547	15,094,453
17	Jersey Central Power and Light Company	\$ 63.85	\$1,268,079,809	19,859,873
18	Central Vermont Public Service Corporation	\$ 61.94	\$ 149,099,913	2,407,001
19	Metropolitan Edison Company	\$ 60.45	\$ 678,098,338	11,216,944
20	Upper Peninsula Power Company	\$ 59.24	\$ 52,387,258	884,386
21	Puget Sound Energy Inc.	\$ 58.85	\$1,287,576,758	21,877,894
22	Exeter and Hampton Electric Company	\$ 57.33	\$ 31,755,414	553,897
23	Eastern Edison Company	\$ 56.44	\$ 156,011,335	2,764,324
24	Central Maine Power Company	\$ 56.26	\$ 547,450,024	9,731,463
25	Atlantic City Electric Company	\$ 56.18	\$ 512,087,318	9,115,446
26	The Connecticut Light and Power Company	\$ 56.16	\$1,331,288,341	23,703,603
27	Connecticut Valley Electric Company Inc.	\$ 55.39	\$ 9,556,550	172,529
28	Rockland Electric Company	\$ 55.01	\$ 78,750,529	1,431,670
29	Sierra Pacific Power Company	\$ 54.96	\$ 456,373,233	8,304,176
30	Maine Public Service Company	\$ 54.75	\$ 31,593,704	577,058
31	Public Service Electric and Gas Company	\$ 54.48	\$2,327,007,762	42,712,499
32	PP&L Inc.	\$ 54.43	\$1,949,727,817	35,823,128
33	The Empire District Electric Company	\$ 53.90	\$ 229,742,532	4,262,249

Rank	Company	Lines and Feeders Plant per Megawatt-Hour of System Energy	Lines and Feeders Plant	System Energy
34	Niagara Mohawk Power Corporation	\$ 52.56	\$1,915,911,627	36,454,413
35	Public Service Company of New Mexico	\$ 52.14	\$ 385,917,155	7,402,096
36	Kansas City Power and Light Company	\$ 51.31	\$ 701,527,268	13,673,569
37	Tucson Electric Power Company	\$ 51.20	\$ 416,261,951	8,130,333
38	The United Illuminating Company	\$ 50.90	\$ 291,061,098	5,718,141
39	Green Mountain Power Corporation	\$ 50.87	\$ 99,355,392	1,953,044
40	Northwestern Public Service	\$ 50.71	\$ 61,766,931	1,218,079
41	Savannah Electric and Power Company	\$ 50.30	\$ 194,505,368	3,867,179
42	The Detroit Edison Company	\$ 49.76	\$2,521,676,509	50,677,248
43	Commonwealth Edison Company	\$ 49.72	\$4,477,667,166	90,055,263
44	Cleco Utility Group Inc.	\$ 49.54	\$ 395,737,916	7,987,460
45	Union Electric Company	\$ 49.02	\$1,820,303,275	37,130,108
46	Fitchburg Gas and Electric Light Company	\$ 48.72	\$ 25,628,771	526,049
47	Baltimore Gas and Electric Company	\$ 48.53	\$1,467,770,801	30,246,999
48	Blackstone Valley Electric Company	\$ 47.94	\$ 64,028,370	1,335,580
49	Chugach Electric Association Inc.	\$ 47.54	\$ 100,936,279	2,123,200
50	Wisconsin Electric Power Company	\$ 46.59	\$1,350,633,223	28,987,802
51	Concord Electric Company	\$ 46.19	\$ 23,870,893	516,795
52	Central Hudson Gas and Electric Corporation	\$ 45.76	\$ 241,185,851	5,270,723
53	Public Service Company of New Hampshire	\$ 45.60	\$ 369,063,847	8,093,376
54	South Carolina Electric and Gas Company	\$ 45.54	\$ 782,520,100	17,184,133
55	PacifiCorp	\$ 45.11	\$2,288,127,120	50,728,090
56	Central Illinois Public Service Company	\$ 44.75	\$ 428,690,309	9,579,339
57	Madison Gas and Electric Company	\$ 44.51	\$ 130,664,035	2,935,469
58	Consumers Energy Company	\$ 44.38	\$1,666,498,769	37,548,269
59	The Potomac Edison Company	\$ 42.73	\$ 603,800,750	14,130,894
60	Oklahoma Gas and Electric Company	\$ 42.62	\$ 963,134,422	22,597,867
61	Florida Power and Light Company	\$ 42.55	\$3,735,904,777	87,791,495
62	IES Utilities Inc.	\$ 42.37	\$ 462,197,722	10,907,800
63	St. Joseph Light and Power Company	\$ 42.27	\$ 67,201,401	1,589,636
64	Public Service Company of Colorado	\$ 41.89	\$1,097,197,042	26,191,057
65	The Montana Power Company	\$ 41.60	\$ 330,399,575	7,941,894
66	The Montana Power Company	\$ 41.60	\$ 330,399,575	71,697,960
67	Monongahela Power Company	\$ 41.20	\$ 455,316,463	11,051,533
68	MDU Resources Group Inc.	\$ 40.83	\$ 82,346,204	2,016,859
69	Cambridge Electric Light Company	\$ 40.46	\$ 58,925,851	1,456,249
70	Entergy Arkansas Inc.	\$ 40.45	\$ 929,615,560	22,981,319

Rank	Company	Lines and Feeders Plant per Megawatt- Hour of System Energy	Lines and Feeders Plant	System Energy
71	Tampa Electric Company	\$ 40.28	\$ 656,157,732	16,291,364
72	Mt. Carmel Public Utility Company	\$ 39.65	\$ 6,621,624	166,990
73	Wisconsin Power and Light Company	\$ 39.10	\$ 474,641,672	12,139,395
74	Black Hills Corporation	\$ 39.08	\$ 74,706,422	1,911,552
75	Duke Energy Corporation	\$ 39.06	\$3,146,107,003	80,553,222
76	Idaho Power Company	\$ 38.94	\$ 559,485,164	14,366,129
77	Columbus Southern Power Company	\$ 38.62	\$ 660,217,633	17,095,324
78	The Toledo Edison Company	\$ 38.52	\$ 396,327,740	10,289,536
79	Delmarva Power and Light Company	\$ 37.51	\$ 541,731,599	14,441,324
80	Portland General Electric Company	\$ 37.32	\$ 723,064,460	19,376,560
81	South Beloit Water, Gas, and Electric Company	\$ 36.88	\$ 7,642,650	207,209
82	Kentucky Power Company	\$ 36.68	\$ 254,546,496	6,940,129
83	Citizens' Electric Company	\$ 36.20	\$ 6,013,131	166,105
84	Western Resources Inc.	\$ 36.03	\$ 389,383,750	10,806,857
85	Florida Power Corporation	\$ 35.85	\$1,290,100,456	35,982,053
86	Alabama Power Company	\$ 35.58	\$1,929,385,106	54,220,429
87	Kansas Gas and Electric Company	\$ 34.54	\$ 323,784,609	9,374,916
88	The Cleveland Electric Illuminating Company	\$ 34.47	\$ 717,456,947	20,816,451
89	Northern States Power Company (Wisconsin)	\$ 34.19	\$ 223,037,801	6,522,643
90	Gulf Power Company	\$ 34.00	\$ 338,871,334	9,965,787
91	Appalachian Power Company	\$ 33.44	\$1,126,736,035	33,689,762
92	Interstate Power Company	\$ 33.32	\$ 187,782,378	5,635,900
93	Pennsylvania Power Company	\$ 33.20	\$ 157,289,031	4,737,775
94	Central Power and Light Company	\$ 33.16	\$ 753,218,871	22,711,782
95	Ohio Edison Company	\$ 32.98	\$ 934,717,192	28,338,312
96	West Penn Power Company	\$ 32.63	\$ 643,201,153	19,710,498
97	TXU Electric Company	\$ 32.06	\$3,246,649,138	101,259,002
98	Otter Tail Power Company	\$ 32.00	\$ 140,960,576	4,405,602
99	The Cincinnati Gas and Electric Company	\$ 31.95	\$ 765,145,203	23,944,957
100	Louisville Gas and Electric Company	\$ 31.59	\$ 357,260,739	11,310,389
101	Northern Indiana Public Service Company	\$ 31.49	\$ 504,445,425	16,019,258
102	West Texas Utilities Company	\$ 31.27	\$ 239,022,097	7,643,375
103	Entergy New Orleans Inc.	\$ 31.05	\$ 186,218,909	5,997,337
104	Carolina Power and Light Company	\$ 30.47	\$1,513,852,692	49,685,053
105	Indianapolis Power and Light Company	\$ 29.98	\$ 423,440,865	14,125,160
106	Southwestern Electric Power Company	\$ 29.76	\$ 617,281,006	20,742,046
107	PSI Energy Inc.	\$ 29.55	\$ 820,465,950	27,768,545

Rank	Company	Lines and Feeders Plant per Megawatt- Hour of System Energy	Lines and Feeders Plant	System Energy
108	The Dayton Power and Light Company	\$ 29.45	\$ 450,218,791	15,289,869
109	Wisconsin Public Service Corporation	\$ 28.94	\$ 326,130,830	11,270,070
110	Entergy Mississippi Inc.	\$ 28.80	\$ 360,348,502	12,513,733
111	Illinois Power Company	\$ 27.86	\$ 740,565,266	26,581,603
112	El Paso Electric Company	\$ 27.05	\$ 210,562,292	7,784,693
113	Entergy Gulf States Inc.	\$ 26.06	\$ 929,302,250	35,657,841
114	Entergy Louisiana Inc.	\$ 25.98	\$ 805,901,632	31,018,470
115	Kentucky Utilities Company	\$ 25.56	\$ 463,908,911	18,151,113
116	Southern Indiana Gas and Electric Company	\$ 24.97	\$ 134,772,405	5,396,955
117	Kingsport Power Company	\$ 23.82	\$ 44,556,684	1,870,380
118	Wheeling Power Company	\$ 23.54	\$ 42,928,832	1,824,002
119	Indiana Michigan Power Company	\$ 21.87	\$ 482,723,813	22,071,161
120	Lockhart Power Company	\$ 20.72	\$ 7,762,089	374,666
121	Minnesota Power Inc.	\$ 18.59	\$ 196,822,419	10,588,779
122	Superior Water, Light, and Power Company	\$ 17.61	\$ 9,930,289	563,818
123	Southwestern Public Service Company	\$ 17.41	\$ 371,473,884	21,342,420
124	Ohio Power Company	\$ 15.45	\$ 628,435,937	40,686,911

Statistical Summary		
Standard Deviation	\$	26.95
Average	\$	47.01
Correlation		0.87



Appendix F

Transformers and Substations Plant per Number of Customers

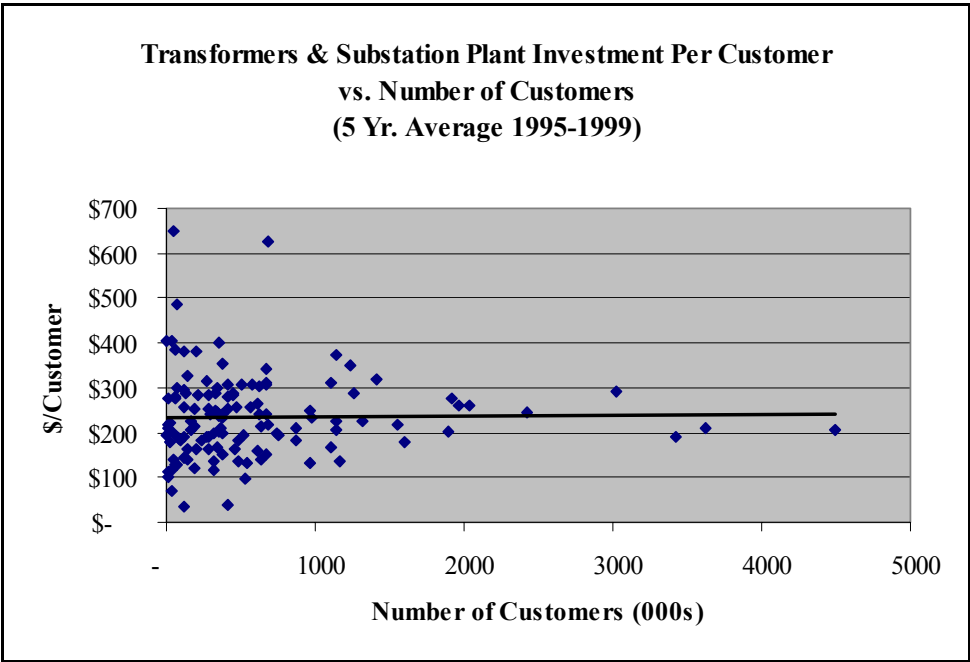
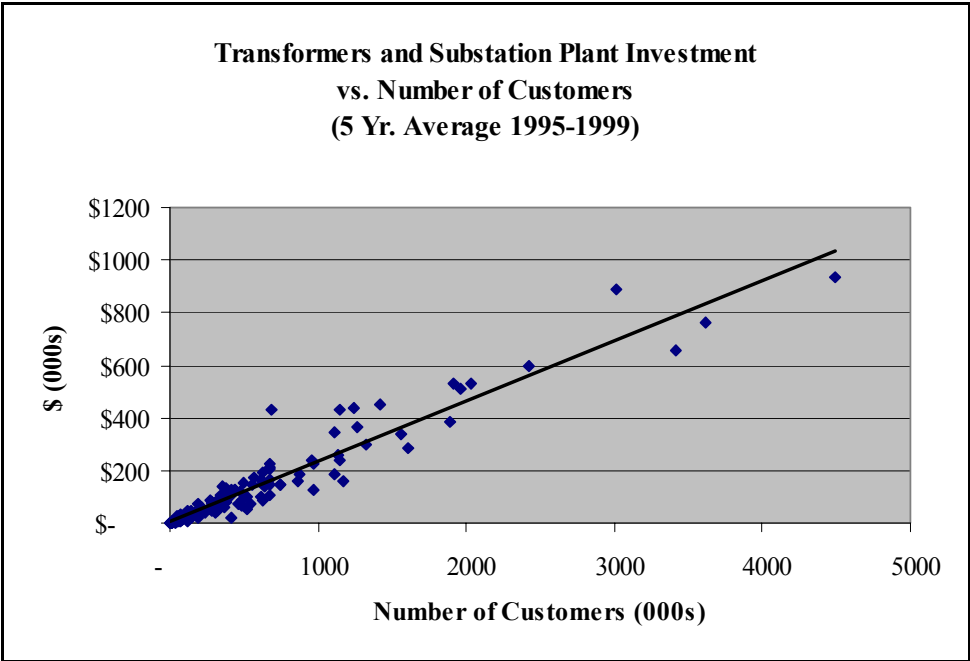
Rank	Company	Transformers and Substations Plant per Number of Customers	Transformers and Substations Plant	Number of Customers
1	Cambridge Electric Light Company	\$ 649	\$ 29,282,502	45,104
2	Potomac Electric Power Company	\$ 626	\$ 428,921,955	685,260
3	Chugach Electric Association Inc.	\$ 486	\$ 32,442,295	66,737
4	Newport Electric Corporation	\$ 406	\$ 13,800,194	34,012
5	Lockhart Power Company	\$ 404	\$ 2,375,405	5,876
6	Monongahela Power Company	\$ 399	\$ 140,146,302	351,318
7	St. Joseph Light and Power Company	\$ 386	\$ 23,725,259	61,541
8	Minnesota Power Inc.	\$ 381	\$ 47,006,879	123,335
9	Central Illinois Light Company	\$ 380	\$ 73,955,441	194,596
10	Union Electric Company	\$ 375	\$ 428,521,140	1,144,059
11	The Potomac Edison Company	\$ 354	\$ 134,249,492	379,343
12	PP&L Inc.	\$ 351	\$ 434,775,613	1,239,904
13	Boston Edison Company	\$ 340	\$ 227,432,867	667,949
14	The Empire District Electric Company	\$ 328	\$ 46,127,987	140,455
15	PacifiCorp	\$ 318	\$ 449,503,282	1,413,457
16	Hawaiian Electric Company Inc.	\$ 316	\$ 85,723,725	271,242
17	West Penn Power Company	\$ 313	\$ 209,952,211	671,490
18	Baltimore Gas and Electric Company	\$ 311	\$ 344,609,105	1,108,547
19	PSI Energy Inc.	\$ 308	\$ 206,343,222	669,017
20	Northern Indiana Public Service Company	\$ 307	\$ 126,976,142	413,575
21	South Carolina Electric and Gas Company	\$ 306	\$ 153,148,993	500,204
22	Pennsylvania Electric Company	\$ 306	\$ 175,234,441	572,966
23	Entergy Louisiana Inc.	\$ 305	\$ 189,829,681	622,326
24	Gulf Power Company	\$ 301	\$ 102,772,336	341,435
25	Rockland Electric Company	\$ 301	\$ 20,102,958	66,864
26	Southern Indiana Gas and Electric Company	\$ 294	\$ 35,933,603	122,295
27	Consolidated Edison Company of New York Inc.	\$ 294	\$ 886,227,981	3,018,380
28	Otter Tail Power Company	\$ 289	\$ 36,090,182	124,859
29	Delmarva Power and Light Company	\$ 289	\$ 127,813,728	442,747
30	Alabama Power Company	\$ 288	\$ 364,124,645	1,262,497
31	Central Illinois Public Service Company	\$ 286	\$ 95,090,214	332,612
32	Northern States Power Company (Wisconsin)	\$ 285	\$ 62,082,879	217,514

Rank	Company	Transformers and Substations Plant per Number of Customers	Transformers and Substations Plant	Number of Customers
33	The Montana Power Company	\$ 285	\$ 79,494,194	278,688
34	Kansas City Power and Light Company	\$ 283	\$ 125,406,520	442,611
35	Black Hills Corporation	\$ 281	\$ 15,745,365	56,068
36	Southwestern Electric Power Company	\$ 278	\$ 115,445,945	414,845
37	Public Service Electric and Gas Company	\$ 276	\$ 527,757,920	1,913,086
38	Northwestern Public Service	\$ 276	\$ 15,399,721	55,860
39	Alaska Electric Light and Power Company	\$ 276	\$ 3,884,371	14,094
40	The Cincinnati Gas and Electric Company	\$ 265	\$ 162,506,853	613,900
41	Virginia Electric and Power Company	\$ 262	\$ 513,637,986	1,960,993
42	The Detroit Edison Company	\$ 260	\$ 529,997,371	2,036,973
43	Illinois Power Company	\$ 258	\$ 144,316,939	560,164
44	Savannah Electric and Power Company	\$ 257	\$ 31,659,842	122,965
45	Metropolitan Edison Company	\$ 256	\$ 121,286,007	473,428
46	Indianapolis Power and Light Company	\$ 255	\$ 106,320,120	417,450
47	West Texas Utilities Company	\$ 254	\$ 47,610,028	187,148
48	El Paso Electric Company	\$ 254	\$ 71,649,718	282,499
49	Jersey Central Power and Light Company	\$ 249	\$ 239,801,084	961,927
50	Western Resources Inc.	\$ 247	\$ 82,415,514	333,424
51	TXU Electric Company	\$ 247	\$ 597,255,038	2,421,757
52	IES Utilities Inc.	\$ 245	\$ 82,567,673	337,275
53	Oklahoma Gas and Electric Company	\$ 241	\$ 162,572,698	675,306
54	The Toledo Edison Company	\$ 241	\$ 70,671,806	293,589
55	Entergy Arkansas Inc.	\$ 241	\$ 149,409,972	621,231
56	Entergy Mississippi Inc.	\$ 240	\$ 91,472,676	381,002
57	Idaho Power Company	\$ 238	\$ 84,942,020	356,956
58	Southwestern Public Service Company	\$ 235	\$ 89,033,824	378,453
59	Wisconsin Electric Power Company	\$ 234	\$ 227,270,417	973,000
60	Florida Power Corporation	\$ 226	\$ 297,503,464	1,319,146
61	Kentucky Power Company	\$ 224	\$ 37,608,382	167,555
62	Carolina Power and Light Company	\$ 224	\$ 255,365,484	1,138,375
63	Fitchburg Gas and Electric Light Company	\$ 223	\$ 5,878,428	26,348
64	Portland General Electric Company	\$ 218	\$ 147,805,975	677,858
65	Superior Water, Light, and Power Company	\$ 218	\$ 3,046,694	13,996
66	Niagara Mohawk Power Corporation	\$ 217	\$ 338,560,535	1,557,040
67	Entergy Gulf States Inc.	\$ 215	\$ 136,701,173	636,799
68	Entergy New Orleans Inc.	\$ 213	\$ 40,306,888	189,532
69	Florida Power and Light Company	\$ 211	\$ 764,223,367	3,618,302

Rank	Company	Transformers and Substations Plant per Number of Customers	Transformers and Substations Plant	Number of Customers
70	Utilicorp United Inc.	\$ 211	\$ 76,695,671	363,506
71	Appalachian Power Company	\$ 210	\$ 183,045,192	872,038
72	South Beloit Water, Gas, and Electric Company	\$ 209	\$ 1,521,127	7,271
73	Pacific Gas and Electric Company	\$ 208	\$ 931,769,877	4,489,628
74	Public Service Company of Colorado	\$ 207	\$ 236,938,490	1,142,535
75	Interstate Power Company	\$ 205	\$ 33,874,961	164,878
76	Louisville Gas and Electric Company	\$ 204	\$ 72,214,245	354,821
77	Duke Energy Corporation	\$ 202	\$ 382,289,649	1,888,956
78	Wisconsin Power and Light Company	\$ 200	\$ 76,391,824	381,796
79	The Cleveland Electric Illuminating Company	\$ 198	\$ 148,207,904	746,740
80	Wheeling Power Company	\$ 198	\$ 8,203,809	41,457
81	Tucson Electric Power Company	\$ 197	\$ 61,692,106	313,798
82	Mt. Carmel Public Utility Company	\$ 196	\$ 1,108,804	5,659
83	Tampa Electric Company	\$ 194	\$ 100,653,987	518,703
84	Arizona Public Service Company	\$ 194	\$ 144,777,767	747,799
85	Central Hudson Gas and Electric Corporation	\$ 192	\$ 51,188,985	266,291
86	MDU Resources Group Inc.	\$ 192	\$ 21,781,239	113,326
87	Commonwealth Edison Company	\$ 191	\$ 654,229,939	3,419,931
88	Sierra Pacific Power Company	\$ 191	\$ 53,820,815	282,520
89	Green Mountain Power Corporation	\$ 186	\$ 15,355,608	82,766
90	Cleco Utility Group Inc.	\$ 183	\$ 42,940,474	234,654
91	Puget Sound Energy Inc.	\$ 182	\$ 157,292,750	865,417
92	The Dayton Power and Light Company	\$ 181	\$ 87,490,587	482,274
93	Blackstone Valley Electric Company	\$ 181	\$ 16,039,840	88,577
94	Consumers Energy Company	\$ 180	\$ 288,301,333	1,604,104
95	Concord Electric Company	\$ 180	\$ 4,797,326	26,722
96	The Connecticut Light and Power Company	\$ 167	\$ 184,816,131	1,105,848
97	Public Service Company of New Mexico	\$ 167	\$ 57,670,294	345,302
98	Central Vermont Public Service Corporation	\$ 165	\$ 23,008,703	139,369
99	Western Massachusetts Electric Company	\$ 164	\$ 32,096,017	195,653
100	Kansas Gas and Electric Company	\$ 164	\$ 45,869,665	280,248
101	Kentucky Utilities Company	\$ 163	\$ 75,532,862	464,574
102	Columbus Southern Power Company	\$ 161	\$ 99,439,280	617,502
103	Ohio Power Company	\$ 153	\$ 103,604,981	675,594
104	Wisconsin Public Service Corporation	\$ 153	\$ 56,556,041	370,763
105	Bangor Hydro Electric Company	\$ 145	\$ 17,366,403	119,781
106	Pennsylvania Power Company	\$ 139	\$ 19,889,922	143,386

Rank	Company	Transformers and Substations Plant per Number of Customers	Transformers and Substations Plant	Number of Customers
107	Central Power and Light Company	\$ 139	\$ 87,451,761	630,688
108	Kingsport Power Company	\$ 138	\$ 5,932,598	42,901
109	San Diego Gas and Electric Company	\$ 138	\$ 160,964,220	1,168,926
110	Atlantic City Electric Company	\$ 136	\$ 65,401,066	481,221
111	Commonwealth Electric Company	\$ 135	\$ 43,396,908	322,445
112	Indiana Michigan Power Company	\$ 133	\$ 72,426,124	544,809
113	Ohio Edison Company	\$ 132	\$ 127,560,660	963,867
114	New Hampshire Electric Cooperative Inc.	\$ 128	\$ 8,844,680	69,003
115	Upper Peninsula Power Company	\$ 128	\$ 7,995,885	62,443
116	Eastern Edison Company	\$ 121	\$ 22,761,006	187,992
117	The United Illuminating Company	\$ 118	\$ 37,009,694	312,422
118	Maine Public Service Company	\$ 116	\$ 4,075,060	35,274
119	Citizens' Electric Company	\$ 113	\$ 710,276	6,279
120	Connecticut Valley Electric Company Inc.	\$ 102	\$ 1,058,615	10,352
121	Central Maine Power Company	\$ 98	\$ 51,519,993	524,631
122	Exeter and Hampton Electric Company	\$ 68	\$ 2,622,196	38,384
123	Public Service Company of New Hampshire	\$ 40	\$ 16,601,599	413,989
124	Madison Gas and Electric Company	\$ 33	\$ 4,048,678	122,194

Statistical Summary		
Standard Deviation	\$	94.85
Average	\$	236
Correlation		0.96



Appendix G

Lines and Feeders Plant per Number of Customers

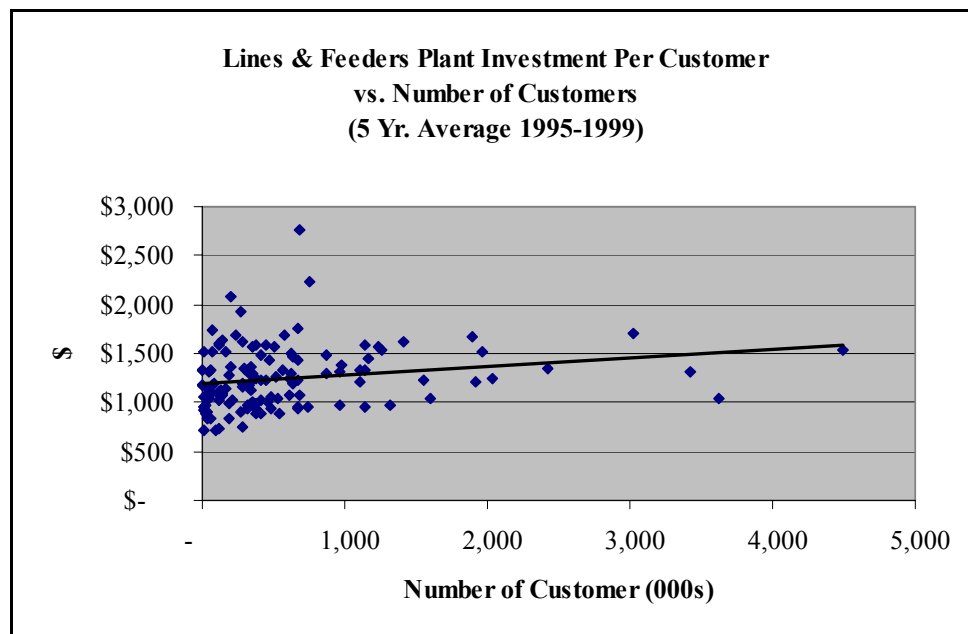
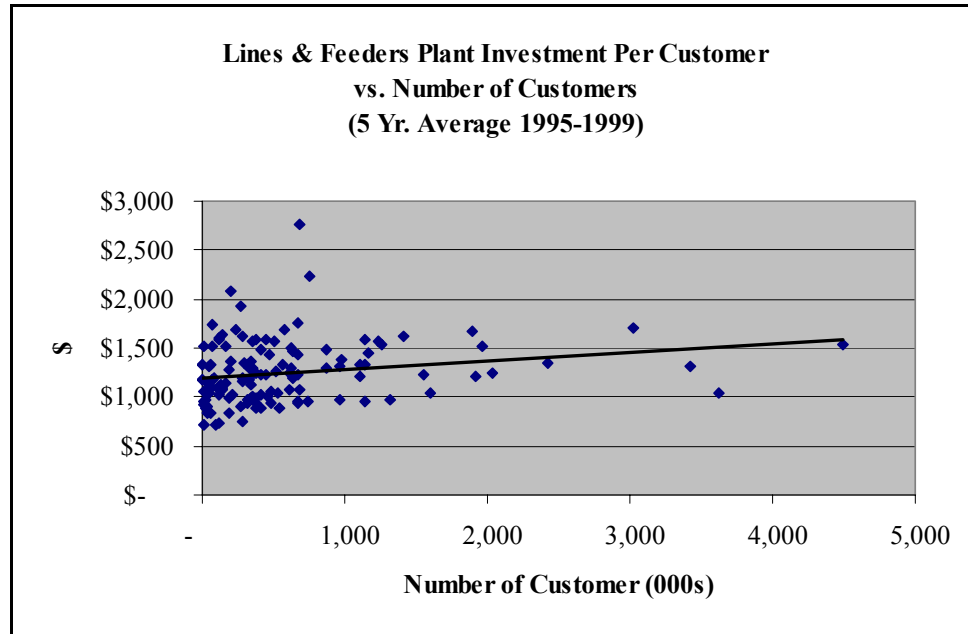
Rank	Company	Lines and Feeders Plant per Number of Customers	Lines and Feeders Plant	Number of Customers
1	Potomac Electric Power Company	\$ 2,766	\$1,895,640,029	685,260
2	Arizona Public Service Company	\$ 2,234	\$1,670,623,090	747,799
3	Central Illinois Light Company	\$ 2,083	\$ 405,251,400	194,596
4	Hawaiian Electric Company Inc.	\$ 1,929	\$ 523,181,868	271,242
5	Boston Edison Company	\$ 1,748	\$1,167,653,610	667,949
6	New Hampshire Electric Cooperative Inc.	\$ 1,747	\$ 120,546,369	69,003
7	Consolidated Edison Company of New York Inc.	\$ 1,711	\$5,164,834,180	3,018,380
8	Pennsylvania Electric Company	\$ 1,695	\$ 971,257,547	572,966
9	Cleco Utility Group Inc.	\$ 1,686	\$ 395,737,916	234,654
10	Duke Energy Corporation	\$ 1,666	\$3,146,107,003	1,888,956
11	The Empire District Electric Company	\$ 1,636	\$ 229,742,532	140,455
12	PacifiCorp	\$ 1,619	\$2,288,127,120	1,413,457
13	Sierra Pacific Power Company	\$ 1,615	\$ 456,373,233	282,520
14	Minnesota Power Inc.	\$ 1,596	\$ 196,822,419	123,335
15	The Potomac Edison Company	\$ 1,592	\$ 603,800,750	379,343
16	Union Electric Company	\$ 1,591	\$1,820,303,275	1,144,059
17	Kansas City Power and Light Company	\$ 1,585	\$ 701,527,268	442,611
18	Savannah Electric and Power Company	\$ 1,582	\$ 194,505,368	122,965
19	PP&L Inc.	\$ 1,572	\$1,949,727,817	1,239,904
20	Idaho Power Company	\$ 1,567	\$ 559,485,164	356,956
21	South Carolina Electric and Gas Company	\$ 1,564	\$ 782,520,100	500,204
22	Pacific Gas and Electric Company	\$ 1,542	\$6,923,701,722	4,489,628
23	Alabama Power Company	\$ 1,528	\$1,929,385,106	1,262,497
24	Alaska Electric Light and Power Company	\$ 1,520	\$ 21,416,443	14,094
25	Kentucky Power Company	\$ 1,519	\$ 254,546,496	167,555
26	Virginia Electric and Power Company	\$ 1,518	\$2,976,813,110	1,960,993
27	Chugach Electric Association Inc.	\$ 1,512	\$ 100,936,279	66,737
28	Entergy Arkansas Inc.	\$ 1,496	\$ 929,615,560	621,231
29	Southwestern Electric Power Company	\$ 1,488	\$ 617,281,006	414,845
30	Puget Sound Energy Inc.	\$ 1,488	\$1,287,576,758	865,417
31	Entergy Gulf States Inc.	\$ 1,459	\$ 929,302,250	636,799
32	San Diego Gas and Electric Company	\$ 1,440	\$1,683,716,175	1,168,926
33	Metropolitan Edison Company	\$ 1,432	\$ 678,098,338	473,428
34	Oklahoma Gas and Electric Company	\$ 1,426	\$ 963,134,422	675,306

Rank	Company	Lines and Feeders Plant per Number of Customers	Lines and Feeders Plant	Number of Customers
35	Wisconsin Electric Power Company	\$ 1,388	\$1,350,633,223	973,000
36	IES Utilities Inc.	\$ 1,370	\$ 462,197,722	337,275
37	Western Massachusetts Electric Company	\$ 1,369	\$ 267,870,079	195,653
38	The Toledo Edison Company	\$ 1,350	\$ 396,327,740	293,589
39	TXU Electric Company	\$ 1,341	\$3,246,649,138	2,421,757
40	Black Hills Corporation	\$ 1,332	\$ 74,706,422	56,068
41	Carolina Power and Light Company	\$ 1,330	\$1,513,852,692	1,138,375
42	Tucson Electric Power Company	\$ 1,327	\$ 416,261,951	313,798
43	Baltimore Gas and Electric Company	\$ 1,324	\$1,467,770,801	1,108,547
44	Illinois Power Company	\$ 1,322	\$ 740,565,266	560,164
45	Lockhart Power Company	\$ 1,321	\$ 7,762,089	5,876
46	Jersey Central Power and Light Company	\$ 1,318	\$1,268,079,809	961,927
47	Commonwealth Edison Company	\$ 1,309	\$4,477,667,166	3,419,931
48	Cambridge Electric Light Company	\$ 1,306	\$ 58,925,851	45,104
49	Monongahela Power Company	\$ 1,296	\$ 455,316,463	351,318
50	Entergy Louisiana Inc.	\$ 1,295	\$ 805,901,632	622,326
51	Appalachian Power Company	\$ 1,292	\$1,126,736,035	872,038
52	Central Illinois Public Service Company	\$ 1,289	\$ 428,690,309	332,612
53	West Texas Utilities Company	\$ 1,277	\$ 239,022,097	187,148
54	Tampa Electric Company	\$ 1,265	\$ 656,157,732	518,703
55	Utilicorp United Inc.	\$ 1,250	\$ 454,254,468	363,506
56	The Cincinnati Gas and Electric Company	\$ 1,246	\$ 765,145,203	613,900
57	Wisconsin Power and Light Company	\$ 1,243	\$ 474,641,672	381,796
58	The Detroit Edison Company	\$ 1,238	\$2,521,676,509	2,036,973
59	Niagara Mohawk Power Corporation	\$ 1,230	\$1,915,911,627	1,557,040
60	PSI Energy Inc.	\$ 1,226	\$ 820,465,950	669,017
61	Delmarva Power and Light Company	\$ 1,224	\$ 541,731,599	442,747
62	Northern Indiana Public Service Company	\$ 1,220	\$ 504,445,425	413,575
63	Public Service Electric and Gas Company	\$ 1,216	\$2,327,007,762	1,913,086
64	The Connecticut Light and Power Company	\$ 1,204	\$1,331,288,341	1,105,848
65	Green Mountain Power Corporation	\$ 1,200	\$ 99,355,392	82,766
66	Central Power and Light Company	\$ 1,194	\$ 753,218,871	630,688
67	The Montana Power Company	\$ 1,186	\$ 330,399,575	278,688
68	Rockland Electric Company	\$ 1,178	\$ 78,750,529	66,864
69	Mt. Carmel Public Utility Company	\$ 1,170	\$ 6,621,624	5,659
70	Western Resources Inc.	\$ 1,168	\$ 389,383,750	333,424
71	Kansas Gas and Electric Company	\$ 1,155	\$ 323,784,609	280,248
72	Newport Electric Corporation	\$ 1,144	\$ 38,923,145	34,012
73	Interstate Power Company	\$ 1,139	\$ 187,782,378	164,878

Rank	Company	Lines and Feeders Plant per Number of Customers	Lines and Feeders Plant	Number of Customers
74	Otter Tail Power Company	\$ 1,129	\$ 140,960,576	124,859
75	Public Service Company of New Mexico	\$ 1,118	\$ 385,917,155	345,302
76	Northwestern Public Service	\$ 1,106	\$ 61,766,931	55,860
77	Southern Indiana Gas and Electric Company	\$ 1,102	\$ 134,772,405	122,295
78	Pennsylvania Power Company	\$ 1,097	\$ 157,289,031	143,386
79	St. Joseph Light and Power Company	\$ 1,092	\$ 67,201,401	61,541
80	Central Vermont Public Service Corporation	\$ 1,070	\$ 149,099,913	139,369
81	Madison Gas and Electric Company	\$ 1,069	\$ 130,664,035	122,194
82	Columbus Southern Power Company	\$ 1,069	\$ 660,217,633	617,502
83	Portland General Electric Company	\$ 1,067	\$ 723,064,460	677,858
84	Atlantic City Electric Company	\$ 1,064	\$ 512,087,318	481,221
85	South Beloit Water, Gas, and Electric Company	\$ 1,051	\$ 7,642,650	7,271
86	Central Maine Power Company	\$ 1,043	\$ 547,450,024	524,631
87	Consumers Energy Company	\$ 1,039	\$1,666,498,769	1,604,104
88	Kingsport Power Company	\$ 1,039	\$ 44,556,684	42,901
89	Wheeling Power Company	\$ 1,036	\$ 42,928,832	41,457
90	Florida Power and Light Company	\$ 1,033	\$3,735,904,777	3,618,302
91	Bangor Hydro Electric Company	\$ 1,028	\$ 123,118,487	119,781
92	Northern States Power Company (Wisconsin)	\$ 1,025	\$ 223,037,801	217,514
93	Indianapolis Power and Light Company	\$ 1,014	\$ 423,440,865	417,450
94	Louisville Gas and Electric Company	\$ 1,007	\$ 357,260,739	354,821
95	Kentucky Utilities Company	\$ 999	\$ 463,908,911	464,574
96	Gulf Power Company	\$ 992	\$ 338,871,334	341,435
97	Entergy New Orleans Inc.	\$ 983	\$ 186,218,909	189,532
98	Southwestern Public Service Company	\$ 982	\$ 371,473,884	378,453
99	Florida Power Corporation	\$ 978	\$1,290,100,456	1,319,146
100	Commonwealth Electric Company	\$ 977	\$ 315,030,315	322,445
101	Fitchburg Gas and Electric Light Company	\$ 973	\$ 25,628,771	26,348
102	Ohio Edison Company	\$ 970	\$ 934,717,192	963,867
103	The Cleveland Electric Illuminating Company	\$ 961	\$ 717,456,947	746,740
104	Public Service Company of Colorado	\$ 960	\$1,097,197,042	1,142,535
105	West Penn Power Company	\$ 958	\$ 643,201,153	671,490
106	Citizens' Electric Company	\$ 958	\$ 6,013,131	6,279
107	Entergy Mississippi Inc.	\$ 946	\$ 360,348,502	381,002
108	The Dayton Power and Light Company	\$ 934	\$ 450,218,791	482,274
109	The United Illuminating Company	\$ 932	\$ 291,061,098	312,422
110	Ohio Power Company	\$ 930	\$ 628,435,937	675,594
111	Connecticut Valley Electric Company Inc.	\$ 923	\$ 9,556,550	10,352
112	Central Hudson Gas and Electric Corporation	\$ 906	\$ 241,185,851	266,291

Rank	Company	Lines and Feeders Plant per Number of Customers	Lines and Feeders Plant	Number of Customers
113	Maine Public Service Company	\$ 896	\$ 31,593,704	35,274
114	Concord Electric Company	\$ 893	\$ 23,870,893	26,722
115	Public Service Company of New Hampshire	\$ 891	\$ 369,063,847	413,989
116	Indiana Michigan Power Company	\$ 886	\$ 482,723,813	544,809
117	Wisconsin Public Service Corporation	\$ 880	\$ 326,130,830	370,763
118	Upper Peninsula Power Company	\$ 839	\$ 52,387,258	62,443
119	Eastern Edison Company	\$ 830	\$ 156,011,335	187,992
120	Exeter and Hampton Electric Company	\$ 827	\$ 31,755,414	38,384
121	El Paso Electric Company	\$ 745	\$ 210,562,292	282,499
122	MDU Resources Group Inc.	\$ 727	\$ 82,346,204	113,326
123	Blackstone Valley Electric Company	\$ 723	\$ 64,028,370	88,577
124	Superior Water, Light, and Power Company	\$ 709	\$ 9,930,289	13,996

Statistical Summary		
Standard Deviation	\$	319
Average	\$	1,248
Correlation		0.97



Appendix H

Transformers and Substations O&M Expense per Megawatt of System Peak

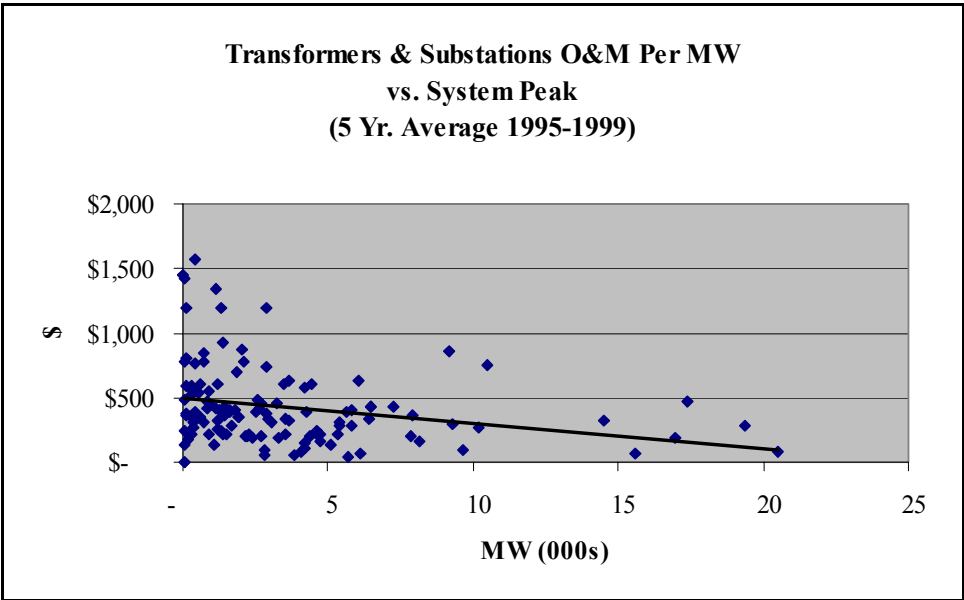
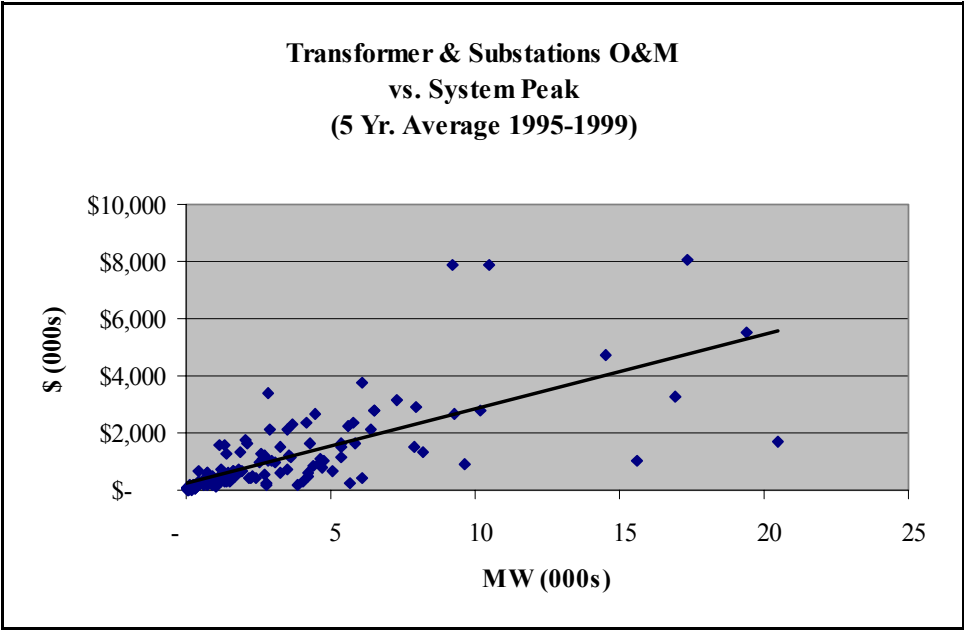
Rank	Company	Transformers and Substations O&M Expense per Megawatt of System Peak	Transformers and Substations O&M Expense	System Peak
1	Central Vermont Public Service Corporation	\$ 1,570	\$ 646,890	412.0
2	Connecticut Valley Electric Company Inc.	\$ 1,455	\$ 41,030	28.2
3	Alaska Electric Light and Power Company	\$ 1,426	\$ 89,267	62.6
4	The United Illuminating Company	\$ 1,337	\$ 1,548,348	1,158.2
5	Upper Peninsula Power Company	\$ 1,200	\$ 169,189	141.0
6	Boston Edison Company	\$ 1,198	\$ 3,416,610	2,851.0
7	Central Maine Power Company	\$ 1,192	\$ 1,598,025	1,340.4
8	Public Service Company of New Hampshire	\$ 925	\$ 1,257,711	1,359.0
9	Atlantic City Electric Company	\$ 872	\$ 1,785,195	2,047.4
10	Consolidated Edison Company of New York Inc.	\$ 856	\$ 7,875,797	9,195.4
11	Commonwealth Electric Company	\$ 844	\$ 599,554	710.6
12	Newport Electric Corporation	\$ 801	\$ 81,992	102.4
13	Gulf Power Company	\$ 784	\$ 1,655,319	2,111.0
14	Western Massachusetts Electric Company	\$ 782	\$ 585,718	749.0
15	Mt. Carmel Public Utility Company	\$ 780	\$ 28,539	36.6
16	MDU Resources Group Inc.	\$ 759	\$ 308,994	407.0
17	The Detroit Edison Company	\$ 752	\$ 7,887,184	10,482.6
18	Delmarva Power and Light Company	\$ 735	\$ 2,121,338	2,887.4
19	IES Utilities Inc.	\$ 701	\$ 1,320,566	1,883.8
20	Portland General Electric Company	\$ 630	\$ 2,301,913	3,653.6
21	Baltimore Gas and Electric Company	\$ 624	\$ 3,784,682	6,062.0
22	Columbus Southern Power Company	\$ 608	\$ 2,117,609	3,484.4
23	The Connecticut Light and Power Company	\$ 603	\$ 2,687,960	4,457.4
24	Otter Tail Power Company	\$ 601	\$ 373,398	621.6
25	Hawaiian Electric Company Inc.	\$ 598	\$ 712,107	1,191.0
26	Wheeling Power Company	\$ 592	\$ 171,305	289.2
27	Maine Public Service Company	\$ 587	\$ 59,722	101.8
28	Blackstone Valley Electric Company	\$ 582	\$ 156,218	268.2
29	The Cleveland Electric Illuminating Company	\$ 573	\$ 2,393,708	4,179.0
30	Cambridge Electric Light Company	\$ 568	\$ 163,481	287.6
31	Chugach Electric Association Inc.	\$ 564	\$ 221,186	392.2
32	Central Hudson Gas and Electric Corporation	\$ 557	\$ 514,057	923.4

Rank	Company	Transformers and Substations O&M Expense per Megawatt of System Peak	Transformers and Substations O&M Expense	System Peak
33	Eastern Edison Company	\$ 534	\$ 294,264	550.6
34	Bangor Hydro Electric Company	\$ 522	\$ 146,041	279.6
35	Pennsylvania Electric Company	\$ 486	\$ 1,263,635	2,597.6
36	Fitchburg Gas and Electric Light Company	\$ 482	\$ 41,751	86.6
37	Savannah Electric and Power Company	\$ 476	\$ 394,917	829.0
38	Florida Power and Light Company	\$ 464	\$ 8,049,496	17,356.8
39	West Penn Power Company	\$ 460	\$ 1,490,145	3,239.6
40	Entergy Mississippi Inc.	\$ 453	\$ 1,230,942	2,716.6
41	Interstate Power Company	\$ 438	\$ 432,035	986.6
42	Consumers Energy Company	\$ 435	\$ 3,165,248	7,269.2
43	PP&L Inc.	\$ 434	\$ 2,815,563	6,490.8
44	Appalachian Power Company	\$ 428	\$ 2,779,212	6,495.4
45	The Montana Power Company	\$ 425	\$ 605,276	1,424.2
46	Utilicorp United Inc.	\$ 420	\$ 483,404	1,151.6
47	Idaho Power Company	\$ 418	\$ 1,101,319	2,637.0
48	Pennsylvania Power Company	\$ 411	\$ 349,079	850.2
49	Kentucky Power Company	\$ 409	\$ 567,136	1,385.8
50	Ohio Power Company	\$ 407	\$ 2,364,503	5,810.8
51	Public Service Company of New Mexico	\$ 403	\$ 505,306	1,255.4
52	Monongahela Power Company	\$ 402	\$ 728,387	1,813.0
53	Cleco Utility Group Inc.	\$ 401	\$ 641,682	1,598.8
54	Ohio Edison Company	\$ 396	\$ 2,219,496	5,609.8
55	Wisconsin Public Service Corporation	\$ 392	\$ 645,102	1,645.0
56	Kingsport Power Company	\$ 390	\$ 156,632	401.4
57	Indiana Michigan Power Company	\$ 388	\$ 1,656,388	4,267.4
58	The Potomac Edison Company	\$ 383	\$ 965,797	2,523.4
59	Concord Electric Company	\$ 371	\$ 34,989	94.2
60	Northern Indiana Public Service Company	\$ 370	\$ 1,059,498	2,860.4
61	PacifiCorp	\$ 364	\$ 2,891,673	7,938.0
62	Exeter and Hampton Electric Company	\$ 363	\$ 38,864	107.2
63	Minnesota Power Inc.	\$ 361	\$ 522,214	1,447.8
64	Central Illinois Public Service Company	\$ 352	\$ 670,578	1,905.8
65	Madison Gas and Electric Company	\$ 347	\$ 209,500	603.2
66	The Toledo Edison Company	\$ 345	\$ 652,192	1,890.4
67	San Diego Gas and Electric Company	\$ 340	\$ 1,210,478	3,558.6
68	The Dayton Power and Light Company	\$ 339	\$ 1,007,092	2,966.6
69	St. Joseph Light and Power Company	\$ 336	\$ 121,318	361.0

Rank	Company	Transformers and Substations O&M Expense per Megawatt of System Peak	Transformers and Substations O&M Expense	System Peak
70	Entergy Gulf States Inc.	\$ 332	\$ 2,122,959	6,389.2
71	Virginia Electric and Power Company	\$ 327	\$ 4,747,799	14,513.6
72	Illinois Power Company	\$ 318	\$ 1,153,498	3,631.0
73	Entergy New Orleans Inc.	\$ 317	\$ 382,939	1,208.6
74	Rockland Electric Company	\$ 315	\$ 111,817	354.8
75	Kansas City Power and Light Company	\$ 314	\$ 966,256	3,073.2
76	Northwestern Public Service	\$ 303	\$ 210,651	694.4
77	PSI Energy Inc.	\$ 302	\$ 1,627,133	5,380.2
78	Public Service Electric and Gas Company	\$ 289	\$ 2,688,451	9,296.8
79	Commonwealth Edison Company	\$ 286	\$ 5,542,728	19,376.0
80	Entergy Arkansas Inc.	\$ 285	\$ 1,665,621	5,838.0
81	Entergy Louisiana Inc.	\$ 284	\$ 1,524,607	5,371.4
82	Tucson Electric Power Company	\$ 277	\$ 467,467	1,687.0
83	Alabama Power Company	\$ 275	\$ 2,805,773	10,202.4
84	Black Hills Corporation	\$ 274	\$ 90,666	331.2
85	Central Illinois Light Company	\$ 253	\$ 298,977	1,180.2
86	Sierra Pacific Power Company	\$ 246	\$ 325,318	1,322.2
87	Superior Water, Light, and Power Company	\$ 244	\$ 21,084	86.4
88	The Cincinnati Gas and Electric Company	\$ 237	\$ 1,097,232	4,635.8
89	Green Mountain Power Corporation	\$ 221	\$ 69,429	313.6
90	El Paso Electric Company	\$ 219	\$ 303,700	1,385.8
91	Wisconsin Electric Power Company	\$ 218	\$ 1,163,250	5,331.8
92	Public Service Company of Colorado	\$ 217	\$ 998,842	4,611.0
93	The Empire District Electric Company	\$ 216	\$ 191,486	885.6
94	Arizona Public Service Company	\$ 213	\$ 1,012,694	4,747.0
95	West Texas Utilities Company	\$ 212	\$ 315,482	1,489.6
96	Wisconsin Power and Light Company	\$ 211	\$ 481,749	2,278.0
97	Kentucky Utilities Company	\$ 209	\$ 734,549	3,513.0
98	Metropolitan Edison Company	\$ 203	\$ 452,744	2,229.8
99	Kansas Gas and Electric Company	\$ 200	\$ 435,695	2,174.8
100	Puget Sound Energy Inc.	\$ 198	\$ 868,026	4,377.8
101	Union Electric Company	\$ 195	\$ 1,532,802	7,866.6
102	Western Resources Inc.	\$ 195	\$ 528,930	2,717.2
103	Pacific Gas and Electric Company	\$ 192	\$ 3,254,958	16,955.2
104	Tampa Electric Company	\$ 186	\$ 609,914	3,273.8
105	Louisville Gas and Electric Company	\$ 184	\$ 445,253	2,418.6
106	New Hampshire Electric Cooperative Inc.	\$ 171	\$ 28,161	164.6

Rank	Company	Transformers and Substations O&M Expense per Megawatt of System Peak	Transformers and Substations O&M Expense	System Peak
107	Florida Power Corporation	\$ 164	\$ 1,342,960	8,183.4
108	Jersey Central Power and Light Company	\$ 163	\$ 771,504	4,723.6
109	Central Power and Light Company	\$ 141	\$ 595,844	4,226.2
110	Lockhart Power Company	\$ 140	\$ 10,575	75.6
111	Oklahoma Gas and Electric Company	\$ 136	\$ 694,304	5,088.4
112	Southern Indiana Gas and Electric Company	\$ 128	\$ 134,494	1,053.6
113	Southwestern Electric Power Company	\$ 114	\$ 476,957	4,188.4
114	Northern States Power Company (Wisconsin)	\$ 96	\$ 268,052	2,795.4
115	Carolina Power and Light Company	\$ 91	\$ 883,927	9,665.6
116	TXU Electric Company	\$ 82	\$ 1,681,505	20,485.4
117	Southwestern Public Service Company	\$ 74	\$ 300,731	4,059.6
118	Niagara Mohawk Power Corporation	\$ 69	\$ 423,248	6,104.2
119	Duke Energy Corporation	\$ 67	\$ 1,048,193	15,615.4
120	Indianapolis Power and Light Company	\$ 59	\$ 165,471	2,799.6
121	South Carolina Electric and Gas Company	\$ 50	\$ 190,824	3,841.6
122	Potomac Electric Power Company	\$ 38	\$ 215,621	5,688.6
123	Citizens' Electric Company	\$ 0	\$ 0	37.4
124	South Beloit Water, Gas, and Electric Company	\$ 0	\$ 0	48.0

Statistical Summary		
Standard Deviation	\$	305.91
Average	\$	424
Correlation		0.71



Appendix I

Lines and Feeders O&M Expense per Megawatt of System Peak

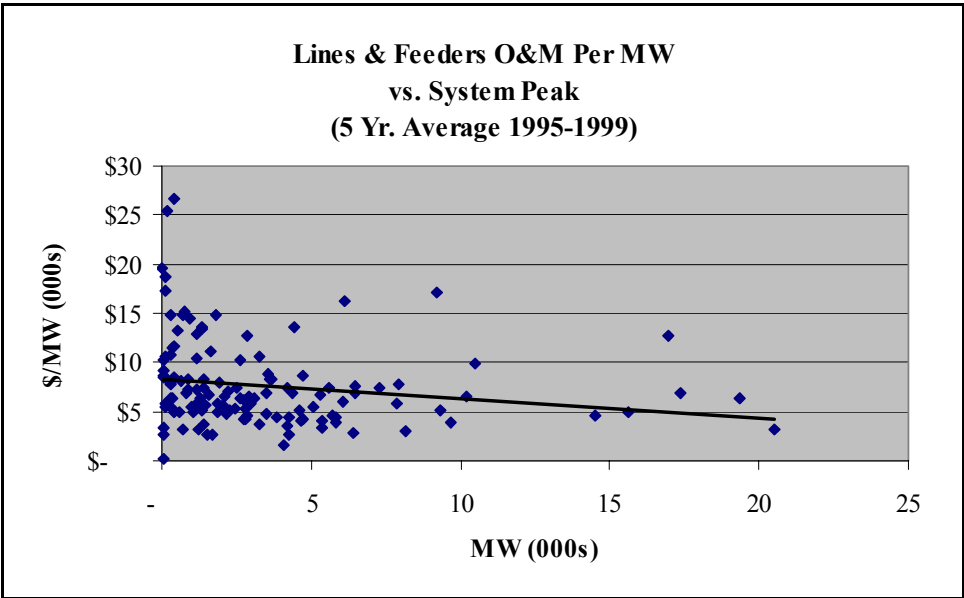
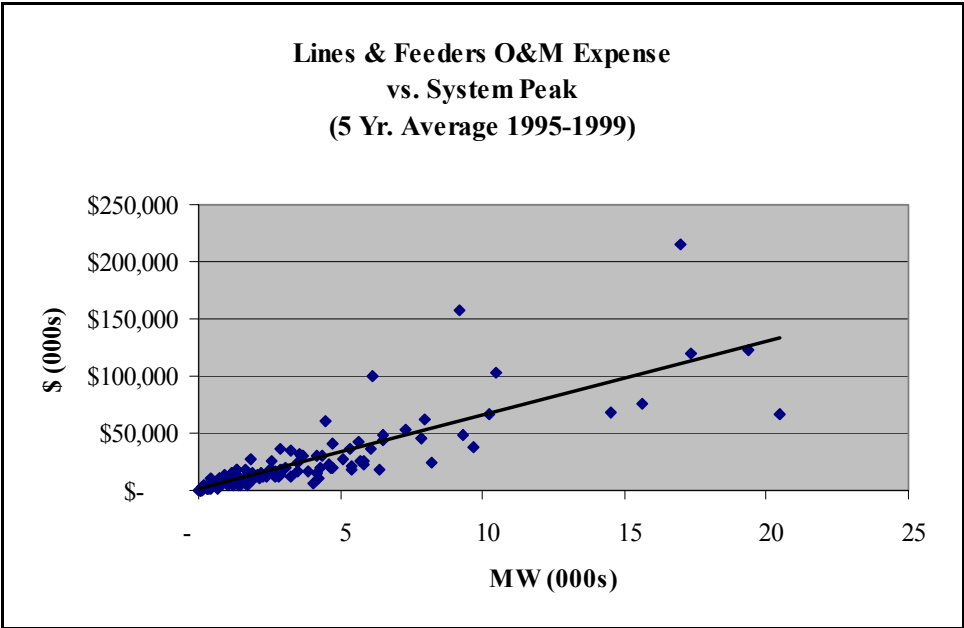
Rank	Company	Lines and Feeders O&M Expense per Megawatt of System Peak	Lines and Feeders O&M Expense	System Peak
1	Central Vermont Public Service Corporation	\$ 26,649	\$ 10,979,355	412.0
2	New Hampshire Electric Cooperative Inc.	\$ 26,649	\$ 10,979,355	164.6
3	Connecticut Valley Electric Company Inc.	\$ 19,610	\$ 553,006	28.2
4	Upper Peninsula Power Company	\$ 18,626	\$ 2,626,257	141.0
5	Newport Electric Corporation	\$ 17,258	\$ 1,767,171	102.4
6	Consolidated Edison Company of New York Inc.	\$ 17,089	\$ 157,138,770	9,195.4
7	Niagara Mohawk Power Corporation	\$ 16,269	\$ 99,310,875	6,104.2
8	Western Massachusetts Electric Company	\$ 15,097	\$ 11,307,684	749.0
9	Commonwealth Electric Company	\$ 14,816	\$ 10,528,430	710.6
10	Monongahela Power Company	\$ 14,772	\$ 26,780,807	1,813.0
11	Bangor Hydro Electric Company	\$ 14,746	\$ 4,123,088	279.6
12	Central Hudson Gas and Electric Corporation	\$ 14,388	\$ 13,285,963	923.4
13	The Connecticut Light and Power Company	\$ 13,657	\$ 60,876,357	4,457.4
14	Public Service Company of New Hampshire	\$ 13,622	\$ 18,511,918	1,359.0
15	Central Maine Power Company	\$ 13,441	\$ 18,015,849	1,340.4
16	Eastern Edison Company	\$ 13,216	\$ 7,276,765	550.6
17	The United Illuminating Company	\$ 12,799	\$ 14,823,822	1,158.2
18	Pacific Gas and Electric Company	\$ 12,674	\$ 214,896,071	16,955.2
19	Boston Edison Company	\$ 12,630	\$ 36,008,596	2,851.0
20	Chugach Electric Association Inc.	\$ 11,703	\$ 4,589,881	392.2
21	Rockland Electric Company	\$ 11,528	\$ 4,090,037	354.8
22	Wisconsin Public Service Corporation	\$ 11,162	\$ 18,360,736	1,645.0
23	Blackstone Valley Electric Company	\$ 10,739	\$ 2,880,280	268.2
24	West Penn Power Company	\$ 10,616	\$ 34,390,075	3,239.6
25	Maine Public Service Company	\$ 10,558	\$ 1,074,842	101.8
26	Utilicorp United Inc.	\$ 10,441	\$ 12,023,302	1,151.6
27	Alaska Electric Light and Power Company	\$ 10,236	\$ 640,751	62.6
28	Pennsylvania Electric Company	\$ 10,163	\$ 26,399,711	2,597.6
29	The Detroit Edison Company	\$ 9,826	\$ 103,003,030	10,482.6
30	Mt. Carmel Public Utility Company	\$ 9,112	\$ 333,515	36.6
31	San Diego Gas and Electric Company	\$ 8,855	\$ 31,510,250	3,558.6
32	Jersey Central Power and Light Company	\$ 8,625	\$ 40,740,620	4,723.6
33	Fitchburg Gas and Electric Light Company	\$ 8,591	\$ 744,014	86.6

Rank	Company	Lines and Feeders O&M Expense per Megawatt of System Peak	Lines and Feeders O&M Expense	System Peak
34	Citizens' Electric Company	\$ 8,534	\$ 319,159	37.4
35	MDU Resources Group Inc.	\$ 8,409	\$ 3,422,632	407.0
36	Portland General Electric Company	\$ 8,373	\$ 30,591,193	3,653.6
37	The Montana Power Company	\$ 8,365	\$ 11,913,588	1,424.2
38	Illinois Power Company	\$ 8,309	\$ 30,171,008	3,631.0
39	Pennsylvania Power Company	\$ 8,235	\$ 7,001,075	850.2
40	Otter Tail Power Company	\$ 8,045	\$ 5,000,695	621.6
41	Wheeling Power Company	\$ 7,950	\$ 2,299,109	289.2
42	Central Illinois Public Service Company	\$ 7,893	\$ 15,042,002	1,905.8
43	Green Mountain Power Corporation	\$ 7,835	\$ 2,456,923	313.6
44	PacifiCorp	\$ 7,807	\$ 61,969,372	7,938.0
45	Appalachian Power Company	\$ 7,569	\$ 49,161,782	6,495.4
46	The Potomac Edison Company	\$ 7,496	\$ 18,914,296	2,523.4
47	Ohio Edison Company	\$ 7,457	\$ 41,833,414	5,609.8
48	Kentucky Power Company	\$ 7,387	\$ 10,236,914	1,385.8
49	The Cleveland Electric Illuminating Company	\$ 7,383	\$ 30,853,133	4,179.0
50	Consumers Energy Company	\$ 7,330	\$ 53,280,756	7,269.2
51	The Empire District Electric Company	\$ 7,317	\$ 6,479,938	885.6
52	Hawaiian Electric Company Inc.	\$ 7,287	\$ 8,679,364	1,191.0
53	Metropolitan Edison Company	\$ 7,066	\$ 15,756,284	2,229.8
54	Puget Sound Energy Inc.	\$ 6,938	\$ 30,371,782	4,377.8
55	Columbus Southern Power Company	\$ 6,919	\$ 24,108,937	3,484.4
56	Florida Power and Light Company	\$ 6,900	\$ 119,762,868	17,356.8
57	Savannah Electric and Power Company	\$ 6,870	\$ 5,695,407	829.0
58	PP&L Inc.	\$ 6,868	\$ 44,575,705	6,490.8
59	Wisconsin Electric Power Company	\$ 6,757	\$ 36,028,202	5,331.8
60	Cleco Utility Group Inc.	\$ 6,712	\$ 10,730,732	1,598.8
61	Alabama Power Company	\$ 6,578	\$ 67,115,551	10,202.4
62	Delmarva Power and Light Company	\$ 6,461	\$ 18,654,313	2,887.4
63	Gulf Power Company	\$ 6,458	\$ 13,632,055	2,111.0
64	Cambridge Electric Light Company	\$ 6,407	\$ 1,842,592	287.6
65	Kansas City Power and Light Company	\$ 6,393	\$ 19,648,127	3,073.2
66	Kansas City Power and Light Company	\$ 6,393	\$ 19,648,127	1,255.4
67	Commonwealth Edison Company	\$ 6,367	\$ 123,367,432	19,376.0
68	Idaho Power Company	\$ 6,352	\$ 16,749,887	2,637.0
69	St. Joseph Light and Power Company	\$ 6,273	\$ 2,264,430	361.0
70	Entergy Mississippi Inc.	\$ 6,132	\$ 16,659,012	2,716.6

Rank	Company	Lines and Feeders O&M Expense per Megawatt of System Peak	Lines and Feeders O&M Expense	System Peak
71	Baltimore Gas and Electric Company	\$ 6,042	\$ 36,627,986	6,062.0
72	IES Utilities Inc.	\$ 5,906	\$ 11,125,938	1,883.8
73	The Dayton Power and Light Company	\$ 5,899	\$ 17,501,437	2,966.6
74	Union Electric Company	\$ 5,847	\$ 45,997,075	7,866.6
75	Concord Electric Company	\$ 5,834	\$ 549,609	94.2
76	Central Illinois Light Company	\$ 5,774	\$ 6,814,811	1,180.2
77	Atlantic City Electric Company	\$ 5,712	\$ 11,694,307	2,047.4
78	Minnesota Power Inc.	\$ 5,685	\$ 8,231,207	1,447.8
79	Interstate Power Company	\$ 5,445	\$ 5,371,766	986.6
80	Oklahoma Gas and Electric Company	\$ 5,422	\$ 27,587,972	5,088.4
81	Exeter and Hampton Electric Company	\$ 5,392	\$ 578,058	107.2
82	Indianapolis Power and Light Company	\$ 5,334	\$ 14,933,885	2,799.6
83	Black Hills Corporation	\$ 5,276	\$ 1,747,442	331.2
84	Louisville Gas and Electric Company	\$ 5,249	\$ 12,694,520	2,418.6
85	Wisconsin Power and Light Company	\$ 5,195	\$ 11,835,229	2,278.0
86	Public Service Electric and Gas Company	\$ 5,137	\$ 47,761,628	9,296.8
87	Sierra Pacific Power Company	\$ 5,102	\$ 6,745,292	1,322.2
88	Public Service Company of Colorado	\$ 5,040	\$ 23,239,513	4,611.0
89	Kingsport Power Company	\$ 4,969	\$ 1,994,588	401.4
90	Madison Gas and Electric Company	\$ 4,926	\$ 2,971,530	603.2
91	Southern Indiana Gas and Electric Company	\$ 4,898	\$ 5,160,795	1,053.6
92	The Toledo Edison Company	\$ 4,863	\$ 9,193,393	1,890.4
93	Duke Energy Corporation	\$ 4,863	\$ 75,938,313	15,615.4
94	Kentucky Utilities Company	\$ 4,842	\$ 17,011,419	3,513.0
95	Kansas Gas and Electric Company	\$ 4,713	\$ 10,249,298	2,174.8
96	Virginia Electric and Power Company	\$ 4,662	\$ 67,663,623	14,513.6
97	Northern Indiana Public Service Company	\$ 4,588	\$ 13,122,116	2,860.4
98	Potomac Electric Power Company	\$ 4,579	\$ 26,047,099	5,688.6
99	Indiana Michigan Power Company	\$ 4,448	\$ 18,979,764	4,267.4
100	South Carolina Electric and Gas Company	\$ 4,387	\$ 16,851,341	3,841.6
101	Ohio Power Company	\$ 4,373	\$ 25,411,195	5,810.8
102	Arizona Public Service Company	\$ 4,237	\$ 20,111,395	4,747.0
103	Western Resources Inc.	\$ 4,198	\$ 11,406,059	2,717.2
104	Northern States Power Company (Wisconsin)	\$ 4,166	\$ 11,646,194	2,795.4
105	The Cincinnati Gas and Electric Company	\$ 4,087	\$ 18,948,573	4,635.8
106	PSI Energy Inc.	\$ 4,001	\$ 21,528,409	5,380.2
107	Carolina Power and Light Company	\$ 3,919	\$ 37,881,446	9,665.6

Rank	Company	Lines and Feeders O&M Expense per Megawatt of System Peak	Lines and Feeders O&M Expense	System Peak
108	Entergy Arkansas Inc.	\$ 3,889	\$ 22,705,596	5,838.0
109	El Paso Electric Company	\$ 3,697	\$ 5,123,822	1,385.8
110	Tampa Electric Company	\$ 3,668	\$ 12,008,726	3,273.8
111	Southwestern Electric Power Company	\$ 3,468	\$ 14,526,590	4,188.4
112	Entergy Louisiana Inc.	\$ 3,433	\$ 18,441,710	5,371.4
113	Superior Water, Light, and Power Company	\$ 3,318	\$ 286,641	86.4
114	Entergy New Orleans Inc.	\$ 3,255	\$ 3,933,571	1,208.6
115	TXU Electric Company	\$ 3,242	\$ 66,419,695	20,485.4
116	Northwestern Public Service	\$ 3,150	\$ 2,187,514	694.4
117	Florida Power Corporation	\$ 3,032	\$ 24,810,726	8,183.4
118	Entergy Gulf States Inc.	\$ 2,870	\$ 18,336,812	6,389.2
119	West Texas Utilities Company	\$ 2,705	\$ 4,029,116	1,489.6
120	Lockhart Power Company	\$ 2,692	\$ 203,512	75.6
121	Tucson Electric Power Company	\$ 2,631	\$ 4,438,032	1,687.0
122	Central Power and Light Company	\$ 2,586	\$ 10,930,500	4,226.2
123	Southwestern Public Service Company	\$ 1,676	\$ 6,805,744	4,059.6
124	South Beloit Water, Gas, and Electric Company	\$ 89	\$ 4,293	48.0

Statistical Summary		
Standard Deviation	\$	4,469.91
Average	\$	7,671
Correlation		0.83



Appendix J

Transformers and Substations O&M Expense per Megawatt-Hour of System Energy

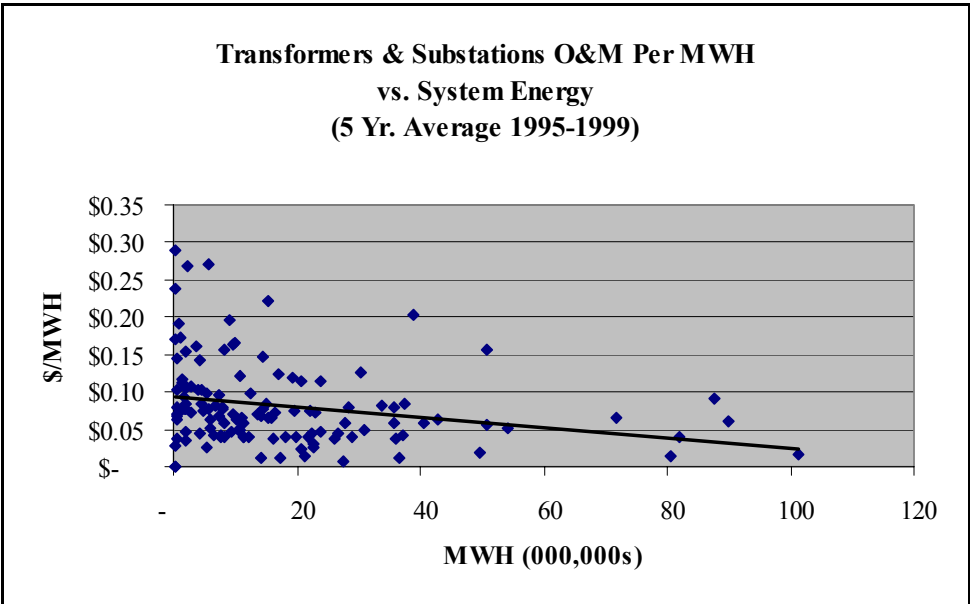
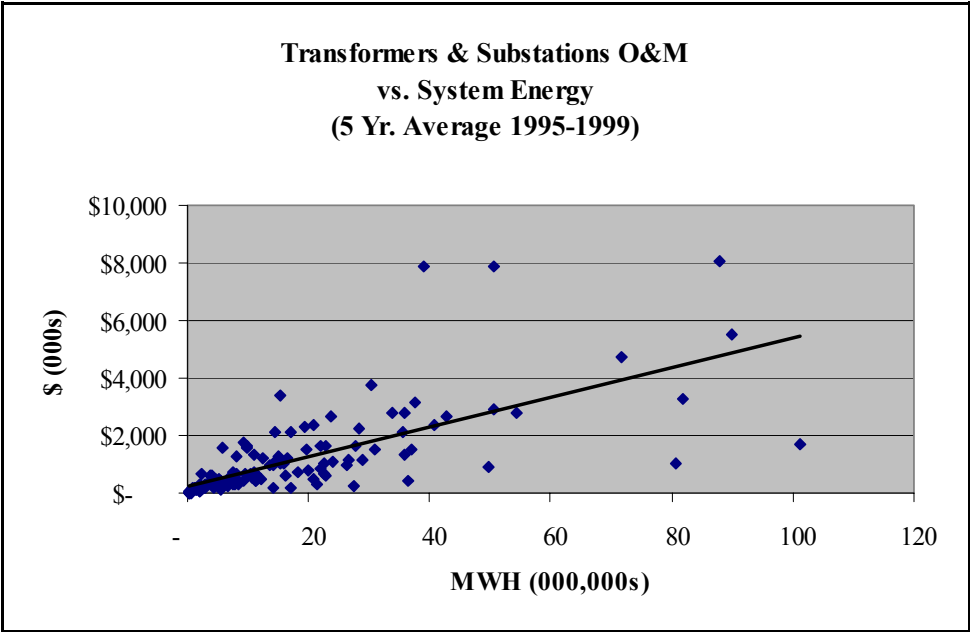
Rank	Company	Transformers and Substations O&M Expense per Megawatt- Hour of System Energy	Transformers and Substations O&M Expense	System Energy
1	Alaska Electric Light and Power Company	\$ 0.29	\$ 89,267	307,743
2	The United Illuminating Company	\$ 0.27	\$ 1,548,348	5,718,141
3	Central Vermont Public Service Corporation	\$ 0.27	\$ 646,890	2,407,001
4	Connecticut Valley Electric Company Inc.	\$ 0.24	\$ 41,030	172,529
5	Boston Edison Company	\$ 0.22	\$ 3,416,610	15,414,813
6	Consolidated Edison Company of New York Inc.	\$ 0.20	\$ 7,875,797	38,925,465
7	Atlantic City Electric Company	\$ 0.20	\$ 1,785,195	9,115,446
8	Upper Peninsula Power Company	\$ 0.19	\$ 169,189	884,386
9	Northwestern Public Service	\$ 0.17	\$ 210,651	1,218,079
10	Mt. Carmel Public Utility Company	\$ 0.17	\$ 28,539	166,990
11	Gulf Power Company	\$ 0.17	\$ 1,655,319	9,965,787
12	Central Maine Power Company	\$ 0.16	\$ 1,598,025	9,731,463
13	Commonwealth Electric Company	\$ 0.16	\$ 599,554	3,741,668
14	The Detroit Edison Company	\$ 0.16	\$ 7,887,184	50,677,248
15	Public Service Company of New Hampshire	\$ 0.16	\$ 1,257,711	8,093,376
16	MDU Resources Group Inc.	\$ 0.15	\$ 308,994	2,016,859
17	Delmarva Power and Light Company	\$ 0.15	\$ 2,121,338	14,441,324
18	Newport Electric Corporation	\$ 0.15	\$ 81,992	564,402
19	Western Massachusetts Electric Company	\$ 0.14	\$ 585,718	4,147,032
20	Baltimore Gas and Electric Company	\$ 0.13	\$ 3,784,682	30,246,999
21	Columbus Southern Power Company	\$ 0.12	\$ 2,117,609	17,095,324
22	IES Utilities Inc.	\$ 0.12	\$ 1,320,566	10,907,800
23	Portland General Electric Company	\$ 0.12	\$ 2,301,913	19,376,560
24	Blackstone Valley Electric Company	\$ 0.12	\$ 156,218	1,335,580
25	The Cleveland Electric Illuminating Company	\$ 0.12	\$ 2,393,708	20,816,451
26	The Connecticut Light and Power Company	\$ 0.11	\$ 2,687,960	23,703,603
27	Cambridge Electric Light Company	\$ 0.11	\$ 163,481	1,456,249
28	Eastern Edison Company	\$ 0.11	\$ 294,264	2,764,324
29	Chugach Electric Association Inc.	\$ 0.10	\$ 221,186	2,123,200
30	Utilicorp United Inc.	\$ 0.10	\$ 483,404	4,668,133
31	Maine Public Service Company	\$ 0.10	\$ 59,722	577,058
32	Savannah Electric and Power Company	\$ 0.10	\$ 394,917	3,867,179

Rank	Company	Transformers and Substations O&M Expense per Megawatt-Hour of System Energy	Transformers and Substations O&M Expense	System Energy
33	Entergy Mississippi Inc.	\$ 0.10	\$ 1,230,942	12,513,733
34	Central Hudson Gas and Electric Corporation	\$ 0.10	\$ 514,057	5,270,723
35	Hawaiian Electric Company Inc.	\$ 0.10	\$ 712,107	7,387,706
36	Wheeling Power Company	\$ 0.09	\$ 171,305	1,824,002
37	Florida Power and Light Company	\$ 0.09	\$ 8,049,496	87,791,495
38	Otter Tail Power Company	\$ 0.08	\$ 373,398	4,405,602
39	Consumers Energy Company	\$ 0.08	\$ 3,165,248	37,548,269
40	Kingsport Power Company	\$ 0.08	\$ 156,632	1,870,380
41	Pennsylvania Electric Company	\$ 0.08	\$ 1,263,635	15,094,453
42	Appalachian Power Company	\$ 0.08	\$ 2,779,212	33,689,762
43	Kentucky Power Company	\$ 0.08	\$ 567,136	6,940,129
44	Cleco Utility Group Inc.	\$ 0.08	\$ 641,682	7,987,460
45	Fitchburg Gas and Electric Light Company	\$ 0.08	\$ 41,751	526,049
46	PP&L Inc.	\$ 0.08	\$ 2,815,563	35,823,128
47	Ohio Edison Company	\$ 0.08	\$ 2,219,496	28,338,312
48	Rockland Electric Company	\$ 0.08	\$ 111,817	1,431,670
49	Bangor Hydro Electric Company	\$ 0.08	\$ 146,041	1,886,818
50	Idaho Power Company	\$ 0.08	\$ 1,101,319	14,366,129
51	Interstate Power Company	\$ 0.08	\$ 432,035	5,635,900
52	St. Joseph Light and Power Company	\$ 0.08	\$ 121,318	1,589,636
53	The Montana Power Company	\$ 0.08	\$ 605,276	7,941,894
54	West Penn Power Company	\$ 0.08	\$ 1,490,145	19,710,498
55	Indiana Michigan Power Company	\$ 0.08	\$ 1,656,388	22,071,161
56	Pennsylvania Power Company	\$ 0.07	\$ 349,079	4,737,775
57	San Diego Gas and Electric Company	\$ 0.07	\$ 1,210,478	16,592,929
58	Entergy Arkansas Inc.	\$ 0.07	\$ 1,665,621	22,981,319
59	Madison Gas and Electric Company	\$ 0.07	\$ 209,500	2,935,469
60	Kansas City Power and Light Company	\$ 0.07	\$ 966,256	13,673,569
61	Exeter and Hampton Electric Company	\$ 0.07	\$ 38,864	553,897
62	Central Illinois Public Service Company	\$ 0.07	\$ 670,578	9,579,339
63	Public Service Company of New Mexico	\$ 0.07	\$ 505,306	7,402,096
64	The Potomac Edison Company	\$ 0.07	\$ 965,797	14,130,894
65	Concord Electric Company	\$ 0.07	\$ 34,989	516,795
66	Virginia Electric and Power Company	\$ 0.07	\$ 4,747,799	71,697,960
67	Northern Indiana Public Service Company	\$ 0.07	\$ 1,059,498	16,019,258
68	Monongahela Power Company	\$ 0.07	\$ 728,387	11,051,533

Rank	Company	Transformers and Substations O&M Expense per Megawatt- Hour of System Energy	Transformers and Substations O&M Expense	System Energy
69	The Dayton Power and Light Company	\$ 0.07	\$ 1,007,092	15,289,869
70	Entergy New Orleans Inc.	\$ 0.06	\$ 382,939	5,997,337
71	New Hampshire Electric Cooperative Inc.	\$ 0.06	\$ 28,161	442,482
72	The Toledo Edison Company	\$ 0.06	\$ 652,192	10,289,536
73	Public Service Electric and Gas Company	\$ 0.06	\$ 2,688,451	42,712,499
74	Commonwealth Edison Company	\$ 0.06	\$ 5,542,728	90,055,263
75	Entergy Gulf States Inc.	\$ 0.06	\$ 2,122,959	35,657,841
76	PSI Energy Inc.	\$ 0.06	\$ 1,627,133	27,768,545
77	Ohio Power Company	\$ 0.06	\$ 2,364,503	40,686,911
78	Tucson Electric Power Company	\$ 0.06	\$ 467,467	8,130,333
79	Wisconsin Public Service Corporation	\$ 0.06	\$ 645,102	11,270,070
80	PacifiCorp	\$ 0.06	\$ 2,891,673	50,728,090
81	Alabama Power Company	\$ 0.05	\$ 2,805,773	54,220,429
82	Central Illinois Light Company	\$ 0.05	\$ 298,977	5,927,414
83	Minnesota Power Inc.	\$ 0.05	\$ 522,214	10,588,779
84	Entergy Louisiana Inc.	\$ 0.05	\$ 1,524,607	31,018,470
85	Western Resources Inc.	\$ 0.05	\$ 528,930	10,806,857
86	Black Hills Corporation	\$ 0.05	\$ 90,666	1,911,552
87	Kansas Gas and Electric Company	\$ 0.05	\$ 435,695	9,374,916
88	The Cincinnati Gas and Electric Company	\$ 0.05	\$ 1,097,232	23,944,957
89	Arizona Public Service Company	\$ 0.05	\$ 1,012,694	22,453,926
90	The Empire District Electric Company	\$ 0.04	\$ 191,486	4,262,249
91	Illinois Power Company	\$ 0.04	\$ 1,153,498	26,581,603
92	Union Electric Company	\$ 0.04	\$ 1,532,802	37,130,108
93	West Texas Utilities Company	\$ 0.04	\$ 315,482	7,643,375
94	Northern States Power Company (Wisconsin)	\$ 0.04	\$ 268,052	6,522,643
95	Kentucky Utilities Company	\$ 0.04	\$ 734,549	18,151,113
96	Metropolitan Edison Company	\$ 0.04	\$ 452,744	11,216,944
97	Wisconsin Electric Power Company	\$ 0.04	\$ 1,163,250	28,987,802
98	Pacific Gas and Electric Company	\$ 0.04	\$ 3,254,958	81,970,667
99	Puget Sound Energy Inc.	\$ 0.04	\$ 868,026	21,877,894
100	Wisconsin Power and Light Company	\$ 0.04	\$ 481,749	12,139,395
101	Louisville Gas and Electric Company	\$ 0.04	\$ 445,253	11,310,389
102	Sierra Pacific Power Company	\$ 0.04	\$ 325,318	8,304,176
103	El Paso Electric Company	\$ 0.04	\$ 303,700	7,784,693
104	Jersey Central Power and Light Company	\$ 0.04	\$ 771,504	19,859,873

Rank	Company	Transformers and Substations O&M Expense per Megawatt- Hour of System Energy	Transformers and Substations O&M Expense	System Energy
105	Public Service Company of Colorado	\$ 0.04	\$ 998,842	26,191,057
106	Superior Water, Light, and Power Company	\$ 0.04	\$ 21,084	563,818
107	Tampa Electric Company	\$ 0.04	\$ 609,914	16,291,364
108	Florida Power Corporation	\$ 0.04	\$ 1,342,960	35,982,053
109	Green Mountain Power Corporation	\$ 0.04	\$ 69,429	1,953,044
110	Oklahoma Gas and Electric Company	\$ 0.03	\$ 694,304	22,597,867
111	Lockhart Power Company	\$ 0.03	\$ 10,575	374,666
112	Central Power and Light Company	\$ 0.03	\$ 595,844	22,711,782
113	Southern Indiana Gas and Electric Company	\$ 0.02	\$ 134,494	5,396,955
114	Southwestern Electric Power Company	\$ 0.02	\$ 476,957	20,742,046
115	Carolina Power and Light Company	\$ 0.02	\$ 883,927	49,685,053
116	TXU Electric Company	\$ 0.02	\$ 1,681,505	101,259,002
117	Southwestern Public Service Company	\$ 0.01	\$ 300,731	21,342,420
118	Duke Energy Corporation	\$ 0.01	\$ 1,048,193	80,553,222
119	Indianapolis Power and Light Company	\$ 0.01	\$ 165,471	14,125,160
120	Niagara Mohawk Power Corporation	\$ 0.01	\$ 423,248	36,454,413
121	South Carolina Electric and Gas Company	\$ 0.01	\$ 190,824	17,184,133
122	Potomac Electric Power Company	\$ 0.01	\$ 215,621	27,543,193
123	Citizens' Electric Company	\$ 0.00	\$ 0	166,105
124	South Beloit Water, Gas, and Electric Company	\$ 0.00	\$ 0	207,209

Statistical Summary		
Standard Deviation	\$	0.06
Average	\$	0.08
Correlation		0.70



Appendix K **Lines and Feeders O&M Expense** **per Megawatt-Hour of System Energy**

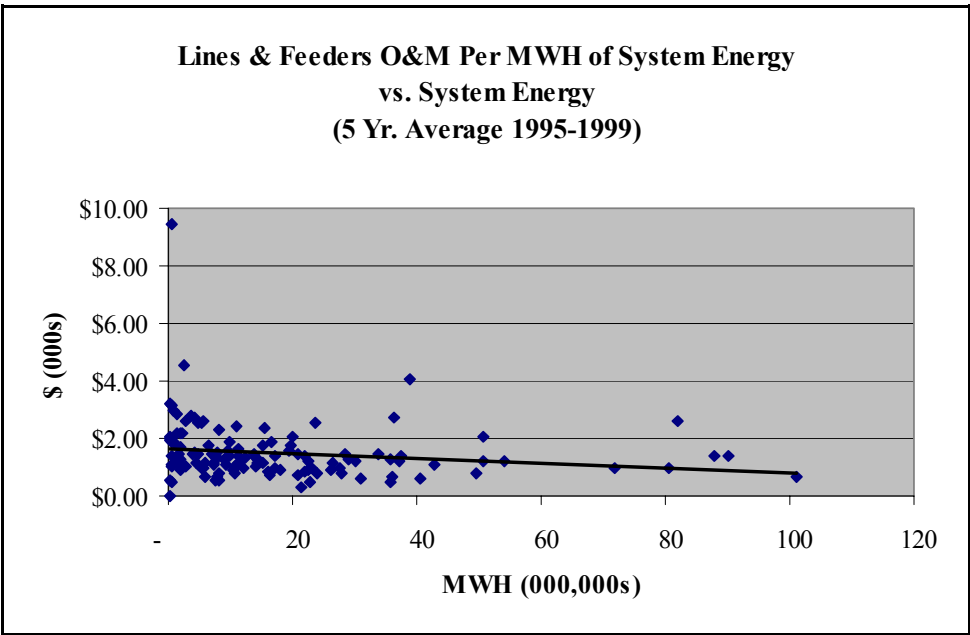
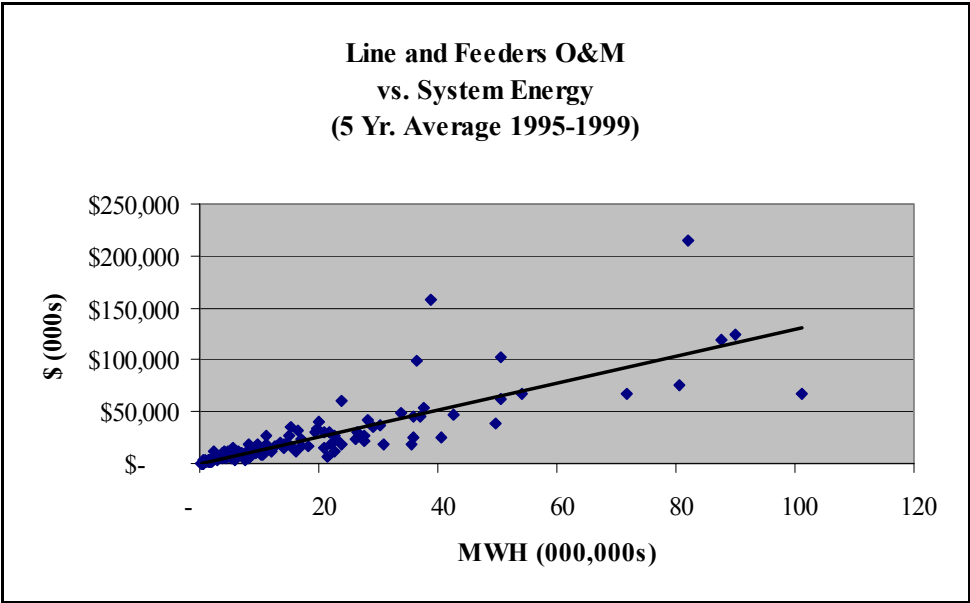
Rank	Company	Lines and Feeders O&M Expense per Megawatt-Hour of System Energy	Lines and Feeders O&M Expense	System Energy
1	New Hampshire Electric Cooperative Inc.	\$ 9.46	\$ 4,185,854	442,482
2	Central Vermont Public Service Corporation	\$ 4.56	\$ 10,979,355	2,407,001
3	Consolidated Edison Company of New York Inc.	\$ 4.04	\$ 157,138,770	38,925,465
4	Connecticut Valley Electric Company Inc.	\$ 3.21	\$ 553,006	172,529
5	Newport Electric Corporation	\$ 3.13	\$ 1,767,171	564,402
6	Upper Peninsula Power Company	\$ 2.97	\$ 2,626,257	884,386
7	Rockland Electric Company	\$ 2.86	\$ 4,090,037	1,431,670
8	Commonwealth Electric Company	\$ 2.81	\$ 10,528,430	3,741,668
9	Western Massachusetts Electric Company	\$ 2.73	\$ 11,307,684	4,147,032
10	Niagara Mohawk Power Corporation	\$ 2.72	\$ 99,310,875	36,454,413
11	Eastern Edison Company	\$ 2.63	\$ 7,276,765	2,764,324
12	Pacific Gas and Electric Company	\$ 2.62	\$ 214,896,071	81,970,667
13	The United Illuminating Company	\$ 2.59	\$ 14,823,822	5,718,141
14	Utilicorp United Inc.	\$ 2.58	\$ 12,023,302	4,668,133
15	The Connecticut Light and Power Company	\$ 2.57	\$ 60,876,357	23,703,603
16	Central Hudson Gas and Electric Corporation	\$ 2.52	\$ 13,285,963	5,270,723
17	Monongahela Power Company	\$ 2.42	\$ 26,780,807	11,051,533
18	Boston Edison Company	\$ 2.34	\$ 36,008,596	15,414,813
19	Public Service Company of New Hampshire	\$ 2.29	\$ 18,511,918	8,093,376
20	Bangor Hydro Electric Company	\$ 2.19	\$ 4,123,088	1,886,818
21	Chugach Electric Association Inc.	\$ 2.16	\$ 4,589,881	2,123,200
22	Blackstone Valley Electric Company	\$ 2.16	\$ 2,880,280	1,335,580
23	Alaska Electric Light and Power Company	\$ 2.08	\$ 640,751	307,743
24	Jersey Central Power and Light Company	\$ 2.05	\$ 40,740,620	19,859,873
25	The Detroit Edison Company	\$ 2.03	\$ 103,003,030	50,677,248
26	Mt. Carmel Public Utility Company	\$ 2.00	\$ 333,515	166,990
27	Citizens' Electric Company	\$ 1.92	\$ 319,159	166,105
28	San Diego Gas and Electric Company	\$ 1.90	\$ 31,510,250	16,592,929
29	Maine Public Service Company	\$ 1.86	\$ 1,074,842	577,058
30	Central Maine Power Company	\$ 1.85	\$ 18,015,849	9,731,463
31	Northwestern Public Service	\$ 1.80	\$ 2,187,514	1,218,079
32	Northern States Power Company (Wisconsin)	\$ 1.79	\$ 11,646,194	6,522,643

Rank	Company	Lines and Feeders O&M Expense per Megawatt-Hour of System Energy	Lines and Feeders O&M Expense	System Energy
33	Pennsylvania Electric Company	\$ 1.75	\$ 26,399,711	15,094,453
34	West Penn Power Company	\$ 1.74	\$ 34,390,075	19,710,498
35	MDU Resources Group Inc.	\$ 1.70	\$ 3,422,632	2,016,859
36	Wisconsin Public Service Corporation	\$ 1.63	\$ 18,360,736	11,270,070
37	Portland General Electric Company	\$ 1.58	\$ 30,591,193	19,376,560
38	Central Illinois Public Service Company	\$ 1.57	\$ 15,042,002	9,579,339
39	The Empire District Electric Company	\$ 1.52	\$ 6,479,938	4,262,249
40	The Montana Power Company	\$ 1.50	\$ 11,913,588	7,941,894
41	The Cleveland Electric Illuminating Company	\$ 1.48	\$ 30,853,133	20,816,451
42	Pennsylvania Power Company	\$ 1.48	\$ 7,001,075	4,737,775
43	Ohio Edison Company	\$ 1.48	\$ 41,833,414	28,338,312
44	Kentucky Power Company	\$ 1.48	\$ 10,236,914	6,940,129
45	Savannah Electric and Power Company	\$ 1.47	\$ 5,695,407	3,867,179
46	Appalachian Power Company	\$ 1.46	\$ 49,161,782	33,689,762
47	Kansas City Power and Light Company	\$ 1.44	\$ 19,648,127	13,673,569
48	St. Joseph Light and Power Company	\$ 1.42	\$ 2,264,430	1,589,636
49	Consumers Energy Company	\$ 1.42	\$ 53,280,756	37,548,269
50	Fitchburg Gas and Electric Light Company	\$ 1.41	\$ 744,014	526,049
51	Columbus Southern Power Company	\$ 1.41	\$ 24,108,937	17,095,324
52	Metropolitan Edison Company	\$ 1.40	\$ 15,756,284	11,216,944
53	Puget Sound Energy Inc.	\$ 1.39	\$ 30,371,782	21,877,894
54	Commonwealth Edison Company	\$ 1.37	\$ 123,367,432	90,055,263
55	Gulf Power Company	\$ 1.37	\$ 13,632,055	9,965,787
56	Florida Power and Light Company	\$ 1.36	\$ 119,762,868	87,791,495
57	Cleco Utility Group Inc.	\$ 1.34	\$ 10,730,732	7,987,460
58	The Potomac Edison Company	\$ 1.34	\$ 18,914,296	14,130,894
59	Entergy Mississippi Inc.	\$ 1.33	\$ 16,659,012	12,513,733
60	Delmarva Power and Light Company	\$ 1.29	\$ 18,654,313	14,441,324
61	Atlantic City Electric Company	\$ 1.28	\$ 11,694,307	9,115,446
62	Cambridge Electric Light Company	\$ 1.27	\$ 1,842,592	1,456,249
63	Wheeling Power Company	\$ 1.26	\$ 2,299,109	1,824,002
64	Green Mountain Power Corporation	\$ 1.26	\$ 2,456,923	1,953,044
65	PP&L Inc.	\$ 1.24	\$ 44,575,705	35,823,128
66	Wisconsin Electric Power Company	\$ 1.24	\$ 36,028,202	28,987,802
67	Union Electric Company	\$ 1.24	\$ 45,997,075	37,130,108
68	Alabama Power Company	\$ 1.24	\$ 67,115,551	54,220,429
69	PacifiCorp	\$ 1.22	\$ 61,969,372	50,728,090

Rank	Company	Lines and Feeders O&M Expense per Megawatt-Hour of System Energy	Lines and Feeders O&M Expense	System Energy
70	Oklahoma Gas and Electric Company	\$ 1.22	\$ 27,587,972	22,597,867
71	Baltimore Gas and Electric Company	\$ 1.21	\$ 36,627,986	30,246,999
72	Hawaiian Electric Company Inc.	\$ 1.17	\$ 8,679,364	7,387,706
73	Idaho Power Company	\$ 1.17	\$ 16,749,887	14,366,129
74	Central Illinois Light Company	\$ 1.15	\$ 6,814,811	5,927,414
75	The Dayton Power and Light Company	\$ 1.14	\$ 17,501,437	15,289,869
76	Otter Tail Power Company	\$ 1.14	\$ 5,000,695	4,405,602
77	Illinois Power Company	\$ 1.14	\$ 30,171,008	26,581,603
78	Louisville Gas and Electric Company	\$ 1.12	\$ 12,694,520	11,310,389
79	Public Service Electric and Gas Company	\$ 1.12	\$ 47,761,628	42,712,499
80	Kansas Gas and Electric Company	\$ 1.09	\$ 10,249,298	9,374,916
81	Public Service Company of New Mexico	\$ 1.08	\$ 8,017,717	7,402,096
82	Kingsport Power Company	\$ 1.07	\$ 1,994,588	1,870,380
83	Concord Electric Company	\$ 1.06	\$ 549,609	516,795
84	Indianapolis Power and Light Company	\$ 1.06	\$ 14,933,885	14,125,160
85	Western Resources Inc.	\$ 1.06	\$ 11,406,059	10,806,857
86	Exeter and Hampton Electric Company	\$ 1.04	\$ 578,058	553,897
87	IES Utilities Inc.	\$ 1.02	\$ 11,125,938	10,907,800
88	Madison Gas and Electric Company	\$ 1.01	\$ 2,971,530	2,935,469
89	Entergy Arkansas Inc.	\$ 0.99	\$ 22,705,596	22,981,319
90	South Carolina Electric and Gas Company	\$ 0.98	\$ 16,851,341	17,184,133
91	Wisconsin Power and Light Company	\$ 0.97	\$ 11,835,229	12,139,395
92	Southern Indiana Gas and Electric Company	\$ 0.96	\$ 5,160,795	5,396,955
93	Interstate Power Company	\$ 0.95	\$ 5,371,766	5,635,900
94	Potomac Electric Power Company	\$ 0.95	\$ 26,047,099	27,543,193
95	Virginia Electric and Power Company	\$ 0.94	\$ 67,663,623	71,697,960
96	Duke Energy Corporation	\$ 0.94	\$ 75,938,313	80,553,222
97	Kentucky Utilities Company	\$ 0.94	\$ 17,011,419	18,151,113
98	Black Hills Corporation	\$ 0.91	\$ 1,747,442	1,911,552
99	Arizona Public Service Company	\$ 0.90	\$ 20,111,395	22,453,926
100	The Toledo Edison Company	\$ 0.89	\$ 9,193,393	10,289,536
101	Public Service Company of Colorado	\$ 0.89	\$ 23,239,513	26,191,057
102	Indiana Michigan Power Company	\$ 0.86	\$ 18,979,764	22,071,161
103	Northern Indiana Public Service Company	\$ 0.82	\$ 13,122,116	16,019,258
104	Sierra Pacific Power Company	\$ 0.81	\$ 6,745,292	8,304,176
105	The Cincinnati Gas and Electric Company	\$ 0.79	\$ 18,948,573	23,944,957
106	Minnesota Power Inc.	\$ 0.78	\$ 8,231,207	10,588,779

Rank	Company	Lines and Feeders O&M Expense per Megawatt-Hour of System Energy	Lines and Feeders O&M Expense	System Energy
107	PSI Energy Inc.	\$ 0.78	\$ 21,528,409	27,768,545
108	Carolina Power and Light Company	\$ 0.76	\$ 37,881,446	49,685,053
109	Tampa Electric Company	\$ 0.74	\$ 12,008,726	16,291,364
110	Southwestern Electric Power Company	\$ 0.70	\$ 14,526,590	20,742,046
111	Florida Power Corporation	\$ 0.69	\$ 24,810,726	35,982,053
112	El Paso Electric Company	\$ 0.66	\$ 5,123,822	7,784,693
113	Entergy New Orleans Inc.	\$ 0.66	\$ 3,933,571	5,997,337
114	TXU Electric Company	\$ 0.66	\$ 66,419,695	101,259,002
115	Ohio Power Company	\$ 0.62	\$ 25,411,195	40,686,911
116	Entergy Louisiana Inc.	\$ 0.59	\$ 18,441,710	31,018,470
117	Tucson Electric Power Company	\$ 0.55	\$ 4,438,032	8,130,333
118	Lockhart Power Company	\$ 0.54	\$ 203,512	374,666
119	West Texas Utilities Company	\$ 0.53	\$ 4,029,116	7,643,375
120	Entergy Gulf States Inc.	\$ 0.51	\$ 18,336,812	35,657,841
121	Superior Water, Light, and Power Company	\$ 0.51	\$ 286,641	563,818
122	Central Power and Light Company	\$ 0.48	\$ 10,930,500	22,711,782
123	Southwestern Public Service Company	\$ 0.32	\$ 6,805,744	21,342,420
124	South Beloit Water, Gas, and Electric Company	\$ 0.02	\$ 4,293	207,209

Statistical Summary		
Standard Deviation	\$	1.04
Average	\$	1.51
Correlation		0.82



Appendix L

Transformers and Substations O&M Expense per Number of Customers

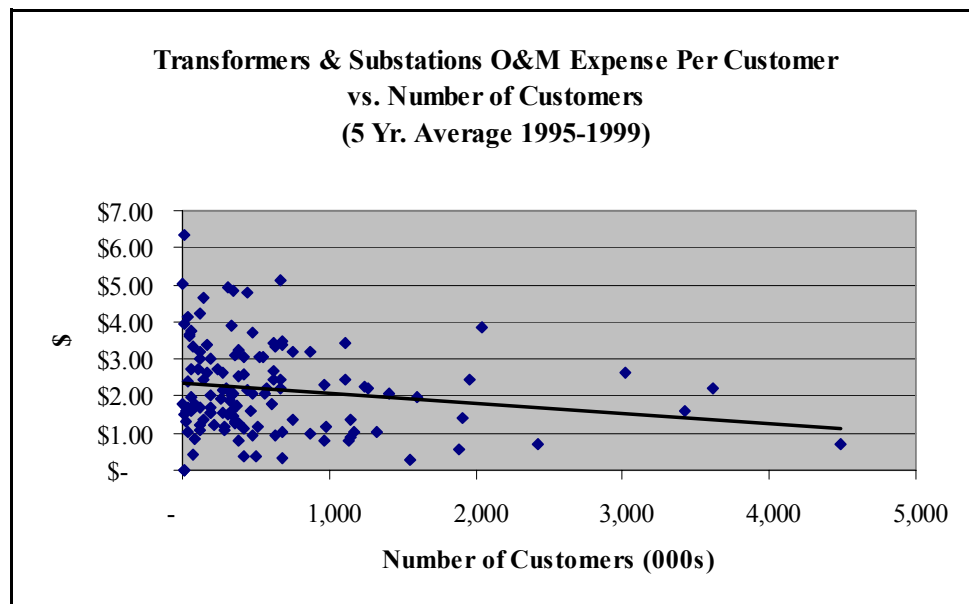
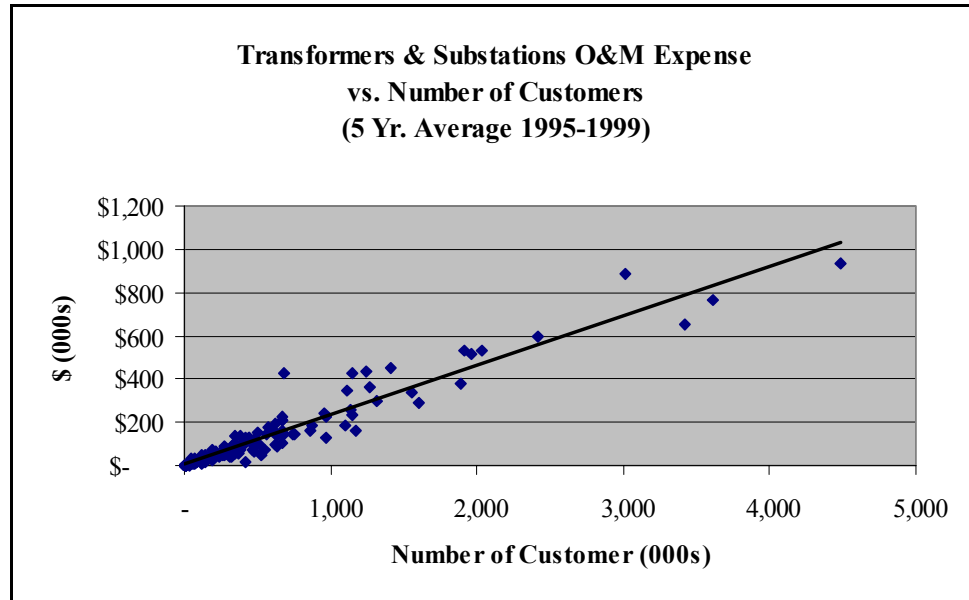
Rank	Company	Transformers and Substations O&M Expense per Number of Customers	Transformers and Substations O&M Expense	Number of Customers
1	Alaska Electric Light and Power Company	\$ 6.33	\$ 3,884,371	14,094
2	Boston Edison Company	\$ 5.12	\$ 227,432,867	667,949
3	Mt. Carmel Public Utility Company	\$ 5.04	\$ 1,108,804	5,659
4	The United Illuminating Company	\$ 4.96	\$ 37,009,694	312,422
5	Gulf Power Company	\$ 4.85	\$ 102,772,336	341,435
6	Delmarva Power and Light Company	\$ 4.79	\$ 127,813,728	442,747
7	Central Vermont Public Service Corporation	\$ 4.64	\$ 23,008,703	139,369
8	Minnesota Power Inc.	\$ 4.23	\$ 47,006,879	123,335
9	Wheeling Power Company	\$ 4.13	\$ 8,203,809	41,457
10	Connecticut Valley Electric Company Inc.	\$ 3.96	\$ 1,058,615	10,352
11	IES Utilities Inc.	\$ 3.92	\$ 82,567,673	337,275
12	The Detroit Edison Company	\$ 3.87	\$ 529,997,371	2,036,973
13	Northwestern Public Service	\$ 3.77	\$ 15,399,721	55,860
14	Atlantic City Electric Company	\$ 3.71	\$ 65,401,066	481,221
15	Kingsport Power Company	\$ 3.65	\$ 5,932,598	42,901
16	Cambridge Electric Light Company	\$ 3.62	\$ 29,282,502	45,104
17	Ohio Power Company	\$ 3.50	\$ 103,604,981	675,594
18	Columbus Southern Power Company	\$ 3.43	\$ 99,439,280	617,502
19	Baltimore Gas and Electric Company	\$ 3.41	\$ 344,609,105	1,108,547
20	Portland General Electric Company	\$ 3.40	\$ 147,805,975	677,858
21	Kentucky Power Company	\$ 3.38	\$ 37,608,382	167,555
22	Entergy Gulf States Inc.	\$ 3.33	\$ 136,701,173	636,799
23	Chugach Electric Association Inc.	\$ 3.31	\$ 32,442,295	66,737
24	Entergy Mississippi Inc.	\$ 3.23	\$ 91,472,676	381,002
25	Savannah Electric and Power Company	\$ 3.21	\$ 31,659,842	122,965
26	The Cleveland Electric Illuminating Company	\$ 3.21	\$ 148,207,904	746,740
27	Appalachian Power Company	\$ 3.19	\$ 183,045,192	872,038
28	Idaho Power Company	\$ 3.09	\$ 84,942,020	356,956
29	Central Maine Power Company	\$ 3.05	\$ 51,519,993	524,631
30	Indiana Michigan Power Company	\$ 3.04	\$ 72,426,124	544,809
31	Public Service Company of New Hampshire	\$ 3.04	\$ 16,601,599	413,989
32	Western Massachusetts Electric Company	\$ 2.99	\$ 32,096,017	195,653

Rank	Company	Transformers and Substations O&M Expense per Number of Customers	Transformers and Substations O&M Expense	Number of Customers
33	Otter Tail Power Company	\$ 2.99	\$ 36,090,182	124,859
34	Cleco Utility Group Inc.	\$ 2.73	\$ 42,940,474	234,654
35	MDU Resources Group Inc.	\$ 2.73	\$ 21,781,239	113,326
36	Upper Peninsula Power Company	\$ 2.71	\$ 7,995,885	62,443
37	Entergy Arkansas Inc.	\$ 2.68	\$ 149,409,972	621,231
38	Hawaiian Electric Company Inc.	\$ 2.63	\$ 85,723,725	271,242
39	Interstate Power Company	\$ 2.62	\$ 33,874,961	164,878
40	Consolidated Edison Company of New York Inc.	\$ 2.61	\$ 886,227,981	3,018,380
41	Northern Indiana Public Service Company	\$ 2.56	\$ 126,976,142	413,575
42	The Potomac Edison Company	\$ 2.55	\$ 134,249,492	379,343
43	Entergy Louisiana Inc.	\$ 2.45	\$ 189,829,681	622,326
44	Pennsylvania Power Company	\$ 2.43	\$ 19,889,922	143,386
45	PSI Energy Inc.	\$ 2.43	\$ 206,343,222	669,017
46	The Connecticut Light and Power Company	\$ 2.43	\$ 184,816,131	1,105,848
47	Virginia Electric and Power Company	\$ 2.42	\$ 513,637,986	1,960,993
48	Newport Electric Corporation	\$ 2.41	\$ 13,800,194	34,012
49	Ohio Edison Company	\$ 2.30	\$ 127,560,660	963,867
50	PP&L Inc.	\$ 2.27	\$ 434,775,613	1,239,904
51	Florida Power and Light Company	\$ 2.22	\$ 764,223,367	3,618,302
52	Alabama Power Company	\$ 2.22	\$ 364,124,645	1,262,497
53	The Toledo Edison Company	\$ 2.22	\$ 70,671,806	293,589
54	West Penn Power Company	\$ 2.22	\$ 209,952,211	671,490
55	Pennsylvania Electric Company	\$ 2.21	\$ 175,234,441	572,966
56	Kansas City Power and Light Company	\$ 2.18	\$ 125,406,520	442,611
57	The Montana Power Company	\$ 2.17	\$ 79,494,194	278,688
58	The Dayton Power and Light Company	\$ 2.09	\$ 87,490,587	482,274
59	Monongahela Power Company	\$ 2.07	\$ 140,146,302	351,318
60	Illinois Power Company	\$ 2.06	\$ 144,316,939	560,164
61	PacifiCorp	\$ 2.05	\$ 449,503,282	1,413,457
62	Entergy New Orleans Inc.	\$ 2.02	\$ 40,306,888	189,532
63	Central Illinois Public Service Company	\$ 2.02	\$ 95,090,214	332,612
64	Consumers Energy Company	\$ 1.97	\$ 288,301,333	1,604,104
65	St. Joseph Light and Power Company	\$ 1.97	\$ 23,725,259	61,541
66	Central Hudson Gas and Electric Corporation	\$ 1.93	\$ 51,188,985	266,291
67	Commonwealth Electric Company	\$ 1.86	\$ 43,396,908	322,445
68	Lockhart Power Company	\$ 1.80	\$ 2,375,405	5,876
69	The Cincinnati Gas and Electric Company	\$ 1.79	\$ 162,506,853	613,900

Rank	Company	Transformers and Substations O&M Expense per Number of Customers	Transformers and Substations O&M Expense	Number of Customers
70	Blackstone Valley Electric Company	\$ 1.76	\$ 16,039,840	88,577
71	Wisconsin Public Service Corporation	\$ 1.74	\$ 56,556,041	370,763
72	Madison Gas and Electric Company	\$ 1.71	\$ 4,048,678	122,194
73	Maine Public Service Company	\$ 1.69	\$ 4,075,060	35,274
74	West Texas Utilities Company	\$ 1.69	\$ 47,610,028	187,148
75	Rockland Electric Company	\$ 1.67	\$ 20,102,958	66,864
76	Commonwealth Edison Company	\$ 1.62	\$ 654,229,939	3,419,931
77	Black Hills Corporation	\$ 1.62	\$ 15,745,365	56,068
78	Western Resources Inc.	\$ 1.59	\$ 82,415,514	333,424
79	Fitchburg Gas and Electric Light Company	\$ 1.58	\$ 5,878,428	26,348
80	Kentucky Utilities Company	\$ 1.58	\$ 75,532,862	464,574
81	Eastern Edison Company	\$ 1.57	\$ 22,761,006	187,992
82	Kansas Gas and Electric Company	\$ 1.55	\$ 45,869,665	280,248
83	Central Illinois Light Company	\$ 1.54	\$ 73,955,441	194,596
84	Superior Water, Light, and Power Company	\$ 1.51	\$ 3,046,694	13,996
85	Tucson Electric Power Company	\$ 1.49	\$ 61,692,106	313,798
86	Public Service Company of New Mexico	\$ 1.46	\$ 57,670,294	345,302
87	Public Service Electric and Gas Company	\$ 1.41	\$ 527,757,920	1,913,086
88	The Empire District Electric Company	\$ 1.36	\$ 46,127,987	140,455
89	Arizona Public Service Company	\$ 1.35	\$ 144,777,767	747,799
90	Union Electric Company	\$ 1.34	\$ 428,521,140	1,144,059
91	Utilicorp United Inc.	\$ 1.33	\$ 76,695,671	363,506
92	Concord Electric Company	\$ 1.31	\$ 4,797,326	26,722
93	Wisconsin Power and Light Company	\$ 1.26	\$ 76,391,824	381,796
94	Louisville Gas and Electric Company	\$ 1.25	\$ 72,214,245	354,821
95	Northern States Power Company (Wisconsin)	\$ 1.23	\$ 62,082,879	217,514
96	Bangor Hydro Electric Company	\$ 1.22	\$ 17,366,403	119,781
97	Wisconsin Electric Power Company	\$ 1.20	\$ 227,270,417	973,000
98	Tampa Electric Company	\$ 1.18	\$ 100,653,987	518,703
99	Sierra Pacific Power Company	\$ 1.15	\$ 53,820,815	282,520
100	Southwestern Electric Power Company	\$ 1.15	\$ 115,445,945	414,845
101	Southern Indiana Gas and Electric Company	\$ 1.10	\$ 35,933,603	122,295
102	El Paso Electric Company	\$ 1.08	\$ 71,649,718	282,499
103	San Diego Gas and Electric Company	\$ 1.04	\$ 160,964,220	1,168,926
104	Oklahoma Gas and Electric Company	\$ 1.03	\$ 162,572,698	675,306
105	Florida Power Corporation	\$ 1.02	\$ 297,503,464	1,319,146

Rank	Company	Transformers and Substations O&M Expense per Number of Customers	Transformers and Substations O&M Expense	Number of Customers
106	Exeter and Hampton Electric Company	\$ 1.01	\$ 2,622,196	38,384
107	Puget Sound Energy Inc.	\$ 1.00	\$ 157,292,750	865,417
108	Metropolitan Edison Company	\$ 0.96	\$ 121,286,007	473,428
109	Central Power and Light Company	\$ 0.94	\$ 87,451,761	630,688
110	Public Service Company of Colorado	\$ 0.87	\$ 236,938,490	1,142,535
111	Green Mountain Power Corporation	\$ 0.84	\$ 15,355,608	82,766
112	Jersey Central Power and Light Company	\$ 0.80	\$ 239,801,084	961,927
113	Southwestern Public Service Company	\$ 0.79	\$ 89,033,824	378,453
114	Carolina Power and Light Company	\$ 0.78	\$ 255,365,484	1,138,375
115	Pacific Gas and Electric Company	\$ 0.72	\$ 931,769,877	4,489,628
116	TXU Electric Company	\$ 0.69	\$ 597,255,038	2,421,757
117	Duke Energy Corporation	\$ 0.55	\$ 382,289,649	1,888,956
118	New Hampshire Electric Cooperative Inc.	\$ 0.41	\$ 8,844,680	69,003
119	Indianapolis Power and Light Company	\$ 0.40	\$ 106,320,120	417,450
120	South Carolina Electric and Gas Company	\$ 0.38	\$ 153,148,993	500,204
121	Potomac Electric Power Company	\$ 0.31	\$ 428,921,955	685,260
122	Niagara Mohawk Power Corporation	\$ 0.27	\$ 338,560,535	1,557,040
123	Citizens' Electric Company	\$ 0.00	\$ 710,276	6,279
124	South Beloit Water, Gas, and Electric Company	\$ 0.00	\$ 1,521,127	7,271

Statistical Summary		
Standard Deviation	\$	1.22
Average	\$	2.17
Correlation		0.96



Appendix M

Lines and Feeders O&M Expense per Number of Customers

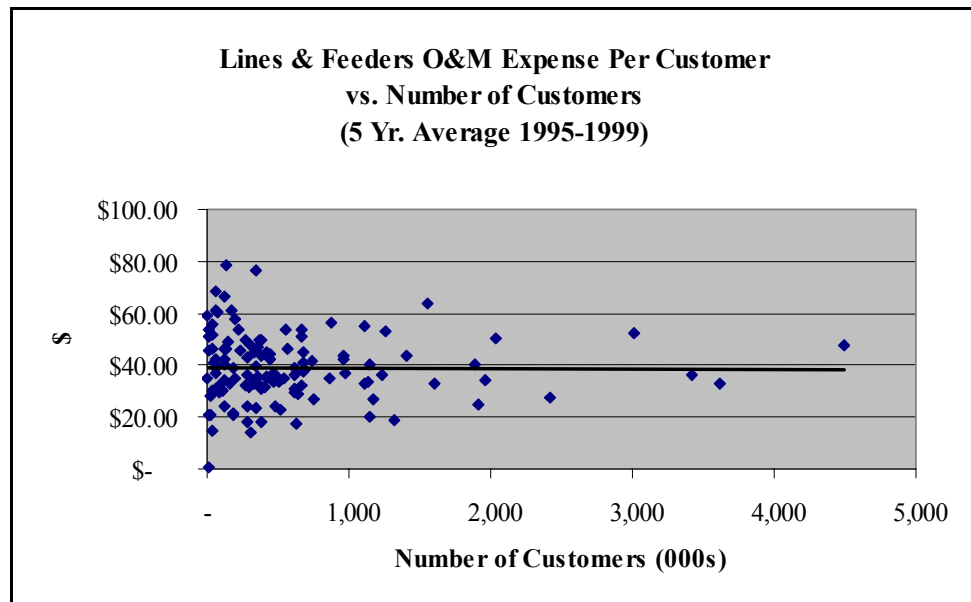
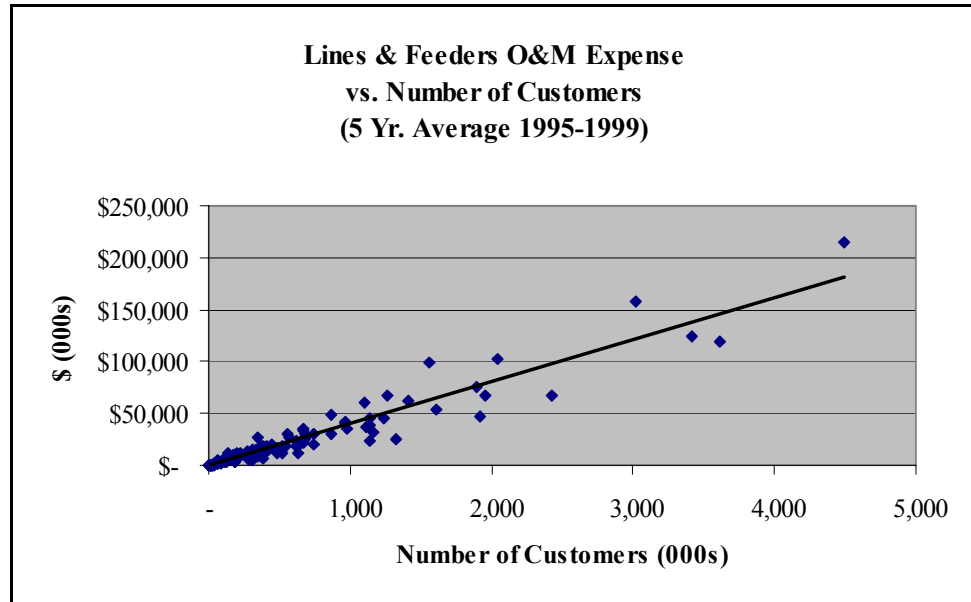
Rank	Company	Lines and Feeders O&M Expense per Number of Customers	Lines and Feeders O&M Expense	Number of Customers
1	Central Vermont Public Service Corporation	\$ 78.78	\$ 10,979,355	139,369
2	Monongahela Power Company	\$ 76.23	\$ 26,780,807	351,318
3	Chugach Electric Association Inc.	\$ 68.78	\$ 4,589,881	66,737
4	Minnesota Power Inc.	\$ 66.74	\$ 8,231,207	123,335
5	Niagara Mohawk Power Corporation	\$ 63.78	\$ 99,310,875	1,557,040
6	Rockland Electric Company	\$ 61.17	\$ 4,090,037	66,864
7	Kentucky Power Company	\$ 61.10	\$ 10,236,914	167,555
8	New Hampshire Electric Cooperative Inc.	\$ 60.66	\$ 4,185,854	69,003
9	Mt. Carmel Public Utility Company	\$ 58.93	\$ 333,515	5,659
10	Western Massachusetts Electric Company	\$ 57.79	\$ 11,307,684	195,653
11	Appalachian Power Company	\$ 56.38	\$ 49,161,782	872,038
12	Wheeling Power Company	\$ 55.46	\$ 2,299,109	41,457
13	The Connecticut Light and Power Company	\$ 55.05	\$ 60,876,357	1,105,848
14	Boston Edison Company	\$ 53.91	\$ 36,008,596	667,949
15	Illinois Power Company	\$ 53.86	\$ 30,171,008	560,164
16	Northern States Power Company (Wisconsin)	\$ 53.54	\$ 11,646,194	217,514
17	Connecticut Valley Electric Company Inc.	\$ 53.42	\$ 553,006	10,352
18	Alabama Power Company	\$ 53.16	\$ 67,115,551	1,262,497
19	Consolidated Edison Company of New York Inc.	\$ 52.06	\$ 157,138,770	3,018,380
20	Newport Electric Corporation	\$ 51.96	\$ 1,767,171	34,012
21	West Penn Power Company	\$ 51.21	\$ 34,390,075	671,490
22	Citizens' Electric Company	\$ 50.83	\$ 319,159	6,279
23	The Detroit Edison Company	\$ 50.57	\$ 103,003,030	2,036,973
24	Central Hudson Gas and Electric Corporation	\$ 49.89	\$ 13,285,963	266,291
25	The Potomac Edison Company	\$ 49.86	\$ 18,914,296	379,343
26	Wisconsin Public Service Corporation	\$ 49.52	\$ 18,360,736	370,763
27	Pennsylvania Power Company	\$ 48.83	\$ 7,001,075	143,386
28	Pacific Gas and Electric Company	\$ 47.86	\$ 214,896,071	4,489,628
29	The United Illuminating Company	\$ 47.45	\$ 14,823,822	312,422
30	Idaho Power Company	\$ 46.92	\$ 16,749,887	356,956
31	Kingsport Power Company	\$ 46.49	\$ 1,994,588	42,901
32	Savannah Electric and Power Company	\$ 46.32	\$ 5,695,407	122,965
33	The Empire District Electric Company	\$ 46.14	\$ 6,479,938	140,455

Rank	Company	Lines and Feeders O&M Expense per Number of Customers	Lines and Feeders O&M Expense	Number of Customers
34	Pennsylvania Electric Company	\$ 46.08	\$ 26,399,711	572,966
35	Cleco Utility Group Inc.	\$ 45.73	\$ 10,730,732	234,654
36	Alaska Electric Light and Power Company	\$ 45.46	\$ 640,751	14,094
37	Central Illinois Public Service Company	\$ 45.22	\$ 15,042,002	332,612
38	Portland General Electric Company	\$ 45.13	\$ 30,591,193	677,858
39	Public Service Company of New Hampshire	\$ 44.72	\$ 18,511,918	413,989
40	Kansas City Power and Light Company	\$ 44.39	\$ 19,648,127	442,611
41	PacifiCorp	\$ 43.84	\$ 61,969,372	1,413,457
42	Entergy Mississippi Inc.	\$ 43.72	\$ 16,659,012	381,002
43	Ohio Edison Company	\$ 43.40	\$ 41,833,414	963,867
44	The Montana Power Company	\$ 42.75	\$ 11,913,588	278,688
45	Jersey Central Power and Light Company	\$ 42.35	\$ 40,740,620	961,927
46	Southern Indiana Gas and Electric Company	\$ 42.20	\$ 5,160,795	122,295
47	Delmarva Power and Light Company	\$ 42.13	\$ 18,654,313	442,747
48	Upper Peninsula Power Company	\$ 42.06	\$ 2,626,257	62,443
49	The Cleveland Electric Illuminating Company	\$ 41.32	\$ 30,853,133	746,740
50	Oklahoma Gas and Electric Company	\$ 40.85	\$ 27,587,972	675,306
51	Cambridge Electric Light Company	\$ 40.85	\$ 1,842,592	45,104
52	Union Electric Company	\$ 40.21	\$ 45,997,075	1,144,059
53	Duke Energy Corporation	\$ 40.20	\$ 75,938,313	1,888,956
54	Otter Tail Power Company	\$ 40.05	\$ 5,000,695	124,859
55	Gulf Power Company	\$ 39.93	\$ 13,632,055	341,435
56	Northwestern Public Service	\$ 39.16	\$ 2,187,514	55,860
57	Columbus Southern Power Company	\$ 39.04	\$ 24,108,937	617,502
58	Eastern Edison Company	\$ 38.71	\$ 7,276,765	187,992
59	Potomac Electric Power Company	\$ 38.01	\$ 26,047,099	685,260
60	Ohio Power Company	\$ 37.61	\$ 25,411,195	675,594
61	Wisconsin Electric Power Company	\$ 37.03	\$ 36,028,202	973,000
62	St. Joseph Light and Power Company	\$ 36.80	\$ 2,264,430	61,541
63	Kentucky Utilities Company	\$ 36.62	\$ 17,011,419	464,574
64	Kansas Gas and Electric Company	\$ 36.57	\$ 10,249,298	280,248
65	Entergy Arkansas Inc.	\$ 36.55	\$ 22,705,596	621,231
66	The Dayton Power and Light Company	\$ 36.29	\$ 17,501,437	482,274
67	Commonwealth Edison Company	\$ 36.07	\$ 123,367,432	3,419,931
68	PP&L Inc.	\$ 35.95	\$ 44,575,705	1,239,904
69	Louisville Gas and Electric Company	\$ 35.78	\$ 12,694,520	354,821
70	Indianapolis Power and Light Company	\$ 35.77	\$ 14,933,885	417,450

Rank	Company	Lines and Feeders O&M Expense per Number of Customers	Lines and Feeders O&M Expense	Number of Customers
71	Puget Sound Energy Inc.	\$ 35.10	\$ 30,371,782	865,417
72	Central Illinois Light Company	\$ 35.02	\$ 6,814,811	194,596
73	Southwestern Electric Power Company	\$ 35.02	\$ 14,526,590	414,845
74	Indiana Michigan Power Company	\$ 34.84	\$ 18,979,764	544,809
75	Lockhart Power Company	\$ 34.64	\$ 203,512	5,876
76	Virginia Electric and Power Company	\$ 34.50	\$ 67,663,623	1,960,993
77	Bangor Hydro Electric Company	\$ 34.42	\$ 4,123,088	119,781
78	Central Maine Power Company	\$ 34.34	\$ 18,015,849	524,631
79	Western Resources Inc.	\$ 34.21	\$ 11,406,059	333,424
80	South Carolina Electric and Gas Company	\$ 33.69	\$ 16,851,341	500,204
81	Metropolitan Edison Company	\$ 33.28	\$ 15,756,284	473,428
82	Carolina Power and Light Company	\$ 33.28	\$ 37,881,446	1,138,375
83	Consumers Energy Company	\$ 33.22	\$ 53,280,756	1,604,104
84	Florida Power and Light Company	\$ 33.10	\$ 119,762,868	3,618,302
85	Utilicorp United Inc.	\$ 33.08	\$ 12,023,302	363,506
86	Baltimore Gas and Electric Company	\$ 33.04	\$ 36,627,986	1,108,547
87	IES Utilities Inc.	\$ 32.99	\$ 11,125,938	337,275
88	Commonwealth Electric Company	\$ 32.65	\$ 10,528,430	322,445
89	Interstate Power Company	\$ 32.58	\$ 5,371,766	164,878
90	Blackstone Valley Electric Company	\$ 32.52	\$ 2,880,280	88,577
91	PSI Energy Inc.	\$ 32.18	\$ 21,528,409	669,017
92	Hawaiian Electric Company Inc.	\$ 32.00	\$ 8,679,364	271,242
93	Northern Indiana Public Service Company	\$ 31.73	\$ 13,122,116	413,575
94	The Toledo Edison Company	\$ 31.31	\$ 9,193,393	293,589
95	Black Hills Corporation	\$ 31.17	\$ 1,747,442	56,068
96	Wisconsin Power and Light Company	\$ 31.00	\$ 11,835,229	381,796
97	The Cincinnati Gas and Electric Company	\$ 30.87	\$ 18,948,573	613,900
98	Maine Public Service Company	\$ 30.47	\$ 1,074,842	35,274
99	MDU Resources Group Inc.	\$ 30.20	\$ 3,422,632	113,326
100	Green Mountain Power Corporation	\$ 29.69	\$ 2,456,923	82,766
101	Entergy Louisiana Inc.	\$ 29.63	\$ 18,441,710	622,326
102	Entergy Gulf States Inc.	\$ 28.80	\$ 18,336,812	636,799
103	Fitchburg Gas and Electric Light Company	\$ 28.24	\$ 744,014	26,348
104	TXU Electric Company	\$ 27.43	\$ 66,419,695	2,421,757
105	San Diego Gas and Electric Company	\$ 26.96	\$ 31,510,250	1,168,926
106	Arizona Public Service Company	\$ 26.89	\$ 20,111,395	747,799
107	Public Service Electric and Gas Company	\$ 24.97	\$ 47,761,628	1,913,086

Rank	Company	Lines and Feeders O&M Expense per Number of Customers	Lines and Feeders O&M Expense	Number of Customers
108	Madison Gas and Electric Company	\$ 24.32	\$ 2,971,530	122,194
109	Atlantic City Electric Company	\$ 24.30	\$ 11,694,307	481,221
110	Sierra Pacific Power Company	\$ 23.88	\$ 6,745,292	282,520
111	Public Service Company of New Mexico	\$ 23.22	\$ 8,017,717	345,302
112	Tampa Electric Company	\$ 23.15	\$ 12,008,726	518,703
113	West Texas Utilities Company	\$ 21.53	\$ 4,029,116	187,148
114	Entergy New Orleans Inc.	\$ 20.75	\$ 3,933,571	189,532
115	Concord Electric Company	\$ 20.57	\$ 549,609	26,722
116	Superior Water, Light, and Power Company	\$ 20.48	\$ 286,641	13,996
117	Public Service Company of Colorado	\$ 20.34	\$ 23,239,513	1,142,535
118	Florida Power Corporation	\$ 18.81	\$ 24,810,726	1,319,146
119	El Paso Electric Company	\$ 18.14	\$ 5,123,822	282,499
120	Southwestern Public Service Company	\$ 17.98	\$ 6,805,744	378,453
121	Central Power and Light Company	\$ 17.33	\$ 10,930,500	630,688
122	Exeter and Hampton Electric Company	\$ 15.06	\$ 578,058	38,384
123	Tucson Electric Power Company	\$ 14.14	\$ 4,438,032	313,798
124	South Beloit Water, Gas, and Electric Company	\$ 0.59	\$ 4,293	7,271

Statistical Summary		
Standard Deviation	\$	13.00
Average	\$	38.93
Correlation		0.95



Appendix N

Growth in Transformers and Substations Plant Investment per Growth in System Peak

Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Peak	Growth in Transformers and Substations Plant Investment	Growth in System Peak
1	The Potomac Edison Company	\$ 3,579,278	\$ 6,442,701	1.8
2	Vermont Public Service Corporation	\$ 1,265,830	\$ 1,518,996	1.2
3	Chugach Electric Association Inc.	\$ 398,062	\$ 3,423,335	8.6
4	Connecticut Valley Electric Company Inc.	\$ 377,044	\$ 150,818	0.4
5	Portland General Electric Company	\$ 374,748	\$ 15,889,328	42.4
6	Bangor Hydro Electric Company	\$ 346,239	\$ 1,246,461	3.6
7	New Hampshire Electric Cooperative Inc.	\$ 338,568	\$ 338,568	1.0
8	Potomac Electric Power Company	\$ 327,996	\$ 17,514,984	53.4
9	Baltimore Gas and Electric Company	\$ 298,396	\$ 20,589,323	69.0
10	Boston Edison Company	\$ 291,462	\$ 15,855,551	54.4
11	PacifiCorp	\$ 274,883	\$ 26,938,504	98.0
12	Pennsylvania Electric Company	\$ 268,644	\$ 5,319,152	19.8
13	Fitchburg Gas and Electric Light Company	\$ 256,340	\$ 717,751	2.8
14	Cambridge Electric Light Company	\$ 226,394	\$ 815,019	3.6
15	PP&L Inc.	\$ 220,950	\$ 12,594,148	57.0
16	Concord Electric Company	\$ 219,644	\$ 351,430	1.6
17	Public Service Company of New Mexico	\$ 201,792	\$ 4,116,554	20.4
18	Rockland Electric Company	\$ 183,676	\$ 734,705	4.0
19	Upper Peninsula Power Company	\$ 179,204	\$ 215,045	1.2
20	Otter Tail Power Company	\$ 160,001	\$ 1,536,009	9.6
21	Central Hudson Gas and Electric Corporation	\$ 151,096	\$ 3,565,857	23.6
22	Green Mountain Power Corporation	\$ 146,790	\$ 557,803	3.8
23	Blackstone Valley Electric Company	\$ 139,655	\$ 586,552	4.2
24	Public Service Electric and Gas Company	\$ 126,720	\$ 20,351,186	160.6
25	West Penn Power Company	\$ 125,653	\$ 6,533,975	52.0
26	Consolidated Edison Company of New York Inc.	\$ 123,321	\$ 29,720,356	241.0
27	St. Joseph Light and Power Company	\$ 121,356	\$ 1,723,252	14.2
28	Pacific Gas and Electric Company	\$ 113,418	\$ 75,717,706	667.6
29	Consumers Energy Company	\$ 111,143	\$ 21,294,986	191.6
30	San Diego Gas and Electric Company	\$ 109,924	\$ 6,859,245	62.4

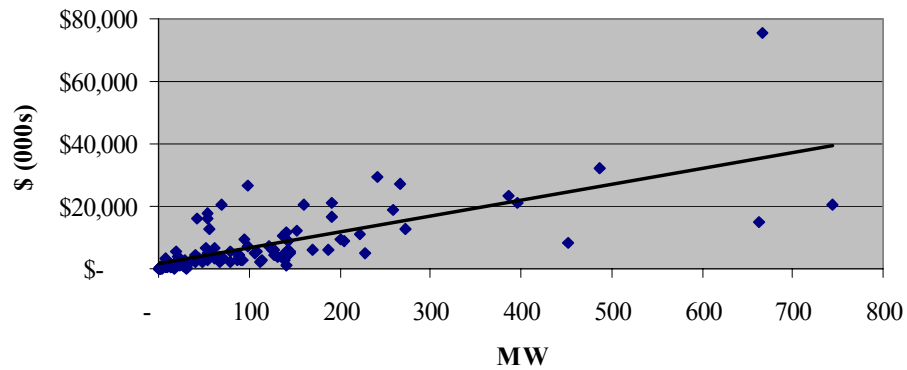
Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Peak	Growth in Transformers and Substations Plant Investment	Growth in System Peak
31	IES Utilities Inc.	\$ 104,823	\$ 4,339,680	41.4
32	The Detroit Edison Company	\$ 101,318	\$ 27,031,764	266.8
33	Entergy Louisiana Inc.	\$ 100,888	\$ 9,544,021	94.6
34	Western Massachusetts Electric Company	\$ 99,468	\$ 736,064	7.4
35	Southern Indiana Gas and Electric Company	\$ 99,213	\$ 2,956,539	29.8
36	Ohio Power Company	\$ 95,026	\$ 5,112,406	53.8
37	Monongahela Power Company	\$ 93,596	\$ 3,837,426	41.0
38	Interstate Power Company	\$ 87,982	\$ 1,495,701	17.0
39	Public Service Company of Colorado	\$ 87,478	\$ 16,655,789	190.4
40	Newport Electric Corporation	\$ 85,525	\$ 171,050	2.0
41	Kentucky Power Company	\$ 85,334	\$ 2,099,204	24.6
42	Carolina Power and Light Company	\$ 84,063	\$ 11,802,494	140.4
43	Central Illinois Light Company	\$ 83,906	\$ 1,644,561	19.6
44	PSI Energy Inc.	\$ 79,261	\$ 12,174,484	153.6
45	Arizona Public Service Company	\$ 77,283	\$ 10,587,777	137.0
46	Northern States Power Company (Wisconsin)	\$ 77,166	\$ 3,503,352	45.4
47	The Dayton Power and Light Company	\$ 75,077	\$ 4,594,724	61.2
48	Illinois Power Company	\$ 74,164	\$ 7,312,594	98.6
49	Union Electric Company	\$ 72,531	\$ 18,713,091	258.0
50	Wisconsin Power and Light Company	\$ 71,584	\$ 5,655,097	79.0
51	Central Maine Power Company	\$ 71,402	\$ 1,485,153	20.8
52	Black Hills Corporation	\$ 65,898	\$ 1,080,726	16.4
53	Florida Power and Light Company	\$ 65,600	\$ 31,960,112	487.2
54	South Carolina Electric and Gas Company	\$ 64,179	\$ 9,164,824	142.8
55	Alabama Power Company	\$ 60,956	\$ 23,541,139	386.2
56	Sierra Pacific Power Company	\$ 60,899	\$ 4,141,114	68.0
57	Indianapolis Power and Light Company	\$ 59,840	\$ 3,087,768	51.6
58	West Texas Utilities Company	\$ 58,705	\$ 2,888,291	49.2
59	Southwestern Public Service Company	\$ 57,001	\$ 6,965,498	122.2
60	Wisconsin Public Service Corporation	\$ 56,782	\$ 2,293,978	40.4
61	Northern Indiana Public Service Company	\$ 54,483	\$ 3,367,037	61.8
62	Minnesota Power Inc.	\$ 53,834	\$ 1,248,939	23.2
63	Virginia Electric and Power Company	\$ 53,063	\$ 20,970,324	395.2
64	Northwestern Public Service	\$ 53,046	\$ 668,378	12.6
65	Tucson Electric Power Company	\$ 53,025	\$ 1,792,230	33.8

Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Peak	Growth in Transformers and Substations Plant Investment	Growth in System Peak
66	Central Illinois Public Service Company	\$ 50,804	\$ 2,723,099	53.6
67	Kansas City Power and Light Company	\$ 50,328	\$ 5,405,200	107.4
68	Duke Energy Corporation	\$ 50,190	\$ 11,182,428	222.8
69	Idaho Power Company	\$ 49,589	\$ 4,433,220	89.4
70	Gulf Power Company	\$ 49,306	\$ 3,550,001	72.0
71	Commonwealth Electric Company	\$ 49,133	\$ 1,326,603	27.0
72	The Empire District Electric Company	\$ 47,440	\$ 2,258,144	47.6
73	Columbus Southern Power Company	\$ 47,346	\$ 5,918,219	125.0
74	Indiana Michigan Power Company	\$ 47,051	\$ 4,987,356	106.0
75	Florida Power Corporation	\$ 46,983	\$ 12,807,502	272.6
76	Jersey Central Power and Light Company	\$ 46,154	\$ 9,304,574	201.6
77	Entergy Mississippi Inc.	\$ 45,849	\$ 5,877,840	128.2
78	Lockhart Power Company	\$ 43,918	\$ 96,620	2.2
79	The Cincinnati Gas and Electric Company	\$ 42,585	\$ 6,089,718	143.0
80	Metropolitan Edison Company	\$ 42,266	\$ 3,795,466	89.8
81	Wisconsin Electric Power Company	\$ 42,186	\$ 8,639,676	204.8
82	MDU Resources Group Inc.	\$ 40,744	\$ 415,589	10.2
83	Delmarva Power and Light Company	\$ 38,832	\$ 5,607,297	144.4
84	Oklahoma Gas and Electric Company	\$ 36,601	\$ 6,200,184	169.4
85	Kentucky Utilities Company	\$ 35,756	\$ 4,555,275	127.4
86	Entergy New Orleans Inc.	\$ 34,747	\$ 965,973	27.8
87	Eastern Edison Company	\$ 34,481	\$ 434,465	12.6
88	Central Power and Light Company	\$ 34,293	\$ 4,951,874	144.4
89	Atlantic City Electric Company	\$ 32,885	\$ 2,847,801	86.6
90	Savannah Electric and Power Company	\$ 32,263	\$ 942,078	29.2
91	Southwestern Electric Power Company	\$ 31,881	\$ 5,974,574	187.4
92	Utilicorp United Inc.	\$ 31,806	\$ 2,143,718	67.4
93	The Connecticut Light and Power Company	\$ 30,571	\$ 4,206,562	137.6
94	Tampa Electric Company	\$ 29,810	\$ 3,905,075	131.0
95	Cleco Utility Group Inc.	\$ 29,103	\$ 2,660,032	91.4
96	The Toledo Edison Company	\$ 28,895	\$ 2,687,218	93.0
97	TXU Electric Company	\$ 27,628	\$ 20,544,069	743.6
98	Louisville Gas and Electric Company	\$ 25,458	\$ 2,000,993	78.6
99	Western Resources Inc.	\$ 24,969	\$ 2,841,469	113.8
100	Exeter and Hampton Electric Company	\$ 24,356	\$ 73,067	3.0

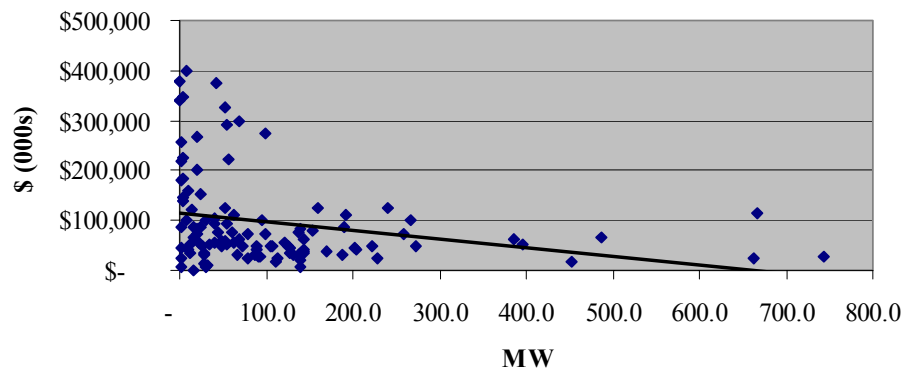
Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Peak	Growth in Transformers and Substations Plant Investment	Growth in System Peak
101	Entergy Gulf States Inc.	\$ 22,966	\$ 5,226,975	227.6
102	Commonwealth Edison Company	\$ 22,789	\$ 15,108,932	663.0
103	The Cleveland Electric Illuminating Company	\$ 21,978	\$ 3,046,152	138.6
104	Entergy Arkansas Inc.	\$ 18,758	\$ 8,493,784	452.8
105	Kansas Gas and Electric Company	\$ 17,565	\$ 1,956,747	111.4
106	The United Illuminating Company	\$ 14,367	\$ 408,025	28.4
107	Pennsylvania Power Company	\$ 11,821	\$ 375,911	31.8
108	Public Service Company of New Hampshire	\$ 7,885	\$ 241,296	30.6
109	South Beloit Water, Gas, and Electric Company	\$ 6,992	\$ 11,187	1.6
110	Ohio Edison Company	\$ 6,050	\$ 848,196	140.2
111	Madison Gas and Electric Company	\$ 1,310	\$ 21,742	16.6
112	Citizens' Electric Company	\$ (8,677)	\$ 10,412	(1.2)
113	Superior Water, Light, and Power Company	\$ (10,094)	\$ 8,075	(0.8)
114	Mt. Carmel Public Utility Company	\$ (22,664)	\$ 31,730	(1.4)
115	Maine Public Service Company	\$ (45,527)	\$ 136,580	(3.0)
116	Kingsport Power Company	\$ (60,989)	\$ 439,120	(7.2)
117	Appalachian Power Company	\$ (82,852)	\$ 13,537,959	(163.4)
118	Wheeling Power Company	\$ (173,942)	\$ 278,307	(1.6)
119	Alaska Electric Light and Power Company	\$ (208,444)	\$ 125,067	(0.6)
120	El Paso Electric Company	\$ (292,813)	\$ 4,567,887	(15.6)
121	Puget Sound Energy Inc.	\$ (380,387)	\$ 5,173,257	(13.6)
122	The Montana Power Company	\$ (391,590)	\$ 4,385,810	(11.2)
123	Niagara Mohawk Power Corporation	\$ (547,951)	\$ 15,780,999	(28.8)
124	Hawaiian Electric Company Inc.	\$ (745,298)	\$ 4,769,909	(6.4)

Statistical Summary		
Standard Deviation	\$	365,298
Average	\$	98,549
Correlation		0.68

**Growth in Transformers & Substations Plant Investment vs.
Growth in System Peak
(5 Yr. Average 1995-1999 / Excludes Negative Growth and Two
Highest Outliers)**



**Growth in Transformers & Substations Plant Per Growth in
System Peak vs. Growth in System Peak
(5 Yr. Average 1995-1999 / Excludes Negative Growth and Two
Highest Outliers)**



Appendix O

Growth in Lines and Feeders Plant Investment per Growth in System Peak

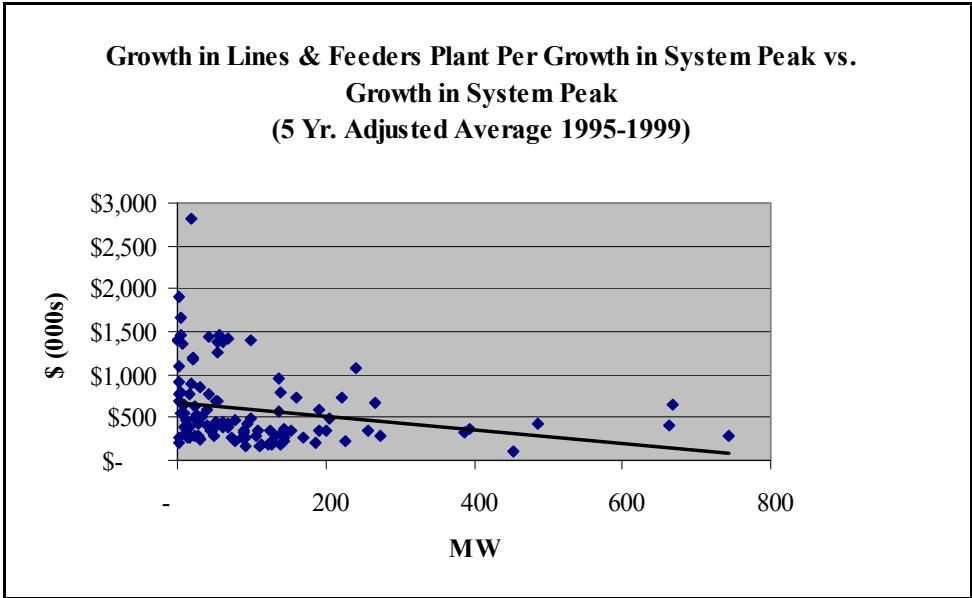
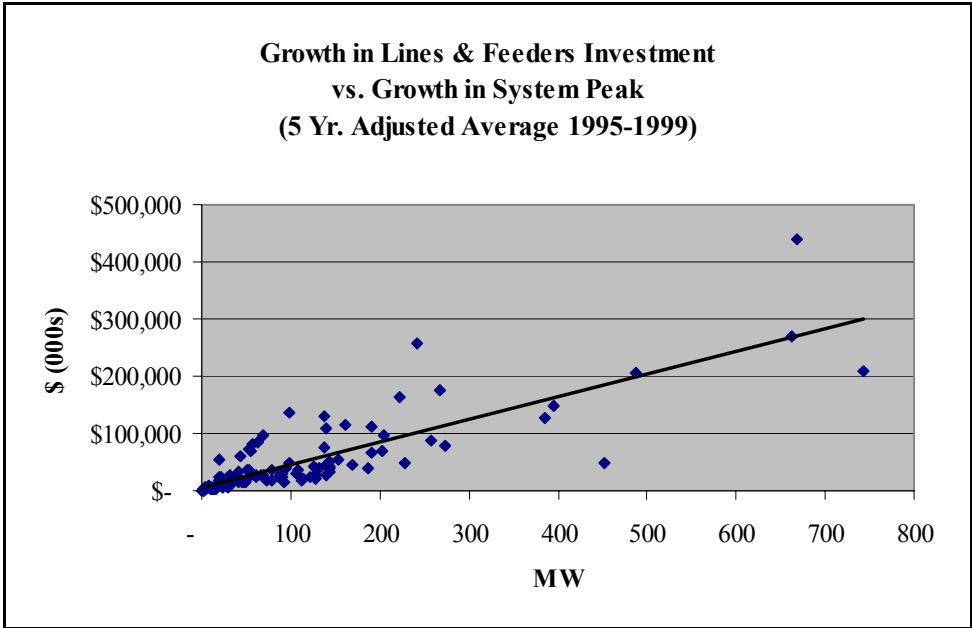
Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Peak	Growth in Lines and Feeders Plant Investment	Growth in System Peak
1	The Potomac Edison Company	\$ 19,483,006	\$ 35,069,410	1.8
2	New Hampshire Electric Cooperative Inc.	\$ 7,130,319	\$ 7,130,319	1.0
3	Central Vermont Public Service Corporation	\$ 6,474,471	\$ 7,769,365	1.2
4	Pennsylvania Electric Company	\$ 2,815,919	\$ 55,755,197	19.8
5	Upper Peninsula Power Company	\$ 1,902,999	\$ 2,283,599	1.2
6	Green Mountain Power Corporation	\$ 1,659,208	\$ 6,304,992	3.8
7	PP&L Inc.	\$ 1,457,472	\$ 83,075,894	57.0
8	Bangor Hydro Electric Company	\$ 1,457,029	\$ 5,245,304	3.6
9	Portland General Electric Company	\$ 1,429,544	\$ 60,612,677	42.4
10	Baltimore Gas and Electric Company	\$ 1,413,312	\$ 97,518,496	69.0
11	Connecticut Valley Electric Company Inc.	\$ 1,394,275	\$ 557,710	0.4
12	PacifiCorp	\$ 1,393,458	\$ 136,558,867	98.0
13	Potomac Electric Power Company	\$ 1,384,774	\$ 73,946,910	53.4
14	San Diego Gas and Electric Company	\$ 1,383,758	\$ 86,346,502	62.4
15	Western Massachusetts Electric Company	\$ 1,348,138	\$ 9,976,219	7.4
16	Boston Edison Company	\$ 1,256,672	\$ 68,362,977	54.4
17	Public Service Company of New Mexico	\$ 1,192,783	\$ 24,332,783	20.4
18	Central Maine Power Company	\$ 1,165,546	\$ 24,243,357	20.8
19	Concord Electric Company	\$ 1,088,347	\$ 1,741,355	1.6
20	Consolidated Edison Company of New York Inc.	\$ 1,071,224	\$ 258,164,963	241.0
21	Arizona Public Service Company	\$ 942,846	\$ 129,169,962	137.0
22	Newport Electric Corporation	\$ 915,530	\$ 1,831,061	2.0
23	Central Illinois Light Company	\$ 886,613	\$ 17,377,610	19.6
24	Public Service Company of New Hampshire	\$ 853,317	\$ 26,111,499	30.6
25	Cambridge Electric Light Company	\$ 795,541	\$ 2,863,947	3.6
26	Carolina Power and Light Company	\$ 780,526	\$ 109,585,909	140.4
27	IES Utilities Inc.	\$ 776,525	\$ 32,148,135	41.4
28	Interstate Power Company	\$ 775,375	\$ 13,181,368	17.0
29	Fitchburg Gas and Electric Light Company	\$ 762,072	\$ 2,133,802	2.8
30	Duke Energy Corporation	\$ 731,974	\$ 163,083,856	222.8
31	Public Service Electric and Gas Company	\$ 725,035	\$ 116,440,597	160.6
32	West Penn Power Company	\$ 693,374	\$ 36,055,463	52.0

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Peak	Growth in Lines and Feeders Plant Investment	Growth in System Peak
33	Ohio Power Company	\$ 693,126	\$ 37,290,195	53.8
34	Exeter and Hampton Electric Company	\$ 691,781	\$ 2,075,342	3.0
35	Rockland Electric Company	\$ 675,930	\$ 2,703,722	4.0
36	The Detroit Edison Company	\$ 663,799	\$ 177,101,518	266.8
37	Pacific Gas and Electric Company	\$ 657,265	\$ 438,789,844	667.6
38	Otter Tail Power Company	\$ 651,783	\$ 6,257,115	9.6
39	Kentucky Power Company	\$ 633,355	\$ 15,580,535	24.6
40	Monongahela Power Company	\$ 588,606	\$ 24,132,841	41.0
41	Consumers Energy Company	\$ 578,734	\$ 110,885,426	191.6
42	The Connecticut Light and Power Company	\$ 558,821	\$ 76,893,712	137.6
43	Chugach Electric Association Inc.	\$ 547,755	\$ 4,710,692	8.6
44	Blackstone Valley Electric Company	\$ 539,508	\$ 2,265,935	4.2
45	Commonwealth Electric Company	\$ 535,533	\$ 14,459,384	27.0
46	Tucson Electric Power Company	\$ 507,323	\$ 17,147,511	33.8
47	Illinois Power Company	\$ 484,372	\$ 47,759,031	98.6
48	Wisconsin Electric Power Company	\$ 479,571	\$ 98,216,114	204.8
49	Central Hudson Gas and Electric Corporation	\$ 478,026	\$ 11,281,419	23.6
50	Eastern Edison Company	\$ 474,219	\$ 5,975,158	12.6
51	Wisconsin Power and Light Company	\$ 457,343	\$ 36,130,078	79.0
52	Entergy New Orleans Inc.	\$ 452,664	\$ 12,584,066	27.8
53	Northern Indiana Public Service Company	\$ 441,154	\$ 27,263,345	61.8
54	Indianapolis Power and Light Company	\$ 438,972	\$ 22,650,938	51.6
55	Central Illinois Public Service Company	\$ 429,798	\$ 23,037,173	53.6
56	Entergy Louisiana Inc.	\$ 426,817	\$ 40,376,880	94.6
57	The United Illuminating Company	\$ 425,356	\$ 12,080,106	28.4
58	Florida Power and Light Company	\$ 423,576	\$ 206,366,354	487.2
59	Utilicorp United Inc.	\$ 416,996	\$ 28,105,552	67.4
60	Commonwealth Edison Company	\$ 408,197	\$ 270,634,305	663.0
61	Wisconsin Public Service Corporation	\$ 397,921	\$ 16,076,011	40.4
62	Madison Gas and Electric Company	\$ 394,662	\$ 6,551,382	16.6
63	The Dayton Power and Light Company	\$ 393,108	\$ 24,058,221	61.2
64	MDU Resources Group Inc.	\$ 387,048	\$ 3,947,892	10.2
65	Sierra Pacific Power Company	\$ 385,991	\$ 26,247,367	68.0
66	Virginia Electric and Power Company	\$ 372,106	\$ 147,056,480	395.2
67	Central Power and Light Company	\$ 357,396	\$ 51,607,941	144.4
68	PSI Energy Inc.	\$ 353,027	\$ 54,224,995	153.6
69	Idaho Power Company	\$ 347,956	\$ 31,107,226	89.4

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Peak	Growth in Lines and Feeders Plant Investment	Growth in System Peak
70	Public Service Company of Colorado	\$ 347,832	\$ 66,227,162	190.4
71	Jersey Central Power and Light Company	\$ 346,517	\$ 69,857,909	201.6
72	Union Electric Company	\$ 346,148	\$ 89,306,251	258.0
73	Columbus Southern Power Company	\$ 343,377	\$ 42,922,088	125.0
74	Northern States Power Company (Wisconsin)	\$ 340,771	\$ 15,471,020	45.4
75	The Empire District Electric Company	\$ 339,908	\$ 16,179,630	47.6
76	Kansas City Power and Light Company	\$ 337,704	\$ 36,269,432	107.4
77	Alabama Power Company	\$ 330,222	\$ 127,531,728	386.2
78	Metropolitan Edison Company	\$ 322,170	\$ 28,930,834	89.8
79	Northwestern Public Service	\$ 318,356	\$ 4,011,288	12.6
80	Ohio Edison Company	\$ 313,524	\$ 43,956,106	140.2
81	South Carolina Electric and Gas Company	\$ 304,703	\$ 43,511,594	142.8
82	West Texas Utilities Company	\$ 291,647	\$ 14,349,043	49.2
83	Savannah Electric and Power Company	\$ 291,174	\$ 8,502,294	29.2
84	Tampa Electric Company	\$ 290,498	\$ 38,055,249	131.0
85	Florida Power Corporation	\$ 288,134	\$ 78,545,213	272.6
86	Indiana Michigan Power Company	\$ 285,252	\$ 30,236,737	106.0
87	TXU Electric Company	\$ 283,040	\$ 210,468,758	743.6
88	Minnesota Power Inc.	\$ 275,322	\$ 6,387,472	23.2
89	The Cincinnati Gas and Electric Company	\$ 272,432	\$ 38,957,768	143.0
90	Cleco Utility Group Inc.	\$ 272,193	\$ 24,878,416	91.4
91	Black Hills Corporation	\$ 267,439	\$ 4,385,994	16.4
92	Gulf Power Company	\$ 266,004	\$ 19,152,301	72.0
93	Atlantic City Electric Company	\$ 264,515	\$ 22,907,000	86.6
94	Oklahoma Gas and Electric Company	\$ 263,218	\$ 44,589,050	169.4
95	St. Joseph Light and Power Company	\$ 259,617	\$ 3,686,558	14.2
96	South Beloit Water, Gas, and Electric Company	\$ 259,239	\$ 414,782	1.6
97	Pennsylvania Power Company	\$ 244,399	\$ 7,771,902	31.8
98	Southern Indiana Gas and Electric Company	\$ 243,760	\$ 7,264,057	29.8
99	Delmarva Power and Light Company	\$ 228,399	\$ 32,980,780	144.4
100	Kentucky Utilities Company	\$ 221,642	\$ 28,237,165	127.4
101	Louisville Gas and Electric Company	\$ 217,465	\$ 17,092,769	78.6
102	Entergy Gulf States Inc.	\$ 216,134	\$ 49,192,129	227.6
103	Lockhart Power Company	\$ 208,486	\$ 458,669	2.2
104	Southwestern Electric Power Company	\$ 205,062	\$ 38,428,630	187.4
105	Southwestern Public Service Company	\$ 186,684	\$ 22,812,817	122.2
106	The Cleveland Electric Illuminating Company	\$ 186,553	\$ 25,856,297	138.6

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Peak	Growth in Lines and Feeders Plant Investment	Growth in System Peak
107	Western Resources Inc.	\$ 184,459	\$ 20,991,429	113.8
108	Entergy Mississippi Inc.	\$ 174,603	\$ 22,384,051	128.2
109	The Toledo Edison Company	\$ 163,059	\$ 15,164,470	93.0
110	Kansas Gas and Electric Company	\$ 155,231	\$ 17,292,698	111.4
111	Entergy Arkansas Inc.	\$ 108,886	\$ 49,303,572	452.8
112	Mt. Carmel Public Utility Company	\$ (220,650)	\$ 308,910	(1.4)
113	Citizens' Electric Company	\$ (292,463)	\$ 350,955	(1.2)
114	Kingsport Power Company	\$ (403,491)	\$ 2,905,133	(7.2)
115	Appalachian Power Company	\$ (445,997)	\$ 72,875,903	(163.4)
116	Maine Public Service Company	\$ (492,606)	\$ 1,477,818	(3.0)
117	Superior Water, Light, and Power Company	\$ (705,781)	\$ 564,625	(0.8)
118	El Paso Electric Company	\$ (1,075,608)	\$ 16,779,484	(15.6)
119	Alaska Electric Light and Power Company	\$ (1,232,920)	\$ 739,752	(0.6)
120	Wheeling Power Company	\$ (1,410,277)	\$ 2,256,443	(1.6)
121	The Montana Power Company	\$ (1,844,562)	\$ 20,659,090	(11.2)
122	Niagara Mohawk Power Corporation	\$ (2,984,178)	\$ 85,944,341	(28.8)
123	Puget Sound Energy Inc.	\$ (4,183,553)	\$ 56,896,314	(13.6)
124	Hawaiian Electric Company Inc.	\$ (6,045,593)	\$ 38,691,795	(6.4)

Statistical Summary		
Standard Deviation	\$	2,129,439
Average	\$	608,215
Correlation		0.80



Appendix P

Growth in Transformers and Substations Plant per Growth in System Energy

Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Energy	Growth in Transformers and Substations Plant Investment	Growth in System Energy
1	Southwestern Public Service Company	\$ 256.37	\$ 6,965,498	27,170
2	Hawaiian Electric Company Inc.	\$ 178.32	\$ 4,769,909	26,749
3	Connecticut Valley Electric Company Inc.	\$ 168.78	\$ 150,818	894
4	PacifiCorp	\$ 94.15	\$ 26,938,504	286,137
5	Alaska Electric Light and Power Company	\$ 90.18	\$ 125,067	1,387
6	Appalachian Power Company	\$ 86.96	\$ 13,537,959	155,679
7	Chugach Electric Association Inc.	\$ 85.76	\$ 3,423,335	39,919
8	Cambridge Electric Light Company	\$ 78.38	\$ 815,019	10,398
9	Minnesota Power Inc.	\$ 67.84	\$ 1,248,939	18,410
10	Central Vermont Public Service Corporation	\$ 60.50	\$ 1,518,996	25,107
11	Potomac Electric Power Company	\$ 59.01	\$ 17,514,984	296,796
12	Bangor Hydro Electric Company	\$ 55.51	\$ 1,246,461	22,457
13	Public Service Electric and Gas Company	\$ 49.46	\$ 20,351,186	411,429
14	Baltimore Gas and Electric Company	\$ 48.29	\$ 20,589,323	426,366
15	Pacific Gas and Electric Company	\$ 48.17	\$ 75,717,706	1,571,964
16	Boston Edison Company	\$ 47.81	\$ 15,855,551	331,604
17	Blackstone Valley Electric Company	\$ 44.61	\$ 586,552	13,147
18	Central Maine Power Company	\$ 41.25	\$ 1,485,153	36,004
19	St. Joseph Light and Power Company	\$ 36.19	\$ 1,723,252	47,612
20	Lockhart Power Company	\$ 35.20	\$ 96,620	2,745
21	Northwestern Public Service	\$ 35.19	\$ 668,378	18,996
22	Consumers Energy Company	\$ 33.27	\$ 21,294,986	640,038
23	Northern Indiana Public Service Company	\$ 32.89	\$ 3,367,037	102,372
24	MDU Resources Group Inc.	\$ 32.07	\$ 415,589	12,960
25	Portland General Electric Company	\$ 29.52	\$ 15,889,328	538,347
26	Concord Electric Company	\$ 29.34	\$ 351,430	11,979
27	Interstate Power Company	\$ 29.25	\$ 1,495,701	51,142
28	PP&L Inc.	\$ 27.95	\$ 12,594,148	450,536
29	Public Service Company of Colorado	\$ 24.78	\$ 16,655,789	672,221
30	Union Electric Company	\$ 24.58	\$ 18,713,091	761,219
31	Kansas Gas and Electric Company	\$ 24.56	\$ 1,956,747	79,667

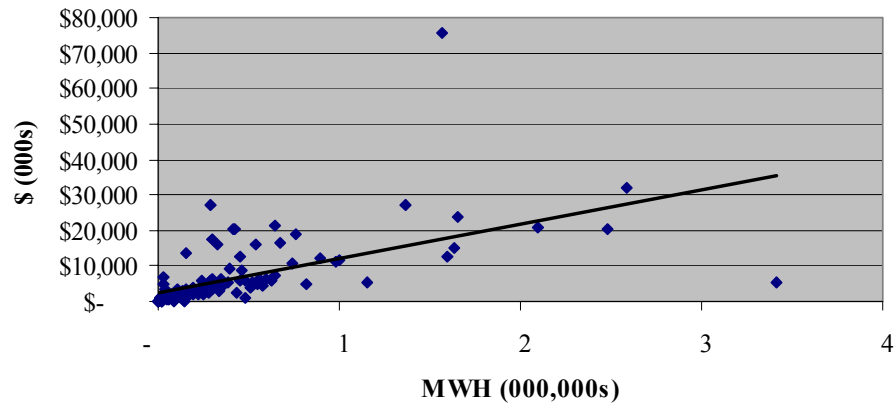
Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Energy	Growth in Transformers and Substations Plant Investment	Growth in System Energy
32	Delmarva Power and Light Company	\$ 23.48	\$ 5,607,297	238,844
33	Jersey Central Power and Light Company	\$ 23.32	\$ 9,304,574	398,921
34	Northern States Power Company (Wisconsin)	\$ 22.74	\$ 3,503,352	154,087
35	Fitchburg Gas and Electric Light Company	\$ 21.34	\$ 717,751	33,635
36	Public Service Company of New Mexico	\$ 20.89	\$ 4,116,554	197,029
37	Central Illinois Public Service Company	\$ 20.51	\$ 2,723,099	132,801
38	Oklahoma Gas and Electric Company	\$ 20.47	\$ 6,200,184	302,880
39	Wheeling Power Company	\$ 20.47	\$ 278,307	13,597
40	Wisconsin Power and Light Company	\$ 19.83	\$ 5,655,097	285,115
41	The Detroit Edison Company	\$ 19.79	\$ 27,031,764	1,365,663
42	The Dayton Power and Light Company	\$ 19.29	\$ 4,594,724	238,192
43	Wisconsin Electric Power Company	\$ 18.73	\$ 8,639,676	461,154
44	The Potomac Edison Company	\$ 18.46	\$ 6,442,701	348,978
45	Black Hills Corporation	\$ 17.77	\$ 1,080,726	60,803
46	Citizens' Electric Company	\$ 17.74	\$ 10,412	587
47	Rockland Electric Company	\$ 17.16	\$ 734,705	42,826
48	Kentucky Power Company	\$ 16.89	\$ 2,099,204	124,296
49	IES Utilities Inc.	\$ 16.86	\$ 4,339,680	257,399
50	Commonwealth Electric Company	\$ 16.49	\$ 1,326,603	80,450
51	The Empire District Electric Company	\$ 15.11	\$ 2,258,144	149,438
52	The Cleveland Electric Illuminating Company	\$ 14.51	\$ 3,046,152	209,977
53	Upper Peninsula Power Company	\$ 14.40	\$ 215,045	14,931
54	Arizona Public Service Company	\$ 14.26	\$ 10,587,777	742,514
55	Alabama Power Company	\$ 14.23	\$ 23,541,139	1,653,858
56	Eastern Edison Company	\$ 14.22	\$ 434,465	30,554
57	Kansas City Power and Light Company	\$ 14.11	\$ 5,405,200	383,186
58	The Toledo Edison Company	\$ 13.89	\$ 2,687,218	193,480
59	Idaho Power Company	\$ 13.81	\$ 4,433,220	321,128
60	Monongahela Power Company	\$ 13.73	\$ 3,837,426	279,501
61	PSI Energy Inc.	\$ 13.57	\$ 12,174,484	896,887
62	Indianapolis Power and Light Company	\$ 13.08	\$ 3,087,768	236,108
63	Entergy Mississippi Inc.	\$ 12.92	\$ 5,877,840	454,837
64	Atlantic City Electric Company	\$ 12.72	\$ 2,847,801	223,945
65	West Texas Utilities Company	\$ 12.37	\$ 2,888,291	233,525
66	Florida Power and Light Company	\$ 12.34	\$ 31,960,112	2,589,582

Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Energy	Growth in Transformers and Substations Plant Investment	Growth in System Energy
67	Columbus Southern Power Company	\$ 12.23	\$ 5,918,219	484,040
68	Central Illinois Light Company	\$ 12.12	\$ 1,644,561	135,742
69	Southern Indiana Gas and Electric Company	\$ 11.86	\$ 2,956,539	249,264
70	Gulf Power Company	\$ 11.86	\$ 3,550,001	299,419
71	West Penn Power Company	\$ 11.81	\$ 6,533,975	553,291
72	Western Massachusetts Electric Company	\$ 11.79	\$ 736,064	62,440
73	Carolina Power and Light Company	\$ 11.75	\$ 11,802,494	1,004,602
74	Sierra Pacific Power Company	\$ 11.69	\$ 4,141,114	354,230
75	The Connecticut Light and Power Company	\$ 11.68	\$ 4,206,562	360,302
76	Duke Energy Corporation	\$ 11.35	\$ 11,182,428	985,347
77	Illinois Power Company	\$ 11.28	\$ 7,312,594	648,429
78	Green Mountain Power Corporation	\$ 11.10	\$ 557,803	50,232
79	Newport Electric Corporation	\$ 11.01	\$ 171,050	15,539
80	Savannah Electric and Power Company	\$ 10.77	\$ 942,078	87,511
81	The Cincinnati Gas and Electric Company	\$ 10.30	\$ 6,089,718	591,406
82	Entergy New Orleans Inc.	\$ 10.12	\$ 965,973	95,456
83	Virginia Electric and Power Company	\$ 10.02	\$ 20,970,324	2,092,244
84	Puget Sound Energy Inc.	\$ 10.01	\$ 5,173,257	516,861
85	Southwestern Electric Power Company	\$ 9.61	\$ 5,974,574	621,928
86	Utilicorp United Inc.	\$ 9.59	\$ 2,143,718	223,479
87	Otter Tail Power Company	\$ 9.54	\$ 1,536,009	161,079
88	Tucson Electric Power Company	\$ 9.34	\$ 1,792,230	191,833
89	Commonwealth Edison Company	\$ 9.26	\$ 15,108,932	1,631,475
90	Indiana Michigan Power Company	\$ 9.10	\$ 4,987,356	548,055
91	Western Resources Inc.	\$ 8.53	\$ 2,841,469	333,223
92	TXU Electric Company	\$ 8.27	\$ 20,544,069	2,484,908
93	Wisconsin Public Service Corporation	\$ 8.10	\$ 2,293,978	283,258
94	Florida Power Corporation	\$ 8.02	\$ 12,807,502	1,597,236
95	Louisville Gas and Electric Company	\$ 7.90	\$ 2,000,993	253,225
96	Kentucky Utilities Company	\$ 7.87	\$ 4,555,275	579,149
97	Tampa Electric Company	\$ 7.72	\$ 3,905,075	505,705
98	The United Illuminating Company	\$ 7.04	\$ 408,025	57,977
99	Cleco Utility Group Inc.	\$ 6.15	\$ 2,660,032	432,772
100	Central Power and Light Company	\$ 6.06	\$ 4,951,874	816,669
101	Exeter and Hampton Electric Company	\$ 4.61	\$ 73,067	15,856

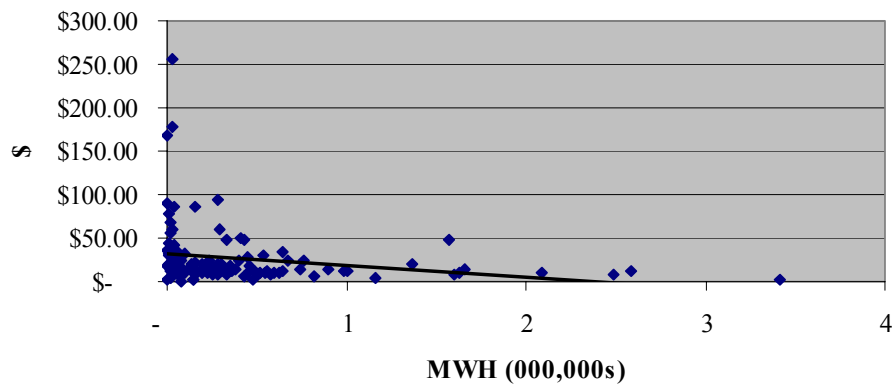
Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in System Energy	Growth in Transformers and Substations Plant Investment	Growth in System Energy
102	Entergy Gulf States Inc.	\$ 4.52	\$ 5,226,975	1,156,210
103	Pennsylvania Power Company	\$ 2.52	\$ 375,911	148,963
104	South Beloit Water, Gas, and Electric Company	\$ 2.48	\$ 11,187	4,517
105	Ohio Edison Company	\$ 1.77	\$ 848,196	479,662
106	Public Service Company of New Hampshire	\$ 1.68	\$ 241,296	143,729
107	Ohio Power Company	\$ 1.50	\$ 5,112,406	3,417,693
108	Madison Gas and Electric Company	\$ 0.26	\$ 21,742	82,681
109	Mt. Carmel Public Utility Company	\$ (3.56)	\$ 31,730	(8,905)
110	Superior Water, Light, and Power Company	\$ (4.14)	\$ 8,075	(1,953)
111	Metropolitan Edison Company	\$ (4.63)	\$ 3,795,466	(820,561)
112	The Montana Power Company	\$ (6.11)	\$ 4,385,810	(717,993)
113	Pennsylvania Electric Company	\$ (6.35)	\$ 5,319,152	(837,015)
114	New Hampshire Electric Cooperative Inc.	\$ (10.28)	\$ 338,568	(32,934)
115	Maine Public Service Company	\$ (12.27)	\$ 136,580	(11,131)
116	South Carolina Electric and Gas Company	\$ (13.95)	\$ 9,164,824	(656,859)
117	San Diego Gas and Electric Company	\$ (27.18)	\$ 6,859,245	(252,336)
118	Consolidated Edison Company of New York Inc.	\$ (32.61)	\$ 29,720,356	(911,497)
119	Kingsport Power Company	\$ (33.15)	\$ 439,120	(13,246)
120	El Paso Electric Company	\$ (43.39)	\$ 4,567,887	(105,283)
121	Central Hudson Gas and Electric Corporation	\$ (73.73)	\$ 3,565,857	(48,363)
122	Niagara Mohawk Power Corporation	\$ (91.43)	\$ 15,780,999	(172,600)
123	Entergy Arkansas Inc.	\$ (106.98)	\$ 8,493,784	(79,399)
124	Entergy Louisiana Inc.	\$ (1,453.64)	\$ 9,544,021	(6,566)

Statistical Summary		
Standard Deviation	\$	138
Average	\$	7.89
Correlation		0.47

**Growth in Transformers & Substations Plant Investment
vs. Growth in System Energy
(5 Yr. Average 1995-1999 / Excludes Negative Growth)**



**Growth in Transformers & Substations Plant Investment Per
MWH vs. Growth in System Energy
(5 Yr. Average 1995-1999 / Excludes Negative Growth)**



Appendix Q

Growth in Lines and Feeders Plant Investment per Growth in System Energy

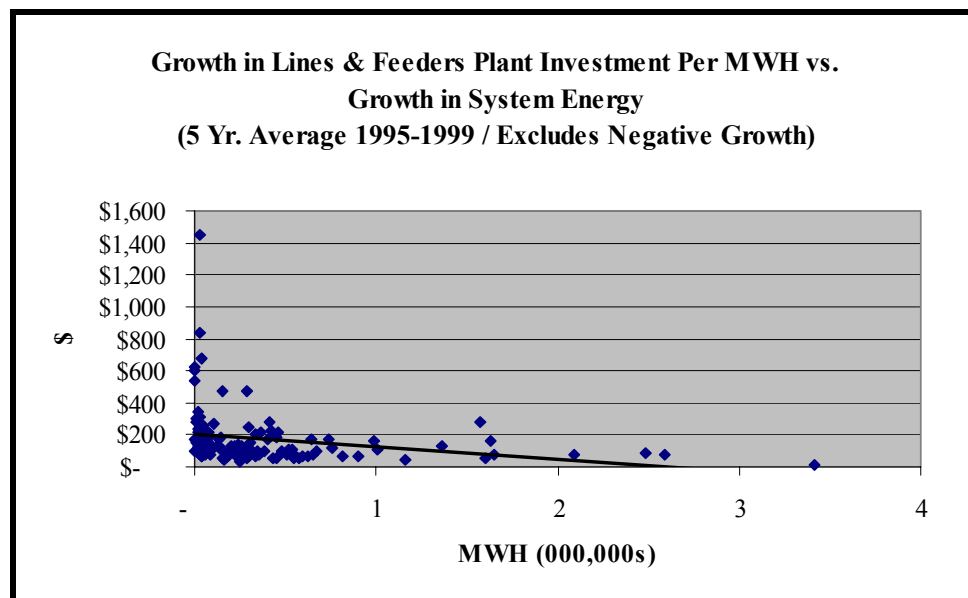
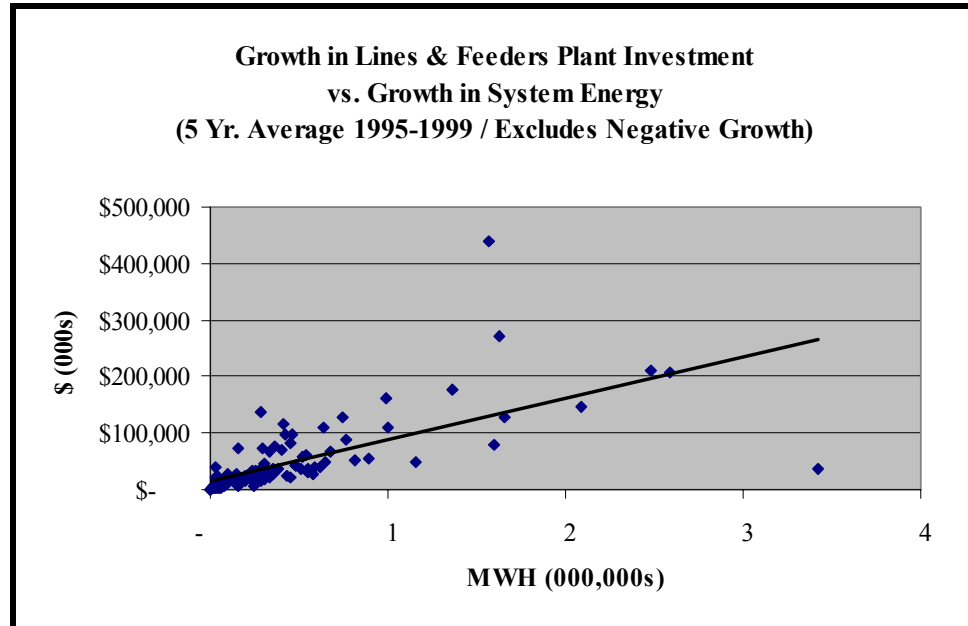
Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Energy	Growth in Lines and Feeders Plant Investment	Growth in System Energy
1	Hawaiian Electric Company Inc.	\$ 1,446	\$ 38,691,795	26,749.4
2	Southwestern Public Service Company	\$ 840	\$ 22,812,817	27,170.2
3	Central Maine Power Company	\$ 673	\$ 24,243,357	36,004.4
4	Connecticut Valley Electric Company Inc.	\$ 624	\$ 557,710	893.6
5	Citizens' Electric Company	\$ 598	\$ 350,955	586.8
6	Alaska Electric Light and Power Company	\$ 533	\$ 739,752	1,386.8
7	PacifiCorp	\$ 477	\$ 136,558,867	286,136.6
8	Appalachian Power Company	\$ 468	\$ 72,875,903	155,678.6
9	Minnesota Power Inc.	\$ 347	\$ 6,387,472	18,410.4
10	Central Vermont Public Service Corporation	\$ 309	\$ 7,769,365	25,107.4
11	MDU Resources Group Inc.	\$ 305	\$ 3,947,892	12,960.0
12	Public Service Electric and Gas Company	\$ 283	\$ 116,440,597	411,429.2
13	Pacific Gas and Electric Company	\$ 279	\$ 438,789,844	1,571,963.6
14	Cambridge Electric Light Company	\$ 275	\$ 2,863,947	10,398.2
15	Northern Indiana Public Service Company	\$ 266	\$ 27,263,345	102,372.4
16	Interstate Power Company	\$ 258	\$ 13,181,368	51,141.6
17	Potomac Electric Power Company	\$ 249	\$ 73,946,910	296,796.4
18	Bangor Hydro Electric Company	\$ 234	\$ 5,245,304	22,456.6
19	Baltimore Gas and Electric Company	\$ 229	\$ 97,518,496	426,365.8
20	Kansas Gas and Electric Company	\$ 217	\$ 17,292,698	79,667.0
21	The Connecticut Light and Power Company	\$ 213	\$ 76,893,712	360,302.0
22	Wisconsin Electric Power Company	\$ 213	\$ 98,216,114	461,154.2
23	Northwestern Public Service	\$ 211	\$ 4,011,288	18,996.0
24	The United Illuminating Company	\$ 208	\$ 12,080,106	57,976.8
25	Boston Edison Company	\$ 206	\$ 68,362,977	331,603.8
26	Eastern Edison Company	\$ 196	\$ 5,975,158	30,553.6
27	PP&L Inc.	\$ 184	\$ 83,075,894	450,536.4
28	Public Service Company of New Hampshire	\$ 182	\$ 26,111,499	143,729.2
29	Commonwealth Electric Company	\$ 180	\$ 14,459,384	80,449.6
30	Jersey Central Power and Light Company	\$ 175	\$ 69,857,909	398,921.0
31	Arizona Public Service Company	\$ 174	\$ 129,169,962	742,514.2
32	Central Illinois Public Service Company	\$ 173	\$ 23,037,173	132,801.2

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Energy	Growth in Lines and Feeders Plant Investment	Growth in System Energy
33	Consumers Energy Company	\$ 173	\$ 110,885,426	640,037.8
34	Blackstone Valley Electric Company	\$ 172	\$ 2,265,935	13,147.4
35	Lockhart Power Company	\$ 167	\$ 458,669	2,745.0
36	Wheeling Power Company	\$ 166	\$ 2,256,443	13,597.2
37	Commonwealth Edison Company	\$ 166	\$ 270,634,305	1,631,474.8
38	Duke Energy Corporation	\$ 166	\$ 163,083,856	985,347.2
39	Western Massachusetts Electric Company	\$ 160	\$ 9,976,219	62,440.4
40	Upper Peninsula Power Company	\$ 153	\$ 2,283,599	14,931.2
41	Oklahoma Gas and Electric Company	\$ 147	\$ 44,589,050	302,879.8
42	Concord Electric Company	\$ 145	\$ 1,741,355	11,978.6
43	Delmarva Power and Light Company	\$ 138	\$ 32,980,780	238,844.0
44	Entergy New Orleans Inc.	\$ 132	\$ 12,584,066	95,456.4
45	Exeter and Hampton Electric Company	\$ 131	\$ 2,075,342	15,855.6
46	The Detroit Edison Company	\$ 130	\$ 177,101,518	1,365,662.8
47	Central Illinois Light Company	\$ 128	\$ 17,377,610	135,742.2
48	Wisconsin Power and Light Company	\$ 127	\$ 36,130,078	285,115.0
49	Utilicorp United Inc.	\$ 126	\$ 28,105,552	223,479.4
50	Green Mountain Power Corporation	\$ 126	\$ 6,304,992	50,232.4
51	Kentucky Power Company	\$ 125	\$ 15,580,535	124,296.2
52	IES Utilities Inc.	\$ 125	\$ 32,148,135	257,398.6
53	Public Service Company of New Mexico	\$ 123	\$ 24,332,783	197,028.6
54	The Cleveland Electric Illuminating Company	\$ 123	\$ 25,856,297	209,977.4
55	Chugach Electric Association Inc.	\$ 118	\$ 4,710,692	39,918.6
56	Newport Electric Corporation	\$ 118	\$ 1,831,061	15,538.8
57	Union Electric Company	\$ 117	\$ 89,306,251	761,219.4
58	Portland General Electric Company	\$ 113	\$ 60,612,677	538,346.6
59	Puget Sound Energy Inc.	\$ 110	\$ 56,896,314	516,861.0
60	Carolina Power and Light Company	\$ 109	\$ 109,585,909	1,004,601.6
61	The Empire District Electric Company	\$ 108	\$ 16,179,630	149,438.2
62	Atlantic City Electric Company	\$ 102	\$ 22,907,000	223,945.2
63	The Dayton Power and Light Company	\$ 101	\$ 24,058,221	238,192.2
64	The Potomac Edison Company	\$ 100	\$ 35,069,410	348,978.4
65	Northern States Power Company (Wisconsin)	\$ 100	\$ 15,471,020	154,086.8
66	Public Service Company of Colorado	\$ 99	\$ 66,227,162	672,221.2
67	Savannah Electric and Power Company	\$ 97	\$ 8,502,294	87,511.2
68	Idaho Power Company	\$ 97	\$ 31,107,226	321,128.4
69	Indianapolis Power and Light Company	\$ 96	\$ 22,650,938	236,107.6

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Energy	Growth in Lines and Feeders Plant Investment	Growth in System Energy
70	Kansas City Power and Light Company	\$ 95	\$ 36,269,432	383,185.6
71	South Beloit Water, Gas, and Electric Company	\$ 92	\$ 414,782	4,517.4
72	Ohio Edison Company	\$ 92	\$ 43,956,106	479,662.4
73	Tucson Electric Power Company	\$ 89	\$ 17,147,511	191,833.2
74	Columbus Southern Power Company	\$ 89	\$ 42,922,088	484,040.0
75	Monongahela Power Company	\$ 86	\$ 24,132,841	279,501.2
76	TXU Electric Company	\$ 85	\$ 210,468,758	2,484,908.2
77	Florida Power and Light Company	\$ 80	\$ 206,366,354	2,589,582.0
78	Madison Gas and Electric Company	\$ 79	\$ 6,551,382	82,680.6
79	The Toledo Edison Company	\$ 78	\$ 15,164,470	193,480.2
80	St. Joseph Light and Power Company	\$ 77	\$ 3,686,558	47,612.2
81	Alabama Power Company	\$ 77	\$ 127,531,728	1,653,857.8
82	Tampa Electric Company	\$ 75	\$ 38,055,249	505,704.8
83	Sierra Pacific Power Company	\$ 74	\$ 26,247,367	354,230.2
84	Illinois Power Company	\$ 74	\$ 47,759,031	648,428.8
85	Black Hills Corporation	\$ 72	\$ 4,385,994	60,802.6
86	Virginia Electric and Power Company	\$ 70	\$ 147,056,480	2,092,243.8
87	Louisville Gas and Electric Company	\$ 68	\$ 17,092,769	253,225.2
88	The Cincinnati Gas and Electric Company	\$ 66	\$ 38,957,768	591,405.6
89	West Penn Power Company	\$ 65	\$ 36,055,463	553,291.4
90	Gulf Power Company	\$ 64	\$ 19,152,301	299,419.2
91	Fitchburg Gas and Electric Light Company	\$ 63	\$ 2,133,802	33,635.4
92	Central Power and Light Company	\$ 63	\$ 51,607,941	816,668.8
93	Rockland Electric Company	\$ 63	\$ 2,703,722	42,825.6
94	Western Resources Inc.	\$ 63	\$ 20,991,429	333,223.4
95	Southwestern Electric Power Company	\$ 62	\$ 38,428,630	621,928.4
96	West Texas Utilities Company	\$ 61	\$ 14,349,043	233,524.8
97	PSI Energy Inc.	\$ 60	\$ 54,224,995	896,887.0
98	Cleco Utility Group Inc.	\$ 57	\$ 24,878,416	432,772.0
99	Wisconsin Public Service Corporation	\$ 57	\$ 16,076,011	283,257.8
100	Indiana Michigan Power Company	\$ 55	\$ 30,236,737	548,054.8
101	Pennsylvania Power Company	\$ 52	\$ 7,771,902	148,963.4
102	Entergy Mississippi Inc.	\$ 49	\$ 22,384,051	454,837.2
103	Florida Power Corporation	\$ 49	\$ 78,545,213	1,597,236.0
104	Kentucky Utilities Company	\$ 49	\$ 28,237,165	579,149.0
105	Entergy Gulf States Inc.	\$ 43	\$ 49,192,129	1,156,210.4
106	Otter Tail Power Company	\$ 39	\$ 6,257,115	161,079.2

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in System Energy	Growth in Lines and Feeders Plant Investment	Growth in System Energy
107	Southern Indiana Gas and Electric Company	\$ 29	\$ 7,264,057	249,263.6
108	Ohio Power Company	\$ 11	\$ 37,290,195	3,417,693.4
109	The Montana Power Company	\$ (29)	\$ 20,659,090	(717,993.2)
110	Mt. Carmel Public Utility Company	\$ (35)	\$ 308,910	(8,904.6)
111	Metropolitan Edison Company	\$ (35)	\$ 28,930,834	(820,560.6)
112	South Carolina Electric and Gas Company	\$ (66)	\$ 43,511,594	(656,859.0)
113	Pennsylvania Electric Company	\$ (67)	\$ 55,755,197	(837,015.0)
114	Maine Public Service Company	\$ (133)	\$ 1,477,818	(11,130.8)
115	El Paso Electric Company	\$ (159)	\$ 16,779,484	(105,282.6)
116	New Hampshire Electric Cooperative Inc.	\$ (217)	\$ 7,130,319	(32,934.4)
117	Kingsport Power Company	\$ (219)	\$ 2,905,133	(13,245.6)
118	Central Hudson Gas and Electric Corporation	\$ (233)	\$ 11,281,419	(48,363.2)
119	Consolidated Edison Company of New York Inc.	\$ (283)	\$ 258,164,963	(911,496.6)
120	Superior Water, Light, and Power Company	\$ (289)	\$ 564,625	(1,952.6)
121	San Diego Gas and Electric Company	\$ (342)	\$ 86,346,502	(252,336.4)
122	Niagara Mohawk Power Corporation	\$ (498)	\$ 85,944,341	(172,599.6)
123	Entergy Arkansas Inc.	\$ (621)	\$ 49,303,572	(79,399.0)
124	Entergy Louisiana Inc.	\$ (6,150)	\$ 40,376,880	(6,565.6)

Statistical Summary		
Standard Deviation	\$	606
Average	\$	74
Correlation		0.53



Appendix R

Growth in Transformers and Substations Plant Investment per Growth in Number of Customers

Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in Number of Customers	Growth in Transformers and Substations Plant Investment	Growth in Number of Customers
1	Wheeling Power Company	\$ 6,354	\$ 278,307	44
2	Boston Edison Company	\$ 5,666	\$ 15,855,551	2,798
3	Connecticut Valley Electric Company Inc.	\$ 5,027	\$ 150,818	30
4	St. Joseph Light and Power Company	\$ 3,677	\$ 1,723,252	469
5	Potomac Electric Power Company	\$ 3,231	\$ 17,514,984	5,421
6	Chugach Electric Association Inc.	\$ 3,139	\$ 3,423,335	1,091
7	Cambridge Electric Light Company	\$ 2,996	\$ 815,019	272
8	West Texas Utilities Company	\$ 2,584	\$ 2,888,291	1,118
9	Hawaiian Electric Company Inc.	\$ 2,538	\$ 4,769,909	1,879
10	Otter Tail Power Company	\$ 2,417	\$ 1,536,009	636
11	Niagara Mohawk Power Corporation	\$ 2,318	\$ 15,780,999	6,807
12	Illinois Power Company	\$ 2,216	\$ 7,312,594	3,300
13	Baltimore Gas and Electric Company	\$ 2,203	\$ 20,589,323	9,347
14	Southern Indiana Gas and Electric Company	\$ 2,167	\$ 2,956,539	1,365
15	Consolidated Edison Company of New York Inc.	\$ 1,990	\$ 29,720,356	14,935
16	Pennsylvania Electric Company	\$ 1,971	\$ 5,319,152	2,698
17	UNION ELECTRIC COMPANY	\$ 1,934	\$ 18,713,091	9,673
18	Southwestern Public Service Company	\$ 1,792	\$ 6,965,498	3,887
19	Central Hudson Gas and Electric Corporation	\$ 1,609	\$ 3,565,857	2,216
20	IES Utilities Inc.	\$ 1,569	\$ 4,339,680	2,766
21	Entergy Louisiana Inc.	\$ 1,548	\$ 9,544,021	6,167
22	Black Hills Corporation	\$ 1,534	\$ 1,080,726	705
23	Northwestern Public Service	\$ 1,515	\$ 668,378	441
24	Central Vermont Public Service Corporation	\$ 1,513	\$ 1,518,996	1,004
25	Pacific Gas and Electric Company	\$ 1,510	\$ 75,717,706	50,129
26	Interstate Power Company	\$ 1,358	\$ 1,495,701	1,102
27	Concord Electric Company	\$ 1,327	\$ 351,430	265
28	Southwestern Electric Power Company	\$ 1,313	\$ 5,974,574	4,550
29	Appalachian Power Company	\$ 1,309	\$ 13,537,959	10,343
30	Kentucky Power Company	\$ 1,260	\$ 2,099,204	1,666

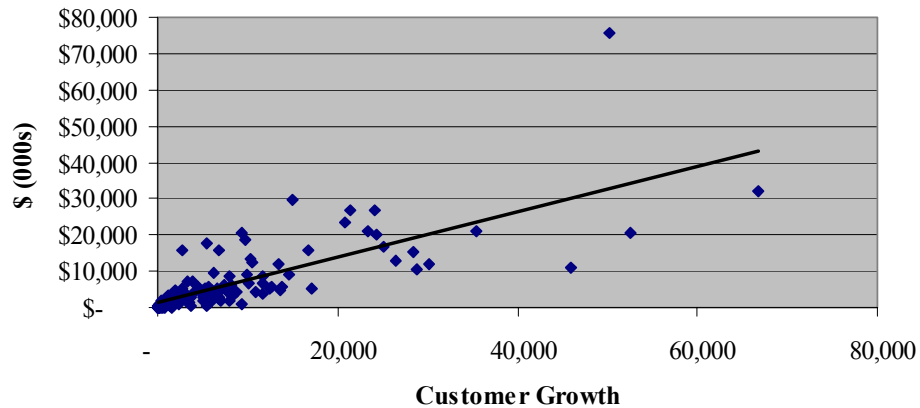
Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in Number of Customers	Growth in Transformers and Substations Plant Investment	Growth in Number of Customers
31	The Detroit Edison Company	\$ 1,257	\$ 27,031,764	21,499
32	Monongahela Power Company	\$ 1,236	\$ 3,837,426	3,104
33	PP&L Inc.	\$ 1,206	\$ 12,594,148	10,442
34	Alabama Power Company	\$ 1,127	\$ 23,541,139	20,896
35	Central Illinois Light Company	\$ 1,125	\$ 1,644,561	1,462
36	PacifiCorp	\$ 1,113	\$ 26,938,504	24,198
37	The Montana Power Company	\$ 1,081	\$ 4,385,810	4,059
38	Entergy Arkansas Inc.	\$ 1,077	\$ 8,493,784	7,889
39	Entergy Mississippi Inc.	\$ 1,051	\$ 5,877,840	5,594
40	Minnesota Power Inc.	\$ 1,011	\$ 1,248,939	1,235
41	Ohio Power Company	\$ 961	\$ 5,112,406	5,319
42	Portland General Electric Company	\$ 949	\$ 15,889,328	16,749
43	South Carolina Electric and Gas Company	\$ 926	\$ 9,164,824	9,897
44	The Dayton Power and Light Company	\$ 919	\$ 4,594,724	4,998
45	Consumers Energy Company	\$ 915	\$ 21,294,986	23,280
46	The Toledo Edison Company	\$ 912	\$ 2,687,218	2,945
47	PSI Energy Inc.	\$ 911	\$ 12,174,484	13,358
48	Bangor Hydro Electric Company	\$ 903	\$ 1,246,461	1,381
49	Lockhart Power Company	\$ 891	\$ 96,620	108
50	Maine Public Service Company	\$ 886	\$ 136,580	154
51	The Potomac Edison Company	\$ 873	\$ 6,442,701	7,377
52	Rockland Electric Company	\$ 850	\$ 734,705	865
53	Indiana Michigan Power Company	\$ 844	\$ 4,987,356	5,911
54	Public Service Electric and Gas Company	\$ 834	\$ 20,351,186	24,398
55	Kansas City Power and Light Company	\$ 820	\$ 5,405,200	6,589
56	Green Mountain Power Corporation	\$ 800	\$ 557,803	697
57	Upper Peninsula Power Company	\$ 779	\$ 215,045	276
58	Wisconsin Power and Light Company	\$ 763	\$ 5,655,097	7,412
59	Western Massachusetts Electric Company	\$ 763	\$ 736,064	965
60	El Paso Electric Company	\$ 761	\$ 4,567,887	6,001
61	Western Resources Inc.	\$ 758	\$ 2,841,469	3,749
62	The Cincinnati Gas and Electric Company	\$ 753	\$ 6,089,718	8,087
63	Wisconsin Electric Power Company	\$ 746	\$ 8,639,676	11,582
64	The Empire District Electric Company	\$ 717	\$ 2,258,144	3,151
65	Northern Indiana Public Service Company	\$ 672	\$ 3,367,037	5,010

Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in Number of Customers	Growth in Transformers and Substations Plant Investment	Growth in Number of Customers
66	San Diego Gas and Electric Company	\$ 671	\$ 6,859,245	10,218
67	Public Service Company of Colorado	\$ 665	\$ 16,655,789	25,051
68	Northern States Power Company (Wisconsin)	\$ 661	\$ 3,503,352	5,299
69	Kansas Gas and Electric Company	\$ 648	\$ 1,956,747	3,019
70	Jersey Central Power and Light Company	\$ 640	\$ 9,304,574	14,544
71	Kingsport Power Company	\$ 627	\$ 439,120	701
72	The Connecticut Light and Power Company	\$ 611	\$ 4,206,562	6,888
73	Metropolitan Edison Company	\$ 601	\$ 3,795,466	6,320
74	Virginia Electric and Power Company	\$ 591	\$ 20,970,324	35,458
75	Atlantic City Electric Company	\$ 573	\$ 2,847,801	4,969
76	West Penn Power Company	\$ 563	\$ 6,533,975	11,608
77	Kentucky Utilities Company	\$ 563	\$ 4,555,275	8,095
78	Commonwealth Edison Company	\$ 532	\$ 15,108,932	28,421
79	Sierra Pacific Power Company	\$ 531	\$ 4,141,114	7,803
80	Indianapolis Power and Light Company	\$ 517	\$ 3,087,768	5,977
81	New Hampshire Electric Cooperative Inc.	\$ 504	\$ 338,568	672
82	Florida Power Corporation	\$ 483	\$ 12,807,502	26,541
83	Florida Power and Light Company	\$ 479	\$ 31,960,112	66,767
84	Public Service Company of New Mexico	\$ 471	\$ 4,116,554	8,742
85	Columbus Southern Power Company	\$ 471	\$ 5,918,219	12,574
86	Cleco Utility Group Inc.	\$ 454	\$ 2,660,032	5,853
87	Gulf Power Company	\$ 427	\$ 3,550,001	8,308
88	Entergy Gulf States Inc.	\$ 422	\$ 5,226,975	12,394
89	Idaho Power Company	\$ 409	\$ 4,433,220	10,844
90	Savannah Electric and Power Company	\$ 408	\$ 942,078	2,311
91	Delmarva Power and Light Company	\$ 404	\$ 5,607,297	13,887
92	Alaska Electric Light and Power Company	\$ 403	\$ 125,067	310
93	Central Illinois Public Service Company	\$ 401	\$ 2,723,099	6,793
94	TXU Electric Company	\$ 391	\$ 20,544,069	52,582
95	Carolina Power and Light Company	\$ 391	\$ 11,802,494	30,221
96	Louisville Gas and Electric Company	\$ 390	\$ 2,000,993	5,136
97	Commonwealth Electric Company	\$ 387	\$ 1,326,603	3,428
98	Arizona Public Service Company	\$ 368	\$ 10,587,777	28,787
99	Central Power and Light Company	\$ 362	\$ 4,951,874	13,669
100	Blackstone Valley Electric Company	\$ 362	\$ 586,552	1,622

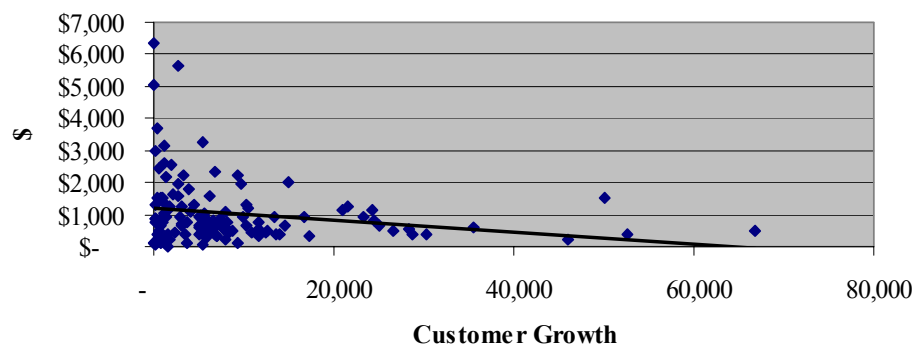
Rank	Company	Growth in Transformers and Substations Plant Investment per Growth in Number of Customers	Growth in Transformers and Substations Plant Investment	Growth in Number of Customers
101	Tampa Electric Company	\$ 337	\$ 3,905,075	11,593
102	Wisconsin Public Service Corporation	\$ 332	\$ 2,293,978	6,902
103	MDU Resources Group Inc.	\$ 315	\$ 415,589	1,319
104	Utilicorp United Inc.	\$ 303	\$ 2,143,718	7,063
105	Puget Sound Energy Inc.	\$ 301	\$ 5,173,257	17,193
106	Newport Electric Corporation	\$ 285	\$ 171,050	600
107	Central Maine Power Company	\$ 253	\$ 1,485,153	5,882
108	Duke Energy Corporation	\$ 243	\$ 11,182,428	45,960
109	Tucson Electric Power Company	\$ 224	\$ 1,792,230	8,016
110	The United Illuminating Company	\$ 222	\$ 408,025	1,835
111	Citizens' Electric Company	\$ 130	\$ 10,412	80
112	Eastern Edison Company	\$ 120	\$ 434,465	3,627
113	Superior Water, Light, and Power Company	\$ 115	\$ 8,075	70
114	Exeter and Hampton Electric Company	\$ 95	\$ 73,067	769
115	Ohio Edison Company	\$ 91	\$ 848,196	9,335
116	South Beloit Water, Gas, and Electric Company	\$ 61	\$ 11,187	185
117	Public Service Company of New Hampshire	\$ 45	\$ 241,296	5,381
118	Madison Gas and Electric Company	\$ 14	\$ 21,742	1,567
119	Oklahoma Gas and Electric Company	\$ (1,114)	\$ 6,200,184	(5,564)
120	Pennsylvania Power Company	\$ (2,047)	\$ 375,911	(184)
121	Mt. Carmel Public Utility Company	\$ (2,783)	\$ 31,730	(11)
122	The Cleveland Electric Illuminating Company	\$ (3,440)	\$ 3,046,152	(886)
123	Fitchburg Gas and Electric Light Company	\$ (6,252)	\$ 717,751	(115)
124	Entergy New Orleans Inc.	\$ (7,983)	\$ 965,973	(121)

Statistical Summary		
Standard Deviation	\$	1,575
Average	\$	815
Correlation		0.75

**Growth in Transformers & Substations Plant Investment
vs. Growth in Customers
(5 Yr. Average 1995-1999 / Excludes Negative Growth)**



**Growth in Transformers & Substations Investment Per
Growth in Customers vs. Growth in Customers
(5 Yr. Average 1995-1999 / Excludes Negative Growth
Companies)**



Appendix S

Growth in Lines and Feeders Plant Investment per Growth in Number of Customers

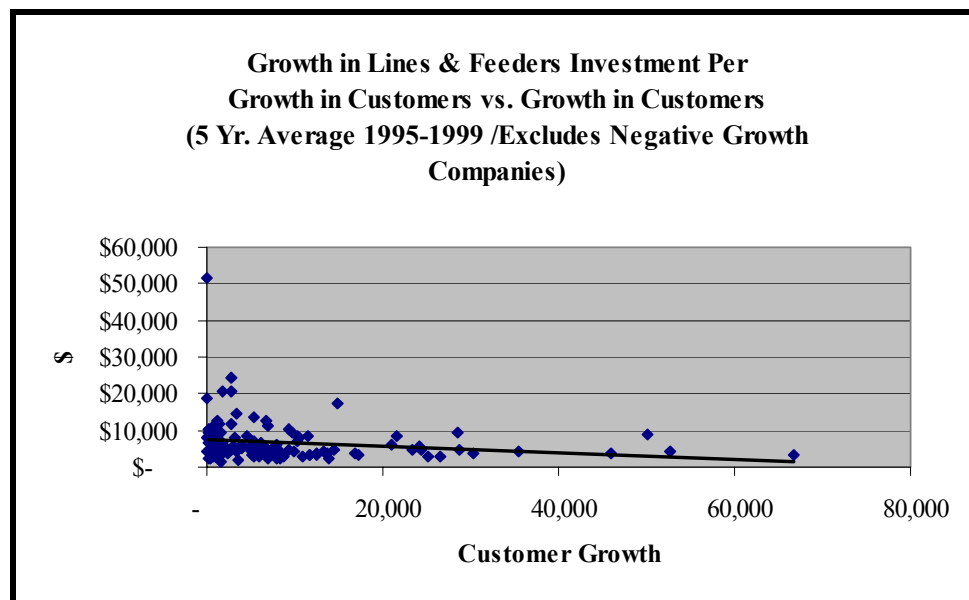
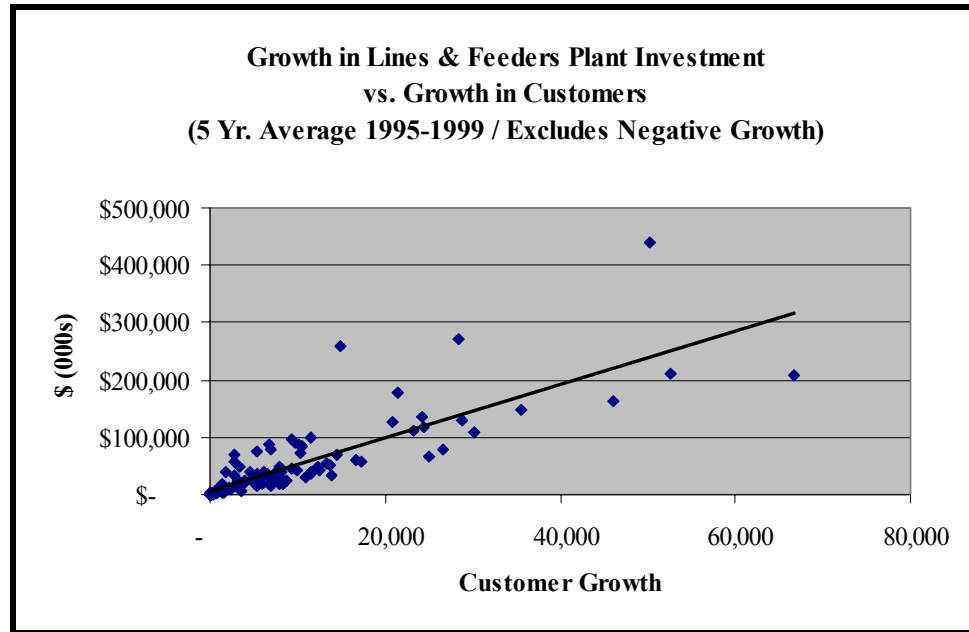
Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in Number of Customers	Growth in Lines and Feeders Plant Investment	Growth in Number of Customers
1	Wheeling Power Company	\$ 51,517	\$ 2,256,443	44
2	Boston Edison Company	\$ 24,429	\$ 68,362,977	2,798
3	Pennsylvania Electric Company	\$ 20,662	\$ 55,755,197	2,698
4	Hawaiian Electric Company Inc.	\$ 20,590	\$ 38,691,795	1,879
5	Connecticut Valley Electric Company Inc.	\$ 18,590	\$ 557,710	30
6	Consolidated Edison Company of New York Inc.	\$ 17,286	\$ 258,164,963	14,935
7	Illinois Power Company	\$ 14,471	\$ 47,759,031	3,300
8	Potomac Electric Power Company	\$ 13,641	\$ 73,946,910	5,421
9	West Texas Utilities Company	\$ 12,839	\$ 14,349,043	1,118
10	Niagara Mohawk Power Corporation	\$ 12,627	\$ 85,944,341	6,807
11	Interstate Power Company	\$ 11,963	\$ 13,181,368	1,102
12	Central Illinois Light Company	\$ 11,889	\$ 17,377,610	1,462
13	IES Utilities Inc.	\$ 11,622	\$ 32,148,135	2,766
14	The Connecticut Light and Power Company	\$ 11,163	\$ 76,893,712	6,888
15	New Hampshire Electric Cooperative Inc.	\$ 10,604	\$ 7,130,319	672
16	Cambridge Electric Light Company	\$ 10,529	\$ 2,863,947	272
17	Baltimore Gas and Electric Company	\$ 10,433	\$ 97,518,496	9,347
18	Western Massachusetts Electric Company	\$ 10,336	\$ 9,976,219	965
19	Otter Tail Power Company	\$ 9,844	\$ 6,257,115	636
20	Maine Public Service Company	\$ 9,584	\$ 1,477,818	154
21	Commonwealth Edison Company	\$ 9,522	\$ 270,634,305	28,421
22	Kentucky Power Company	\$ 9,352	\$ 15,580,535	1,666
23	Union Electric Company	\$ 9,232	\$ 89,306,251	9,673
24	Northwestern Public Service	\$ 9,092	\$ 4,011,288	441
25	Green Mountain Power Corporation	\$ 9,043	\$ 6,304,992	697
26	Pacific Gas and Electric Company	\$ 8,753	\$ 438,789,844	50,129
27	Wisconsin Electric Power Company	\$ 8,480	\$ 98,216,114	11,582
28	San Diego Gas and Electric Company	\$ 8,450	\$ 86,346,502	10,218
29	Southwestern Electric Power Company	\$ 8,446	\$ 38,428,630	4,550
30	Upper Peninsula Power Company	\$ 8,268	\$ 2,283,599	276
31	The Detroit Edison Company	\$ 8,238	\$ 177,101,518	21,499
32	Superior Water, Light, and Power Company	\$ 8,066	\$ 564,625	70

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in Number of Customers	Growth in Lines and Feeders Plant Investment	Growth in Number of Customers
33	PP&L Inc.	\$ 7,956	\$ 83,075,894	10,442
34	St. Joseph Light and Power Company	\$ 7,867	\$ 3,686,558	469
35	Monongahela Power Company	\$ 7,775	\$ 24,132,841	3,104
36	Central Vermont Public Service Corporation	\$ 7,737	\$ 7,769,365	1,004
37	Appalachian Power Company	\$ 7,046	\$ 72,875,903	10,343
38	Ohio Power Company	\$ 7,011	\$ 37,290,195	5,319
39	The United Illuminating Company	\$ 6,584	\$ 12,080,106	1,835
40	Concord Electric Company	\$ 6,576	\$ 1,741,355	265
41	Entergy Louisiana Inc.	\$ 6,547	\$ 40,376,880	6,167
42	Entergy Arkansas Inc.	\$ 6,250	\$ 49,303,572	7,889
43	Black Hills Corporation	\$ 6,225	\$ 4,385,994	705
44	Alabama Power Company	\$ 6,103	\$ 127,531,728	20,896
45	Southwestern Public Service Company	\$ 5,869	\$ 22,812,817	3,887
46	Kansas Gas and Electric Company	\$ 5,727	\$ 17,292,698	3,019
47	PacifiCorp	\$ 5,643	\$ 136,558,867	24,198
48	Western Resources Inc.	\$ 5,599	\$ 20,991,429	3,749
49	Kansas City Power and Light Company	\$ 5,505	\$ 36,269,432	6,589
50	Northern Indiana Public Service Company	\$ 5,441	\$ 27,263,345	5,010
51	Southern Indiana Gas and Electric Company	\$ 5,323	\$ 7,264,057	1,365
52	Minnesota Power Inc.	\$ 5,171	\$ 6,387,472	1,235
53	The Toledo Edison Company	\$ 5,149	\$ 15,164,470	2,945
54	The Empire District Electric Company	\$ 5,135	\$ 16,179,630	3,151
55	Indiana Michigan Power Company	\$ 5,115	\$ 30,236,737	5,911
56	The Montana Power Company	\$ 5,090	\$ 20,659,090	4,059
57	Central Hudson Gas and Electric Corporation	\$ 5,090	\$ 11,281,419	2,216
58	Wisconsin Power and Light Company	\$ 4,875	\$ 36,130,078	7,412
59	Public Service Company of New Hampshire	\$ 4,853	\$ 26,111,499	5,381
60	The Cincinnati Gas and Electric Company	\$ 4,817	\$ 38,957,768	8,087
61	The Dayton Power and Light Company	\$ 4,814	\$ 24,058,221	4,998
62	Jersey Central Power and Light Company	\$ 4,803	\$ 69,857,909	14,544
63	Public Service Electric and Gas Company	\$ 4,773	\$ 116,440,597	24,398
64	Consumers Energy Company	\$ 4,763	\$ 110,885,426	23,280
65	The Potomac Edison Company	\$ 4,754	\$ 35,069,410	7,377
66	Ohio Edison Company	\$ 4,709	\$ 43,956,106	9,335
67	Atlantic City Electric Company	\$ 4,610	\$ 22,907,000	4,969
68	Metropolitan Edison Company	\$ 4,577	\$ 28,930,834	6,320

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in Number of Customers	Growth in Lines and Feeders Plant Investment	Growth in Number of Customers
69	Arizona Public Service Company	\$ 4,487	\$ 129,169,962	28,787
70	South Carolina Electric and Gas Company	\$ 4,396	\$ 43,511,594	9,897
71	Citizens' Electric Company	\$ 4,376	\$ 350,955	80
72	Chugach Electric Association Inc.	\$ 4,319	\$ 4,710,692	1,091
73	Cleco Utility Group Inc.	\$ 4,250	\$ 24,878,416	5,853
74	Lockhart Power Company	\$ 4,231	\$ 458,669	108
75	Commonwealth Electric Company	\$ 4,218	\$ 14,459,384	3,428
76	Madison Gas and Electric Company	\$ 4,180	\$ 6,551,382	1,567
77	Virginia Electric and Power Company	\$ 4,147	\$ 147,056,480	35,458
78	Kingsport Power Company	\$ 4,145	\$ 2,905,133	701
79	Central Maine Power Company	\$ 4,122	\$ 24,243,357	5,882
80	PSI Energy Inc.	\$ 4,059	\$ 54,224,995	13,358
81	TXU Electric Company	\$ 4,003	\$ 210,468,758	52,582
82	Entergy Mississippi Inc.	\$ 4,002	\$ 22,384,051	5,594
83	Utilicorp United Inc.	\$ 3,979	\$ 28,105,552	7,063
84	Entergy Gulf States Inc.	\$ 3,969	\$ 49,192,129	12,394
85	Bangor Hydro Electric Company	\$ 3,799	\$ 5,245,304	1,381
86	Indianapolis Power and Light Company	\$ 3,790	\$ 22,650,938	5,977
87	Central Power and Light Company	\$ 3,776	\$ 51,607,941	13,669
88	Savannah Electric and Power Company	\$ 3,679	\$ 8,502,294	2,311
89	Carolina Power and Light Company	\$ 3,626	\$ 109,585,909	30,221
90	Portland General Electric Company	\$ 3,619	\$ 60,612,677	16,749
91	Duke Energy Corporation	\$ 3,548	\$ 163,083,856	45,960
92	Kentucky Utilities Company	\$ 3,488	\$ 28,237,165	8,095
93	Columbus Southern Power Company	\$ 3,414	\$ 42,922,088	12,574
94	Central Illinois Public Service Company	\$ 3,392	\$ 23,037,173	6,793
95	Sierra Pacific Power Company	\$ 3,364	\$ 26,247,367	7,803
96	Louisville Gas and Electric Company	\$ 3,328	\$ 17,092,769	5,136
97	Puget Sound Energy Inc.	\$ 3,309	\$ 56,896,314	17,193
98	Tampa Electric Company	\$ 3,283	\$ 38,055,249	11,593
99	Rockland Electric Company	\$ 3,126	\$ 2,703,722	865
100	West Penn Power Company	\$ 3,106	\$ 36,055,463	11,608
101	Florida Power and Light Company	\$ 3,091	\$ 206,366,354	66,767
102	Newport Electric Corporation	\$ 3,052	\$ 1,831,061	600
103	MDU Resources Group Inc.	\$ 2,992	\$ 3,947,892	1,319
104	Florida Power Corporation	\$ 2,959	\$ 78,545,213	26,541

Rank	Company	Growth in Lines and Feeders Plant Investment per Growth in Number of Customers	Growth in Lines and Feeders Plant Investment	Growth in Number of Customers
105	Northern States Power Company (Wisconsin)	\$ 2,920	\$ 15,471,020	5,299
106	Idaho Power Company	\$ 2,869	\$ 31,107,226	10,844
107	El Paso Electric Company	\$ 2,796	\$ 16,779,484	6,001
108	Public Service Company of New Mexico	\$ 2,783	\$ 24,332,783	8,742
109	Exeter and Hampton Electric Company	\$ 2,697	\$ 2,075,342	769
110	Public Service Company of Colorado	\$ 2,644	\$ 66,227,162	25,051
111	Alaska Electric Light and Power Company	\$ 2,383	\$ 739,752	310
112	Delmarva Power and Light Company	\$ 2,375	\$ 32,980,780	13,887
113	Wisconsin Public Service Corporation	\$ 2,329	\$ 16,076,011	6,902
114	Gulf Power Company	\$ 2,305	\$ 19,152,301	8,308
115	South Beloit Water, Gas, and Electric Company	\$ 2,244	\$ 414,782	185
116	Tucson Electric Power Company	\$ 2,139	\$ 17,147,511	8,016
117	Eastern Edison Company	\$ 1,647	\$ 5,975,158	3,627
118	Blackstone Valley Electric Company	\$ 1,397	\$ 2,265,935	1,622
119	Oklahoma Gas and Electric Company	\$ (8,014)	\$ 44,589,050	(5,564)
120	Fitchburg Gas and Electric Light Company	\$ (18,587)	\$ 2,133,802	(115)
121	Mt. Carmel Public Utility Company	\$ (27,097)	\$ 308,910	(11)
122	The Cleveland Electric Illuminating Company	\$ (29,196)	\$ 25,856,297	(886)
123	Pennsylvania Power Company	\$ (42,331)	\$ 7,771,902	(184)
124	Entergy New Orleans Inc.	\$ (104,001)	\$ 12,584,066	(121)

Statistical Summary		
Standard Deviation	\$	13,191
Average	\$	4,551
Correlation		0.82



Appendix T

Growth in Transformers and Substations O&M Expense per Growth in System Peak

Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Peak	Growth in Transformers and Substations O&M Expense	Growth in System Peak
1	The Potomac Edison Company	\$ 37,004	\$ 66,607	1.8
2	Bangor Hydro Electric Company	\$ 36,583	\$ 131,698	3.6
3	Central Vermont Public Service Corporation	\$ 26,337	\$ 31,604	1.2
4	Newport Electric Corporation	\$ 22,735	\$ 45,469	2.0
5	Cambridge Electric Light Company	\$ 22,240	\$ 80,065	3.6
6	Portland General Electric Company	\$ 11,289	\$ 478,646	42.4
7	San Diego Gas and Electric Company	\$ 10,209	\$ 637,068	62.4
8	Minnesota Power Inc.	\$ 9,854	\$ 228,605	23.2
9	New Hampshire Electric Cooperative Inc.	\$ 9,565	\$ 9,565	1.0
10	Commonwealth Edison Company	\$ 9,511	\$ 6,305,874	663.0
11	PacifiCorp	\$ 8,838	\$ 866,121	98.0
12	Atlantic City Electric Company	\$ 8,049	\$ 697,038	86.6
13	Kingsport Power Company	\$ 6,753	\$ (48,624)	(7.2)
14	Public Service Company of New Hampshire	\$ 6,468	\$ 197,914	30.6
15	Indianapolis Power and Light Company	\$ 6,271	\$ 323,585	51.6
16	Commonwealth Electric Company	\$ 5,757	\$ 155,435	27.0
17	Fitchburg Gas and Electric Light Company	\$ 5,693	\$ 15,941	2.8
18	Pennsylvania Electric Company	\$ 5,657	\$ 112,004	19.8
19	Northwestern Public Service	\$ 5,548	\$ 69,899	12.6
20	Illinois Power Company	\$ 5,293	\$ 521,878	98.6
21	Consumers Energy Company	\$ 5,025	\$ 962,766	191.6
22	Public Service Company of New Mexico	\$ 4,957	\$ 101,125	20.4
23	Boston Edison Company	\$ 4,897	\$ 266,386	54.4
24	Puget Sound Energy Inc.	\$ 4,700	\$ (63,920)	(13.6)
25	The Detroit Edison Company	\$ 4,643	\$ 1,238,846	266.8
26	Madison Gas and Electric Company	\$ 4,335	\$ 71,956	16.6
27	Interstate Power Company	\$ 3,891	\$ 66,154	17.0
28	Consolidated Edison Company of New York Inc.	\$ 3,849	\$ 927,657	241.0
29	Florida Power and Light Company	\$ 3,788	\$ 1,845,366	487.2
30	Superior Water, Light, and Power Company	\$ 3,636	\$ (2,909)	(0.8)
31	Maine Public Service Company	\$ 3,505	\$ (10,514)	(3.0)
32	Central Illinois Public Service Company	\$ 3,485	\$ 186,780	53.6

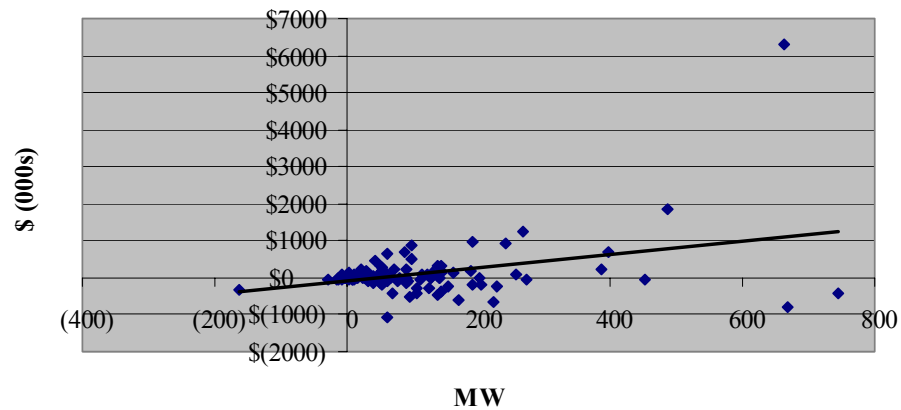
Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Peak	Growth in Transformers and Substations O&M Expense	Growth in System Peak
33	Gulf Power Company	\$ 3,404	\$ 245,056	72.0
34	Potomac Electric Power Company	\$ 3,302	\$ 176,321	53.4
35	Central Maine Power Company	\$ 3,239	\$ 67,370	20.8
36	The United Illuminating Company	\$ 3,032	\$ 86,099	28.4
37	Rockland Electric Company	\$ 2,950	\$ 11,801	4.0
38	Central Illinois Light Company	\$ 2,944	\$ 57,703	19.6
39	MDU Resources Group Inc.	\$ 2,786	\$ 28,419	10.2
40	PP&L Inc.	\$ 2,772	\$ 157,989	57.0
41	Pennsylvania Power Company	\$ 2,675	\$ 85,053	31.8
42	The Connecticut Light and Power Company	\$ 2,338	\$ 321,767	137.6
43	Idaho Power Company	\$ 2,326	\$ 207,926	89.4
44	Central Hudson Gas and Electric Corporation	\$ 2,241	\$ 52,877	23.6
45	Appalachian Power Company	\$ 2,139	\$ (349,580)	(163.4)
46	Central Power and Light Company	\$ 2,139	\$ 308,875	144.4
47	West Texas Utilities Company	\$ 2,008	\$ 98,808	49.2
48	Western Massachusetts Electric Company	\$ 1,895	\$ 14,026	7.4
49	El Paso Electric Company	\$ 1,888	\$ (29,458)	(15.6)
50	Virginia Electric and Power Company	\$ 1,705	\$ 673,881	395.2
51	Niagara Mohawk Power Corporation	\$ 1,690	\$ (48,661)	(28.8)
52	Wheeling Power Company	\$ 1,487	\$ (2,379)	(1.6)
53	Green Mountain Power Corporation	\$ 1,221	\$ 4,641	3.8
54	Lockhart Power Company	\$ 1,179	\$ 2,593	2.2
55	Delmarva Power and Light Company	\$ 1,112	\$ 160,637	144.4
56	South Carolina Electric and Gas Company	\$ 1,040	\$ 148,494	142.8
57	Western Resources Inc.	\$ 878	\$ 99,927	113.8
58	Southwestern Electric Power Company	\$ 860	\$ 161,236	187.4
59	Tampa Electric Company	\$ 858	\$ 112,359	131.0
60	Sierra Pacific Power Company	\$ 823	\$ 55,935	68.0
61	Savannah Electric and Power Company	\$ 806	\$ 23,534	29.2
62	Wisconsin Public Service Corporation	\$ 772	\$ 31,183	40.4
63	Public Service Electric and Gas Company	\$ 758	\$ 121,747	160.6
64	Southwestern Public Service Company	\$ 666	\$ 81,358	122.2
65	Alabama Power Company	\$ 573	\$ 221,180	386.2
66	The Empire District Electric Company	\$ 559	\$ 26,621	47.6
67	Connecticut Valley Electric Company Inc.	\$ 526	\$ 210	0.4
68	Citizens' Electric Company	\$ 478	\$ (574)	(1.2)

Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Peak	Growth in Transformers and Substations O&M Expense	Growth in System Peak
69	Mt. Carmel Public Utility Company	\$ 424	\$ (593)	(1.4)
70	Union Electric Company	\$ 352	\$ 90,852	258.0
71	Arizona Public Service Company	\$ 228	\$ 31,276	137.0
72	Kentucky Utilities Company	\$ 129	\$ 16,482	127.4
73	Carolina Power and Light Company	\$ 20	\$ 2,873	140.4
74	South Beloit Water, Gas, and Electric Company	\$ 0	\$ 0	1.6
75	Jersey Central Power and Light Company	\$ (23)	\$ (4,675)	201.6
76	Black Hills Corporation	\$ (25)	\$ (410)	16.4
77	Exeter and Hampton Electric Company	\$ (95)	\$ (284)	3.0
78	Utilicorp United Inc.	\$ (103)	\$ (6,914)	67.4
79	Entergy Mississippi Inc.	\$ (139)	\$ (17,863)	128.2
80	Entergy Arkansas Inc.	\$ (150)	\$ (68,079)	452.8
81	Ohio Edison Company	\$ (157)	\$ (21,957)	140.2
82	Southern Indiana Gas and Electric Company	\$ (228)	\$ (6,804)	29.8
83	Cleco Utility Group Inc.	\$ (243)	\$ (22,191)	91.4
84	Florida Power Corporation	\$ (264)	\$ (71,987)	272.6
85	Wisconsin Power and Light Company	\$ (316)	\$ (24,965)	79.0
86	Kentucky Power Company	\$ (323)	\$ (7,937)	24.6
87	Kansas Gas and Electric Company	\$ (349)	\$ (38,932)	111.4
88	Entergy New Orleans Inc.	\$ (524)	\$ (14,568)	27.8
89	TXU Electric Company	\$ (579)	\$ (430,322)	743.6
90	Northern States Power Company (Wisconsin)	\$ (671)	\$ (30,458)	45.4
91	St. Joseph Light and Power Company	\$ (773)	\$ (10,977)	14.2
92	Wisconsin Electric Power Company	\$ (866)	\$ (177,420)	204.8
93	Public Service Company of Colorado	\$ (1,022)	\$ (194,637)	190.4
94	Entergy Gulf States Inc.	\$ (1,117)	\$ (254,188)	227.6
95	Pacific Gas and Electric Company	\$ (1,190)	\$ (794,748)	667.6
96	Louisville Gas and Electric Company	\$ (1,214)	\$ (95,390)	78.6
97	The Toledo Edison Company	\$ (1,216)	\$ (113,091)	93.0
98	IES Utilities Inc.	\$ (1,258)	\$ (52,064)	41.4
99	The Montana Power Company	\$ (1,259)	\$ 14,105	(11.2)
100	Alaska Electric Light and Power Company	\$ (1,342)	\$ 805	(0.6)
101	Northern Indiana Public Service Company	\$ (1,384)	\$ (85,546)	61.8
102	Metropolitan Edison Company	\$ (1,672)	\$ (150,146)	89.8
103	PSI Energy Inc.	\$ (1,675)	\$ (257,294)	153.6
104	Columbus Southern Power Company	\$ (2,183)	\$ (272,821)	125.0

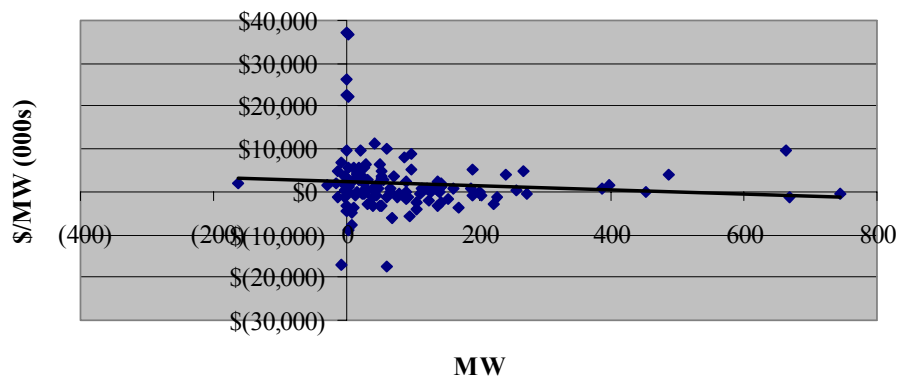
Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Peak	Growth in Transformers and Substations O&M Expense	Growth in System Peak
105	The Cincinnati Gas and Electric Company	\$ (2,558)	\$ (365,788)	143.0
106	Indiana Michigan Power Company	\$ (2,586)	\$ (274,088)	106.0
107	Tucson Electric Power Company	\$ (2,709)	\$ (91,577)	33.8
108	Duke Energy Corporation	\$ (2,960)	\$ (659,480)	222.8
109	West Penn Power Company	\$ (3,194)	\$ (166,111)	52.0
110	The Cleveland Electric Illuminating Company	\$ (3,221)	\$ (446,443)	138.6
111	Monongahela Power Company	\$ (3,300)	\$ (135,303)	41.0
112	Ohio Power Company	\$ (3,489)	\$ (187,700)	53.8
113	Upper Peninsula Power Company	\$ (3,497)	\$ (4,196)	1.2
114	Oklahoma Gas and Electric Company	\$ (3,582)	\$ (606,778)	169.4
115	Eastern Edison Company	\$ (3,881)	\$ (48,897)	12.6
116	Kansas City Power and Light Company	\$ (4,057)	\$ (435,743)	107.4
117	Concord Electric Company	\$ (4,607)	\$ (7,371)	1.6
118	Otter Tail Power Company	\$ (5,056)	\$ (48,533)	9.6
119	Entergy Louisiana Inc.	\$ (5,689)	\$ (538,225)	94.6
120	Baltimore Gas and Electric Company	\$ (5,991)	\$ (413,409)	69.0
121	Chugach Electric Association Inc.	\$ (7,739)	\$ (66,557)	8.6
122	Blackstone Valley Electric Company	\$ (8,776)	\$ (36,861)	4.2
123	Hawaiian Electric Company Inc.	\$ (16,916)	\$ 108,261	(6.4)
124	The Dayton Power and Light Company	\$ (17,502)	\$ (1,071,127)	61.2

Statistical Summary		
Standard Deviation	\$	7,124
Average	\$	1,935
Correlation		0.37

**Growth in Transformers & Substations O&M Expense vs.
Growth in System Peak (5 Yr. Average 1995-1999)**



**Growth in Transformers & Substations O&M Expense per
Growth in System Peak vs. Growth in System Peak
(5 Yr. Average 1995-1999)**



Appendix U

Growth in Lines and Feeders O&M Expense per Growth in System Peak

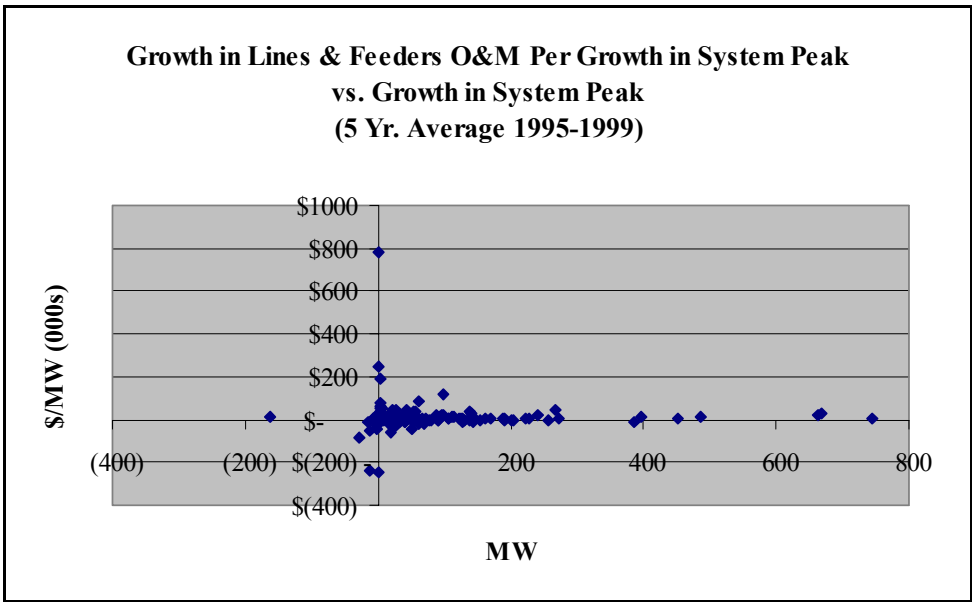
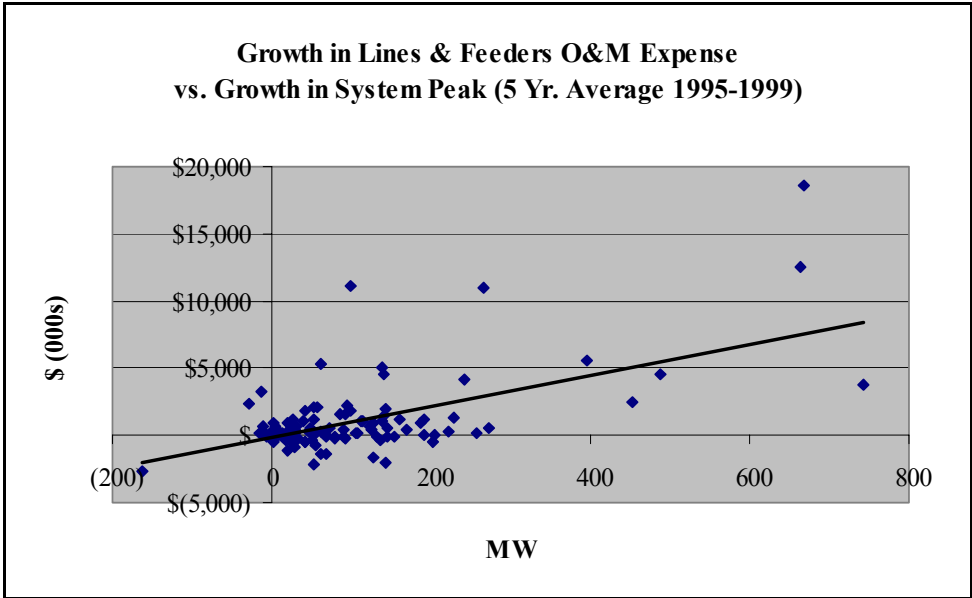
Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Peak	Growth in Lines and Feeders O&M Expense	Growth in System Peak
1	Central Vermont Public Service Corporation	\$ 779,918	\$ 935,901	1.2
2	New Hampshire Electric Cooperative Inc.	\$ 251,074	\$ 251,074	1.0
3	Bangor Hydro Electric Company	\$ 187,481	\$ 674,933	3.6
4	PacifiCorp	\$ 113,976	\$ 11,169,696	98.0
5	San Diego Gas and Electric Company	\$ 84,253	\$ 5,257,377	62.4
6	Green Mountain Power Corporation	\$ 78,879	\$ 299,741	3.8
7	Cambridge Electric Light Company	\$ 59,882	\$ 215,575	3.6
8	Western Massachusetts Electric Company	\$ 54,165	\$ 400,819	7.4
9	Rockland Electric Company	\$ 49,646	\$ 198,586	4.0
10	Central Maine Power Company	\$ 45,688	\$ 950,303	20.8
11	Portland General Electric Company	\$ 43,647	\$ 1,850,629	42.4
12	Commonwealth Electric Company	\$ 41,741	\$ 1,127,001	27.0
13	The Detroit Edison Company	\$ 41,341	\$ 11,029,657	266.8
14	Potomac Electric Power Company	\$ 38,340	\$ 2,047,370	53.4
15	Blackstone Valley Electric Company	\$ 37,981	\$ 159,520	4.2
16	PP&L Inc.	\$ 37,064	\$ 2,112,640	57.0
17	The Cleveland Electric Illuminating Company	\$ 36,252	\$ 5,024,498	138.6
18	Minnesota Power Inc.	\$ 36,020	\$ 835,661	23.2
19	Carolina Power and Light Company	\$ 32,294	\$ 4,534,131	140.4
20	Upper Peninsula Power Company	\$ 31,238	\$ 37,485	1.2
21	Pacific Gas and Electric Company	\$ 27,801	\$ 18,559,662	667.6
22	Wisconsin Public Service Corporation	\$ 25,618	\$ 1,034,959	40.4
23	Entergy Louisiana Inc.	\$ 23,684	\$ 2,240,472	94.6
24	Central Illinois Public Service Company	\$ 21,656	\$ 1,160,772	53.6
25	Central Hudson Gas and Electric Corporation	\$ 20,984	\$ 495,219	23.6
26	Public Service Company of New Hampshire	\$ 19,975	\$ 611,245	30.6
27	Otter Tail Power Company	\$ 19,100	\$ 183,357	9.6
28	Commonwealth Edison Company	\$ 18,926	\$ 12,548,093	663.0
29	Atlantic City Electric Company	\$ 18,771	\$ 1,625,526	86.6
30	Illinois Power Company	\$ 18,098	\$ 1,784,470	98.6
31	Consolidated Edison Company of New York Inc.	\$ 17,001	\$ 4,097,313	241.0
32	The Toledo Edison Company	\$ 16,714	\$ 1,554,365	93.0

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Peak	Growth in Lines and Feeders O&M Expense	Growth in System Peak
33	Appalachian Power Company	\$ 16,704	\$ (2,729,397)	(163.4)
34	Eastern Edison Company	\$ 15,898	\$ 200,315	12.6
35	Entergy New Orleans Inc.	\$ 15,162	\$ 421,503	27.8
36	Virginia Electric and Power Company	\$ 14,000	\$ 5,532,984	395.2
37	MDU Resources Group Inc.	\$ 13,778	\$ 140,537	10.2
38	South Carolina Electric and Gas Company	\$ 13,376	\$ 1,910,094	142.8
39	Newport Electric Corporation	\$ 12,181	\$ 24,362	2.0
40	Wheeling Power Company	\$ 11,377	\$ (18,204)	(1.6)
41	The Empire District Electric Company	\$ 11,056	\$ 526,257	47.6
42	Ohio Edison Company	\$ 10,257	\$ 1,437,994	140.2
43	Kansas Gas and Electric Company	\$ 9,713	\$ 1,082,036	111.4
44	Florida Power and Light Company	\$ 9,329	\$ 4,544,947	487.2
45	Western Resources Inc.	\$ 9,091	\$ 1,034,584	113.8
46	Public Service Company of New Mexico	\$ 9,045	\$ 184,528	20.4
47	Citizens' Electric Company	\$ 8,171	\$ (9,805)	(1.2)
48	Gulf Power Company	\$ 8,114	\$ 584,206	72.0
49	Pennsylvania Power Company	\$ 7,788	\$ 247,668	31.8
50	Public Service Electric and Gas Company	\$ 7,773	\$ 1,248,284	160.6
51	The Connecticut Light and Power Company	\$ 7,684	\$ 1,057,288	137.6
52	West Texas Utilities Company	\$ 7,496	\$ 368,783	49.2
53	Northern States Power Company (Wisconsin)	\$ 7,487	\$ 339,905	45.4
54	Entergy Mississippi Inc.	\$ 7,294	\$ 935,124	128.2
55	Hawaiian Electric Company Inc.	\$ 7,268	\$ (46,517)	(6.4)
56	Concord Electric Company	\$ 6,549	\$ 10,478	1.6
57	Public Service Company of Colorado	\$ 6,153	\$ 1,171,557	190.4
58	Entergy Gulf States Inc.	\$ 6,011	\$ 1,368,158	227.6
59	Madison Gas and Electric Company	\$ 5,797	\$ 96,238	16.6
60	Fitchburg Gas and Electric Light Company	\$ 5,564	\$ 15,580	2.8
61	Entergy Arkansas Inc.	\$ 5,440	\$ 2,463,379	452.8
62	Northwestern Public Service	\$ 5,123	\$ 64,546	12.6
63	Southwestern Electric Power Company	\$ 5,067	\$ 949,584	187.4
64	Southwestern Public Service Company	\$ 5,029	\$ 614,519	122.2
65	TXU Electric Company	\$ 4,996	\$ 3,715,323	743.6
66	Northern Indiana Public Service Company	\$ 4,664	\$ 288,233	61.8
67	Savannah Electric and Power Company	\$ 4,452	\$ 129,989	29.2
68	Exeter and Hampton Electric Company	\$ 4,329	\$ 12,988	3.0
69	Idaho Power Company	\$ 4,165	\$ 372,347	89.4

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Peak	Growth in Lines and Feeders O&M Expense	Growth in System Peak
70	Central Power and Light Company	\$ 4,028	\$ 581,645	144.4
71	St. Joseph Light and Power Company	\$ 3,888	\$ 55,208	14.2
72	Columbus Southern Power Company	\$ 3,796	\$ 474,543	125.0
73	Black Hills Corporation	\$ 3,554	\$ 58,291	16.4
74	Oklahoma Gas and Electric Company	\$ 2,435	\$ 412,533	169.4
75	Florida Power Corporation	\$ 2,139	\$ 583,052	272.6
76	Kansas City Power and Light Company	\$ 1,809	\$ 194,336	107.4
77	Indiana Michigan Power Company	\$ 1,610	\$ 170,693	106.0
78	Utilicorp United Inc.	\$ 1,185	\$ 79,872	67.4
79	Duke Energy Corporation	\$ 1,144	\$ 254,913	222.8
80	Lockhart Power Company	\$ 1,127	\$ 2,480	2.2
81	Kingsport Power Company	\$ 1,059	\$ (7,622)	(7.2)
82	Union Electric Company	\$ 477	\$ 122,983	258.0
83	South Beloit Water, Gas, and Electric Company	\$ (5)	\$ (9)	1.6
84	Consumers Energy Company	\$ (63)	\$ (11,994)	191.6
85	Wisconsin Electric Power Company	\$ (160)	\$ (32,769)	204.8
86	Ohio Power Company	\$ (478)	\$ (25,716)	53.8
87	PSI Energy Inc.	\$ (529)	\$ (81,225)	153.6
88	Delmarva Power and Light Company	\$ (756)	\$ (109,153)	144.4
89	Metropolitan Edison Company	\$ (855)	\$ (76,770)	89.8
90	Tampa Electric Company	\$ (1,187)	\$ (155,475)	131.0
91	Louisville Gas and Electric Company	\$ (1,680)	\$ (132,061)	78.6
92	Sierra Pacific Power Company	\$ (1,837)	\$ (124,922)	68.0
93	Jersey Central Power and Light Company	\$ (2,122)	\$ (427,780)	201.6
94	Cleco Utility Group Inc.	\$ (2,170)	\$ (198,372)	91.4
95	Wisconsin Power and Light Company	\$ (2,330)	\$ (184,056)	79.0
96	Chugach Electric Association Inc.	\$ (2,836)	\$ (24,388)	8.6
97	Arizona Public Service Company	\$ (2,998)	\$ (410,720)	137.0
98	Indianapolis Power and Light Company	\$ (6,199)	\$ (319,866)	51.6
99	Tucson Electric Power Company	\$ (7,528)	\$ (254,450)	33.8
100	Central Illinois Light Company	\$ (7,913)	\$ (155,089)	19.6
101	Alaska Electric Light and Power Company	\$ (8,032)	\$ 4,819	(0.6)
102	IES Utilities Inc.	\$ (10,726)	\$ (444,073)	41.4
103	Monongahela Power Company	\$ (11,667)	\$ (478,346)	41.0
104	El Paso Electric Company	\$ (12,641)	\$ 197,205	(15.6)
105	Kentucky Utilities Company	\$ (12,893)	\$ (1,642,570)	127.4
106	Southern Indiana Gas and Electric Company	\$ (13,735)	\$ (409,315)	29.8

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Peak	Growth in Lines and Feeders O&M Expense	Growth in System Peak
107	Connecticut Valley Electric Company Inc.	\$ (13,912)	\$ (5,565)	0.4
108	The Cincinnati Gas and Electric Company	\$ (13,926)	\$ (1,991,365)	143.0
109	Alabama Power Company	\$ (14,262)	\$ (5,508,031)	386.2
110	Boston Edison Company	\$ (14,842)	\$ (807,411)	54.4
111	Kentucky Power Company	\$ (19,406)	\$ (477,394)	24.6
112	Baltimore Gas and Electric Company	\$ (19,552)	\$ (1,349,110)	69.0
113	Interstate Power Company	\$ (20,488)	\$ (348,291)	17.0
114	Superior Water, Light, and Power Company	\$ (20,689)	\$ 16,551	(0.8)
115	The Dayton Power and Light Company	\$ (23,128)	\$ (1,415,441)	61.2
116	Mt. Carmel Public Utility Company	\$ (27,347)	\$ 38,286	(1.4)
117	The United Illuminating Company	\$ (28,776)	\$ (817,231)	28.4
118	Maine Public Service Company	\$ (40,722)	\$ 122,165	(3.0)
119	West Penn Power Company	\$ (41,649)	\$ (2,165,735)	52.0
120	The Montana Power Company	\$ (54,257)	\$ 607,681	(11.2)
121	Pennsylvania Electric Company	\$ (59,114)	\$ (1,170,463)	19.8
122	Niagara Mohawk Power Corporation	\$ (81,511)	\$ 2,347,524	(28.8)
123	Puget Sound Energy Inc.	\$ (235,144)	\$ 3,197,956	(13.6)
124	The Potomac Edison Company	\$ (246,422)	\$ (443,560)	1.8

Statistical Summary		
Standard Deviation	\$	84,794
Average	\$	12,777
Correlation		0.57



Appendix V

Growth in Transformers and Substations O&M Expense per Growth in System Energy

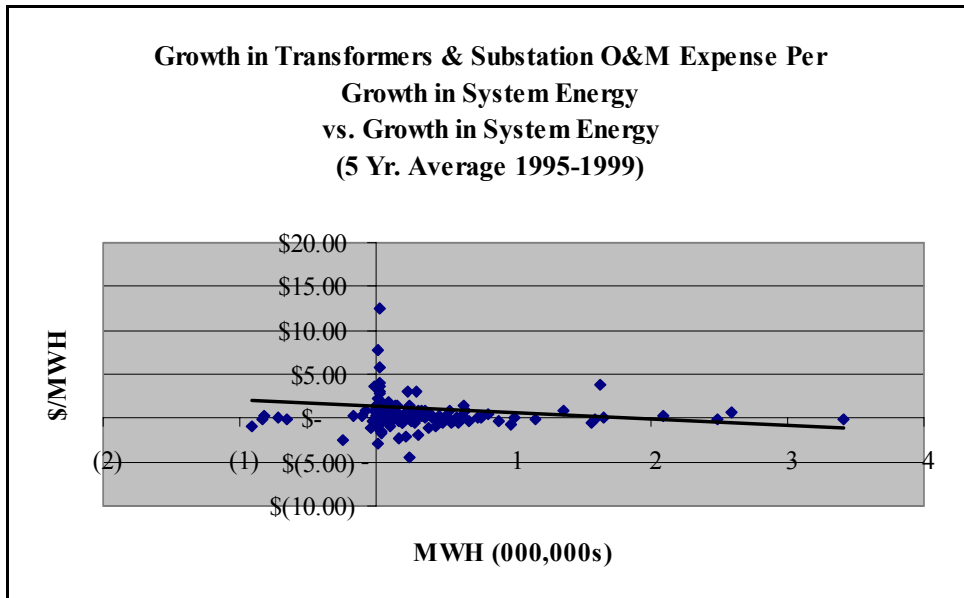
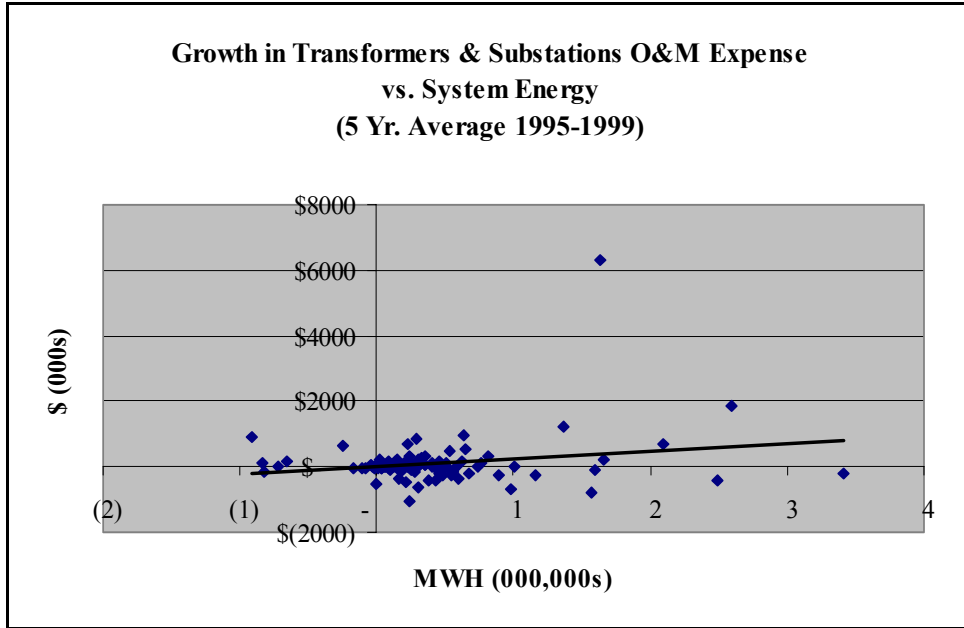
Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Energy	Growth in Transformers and Substations O&M Expense	Growth in System Energy
1	Entergy Louisiana Inc.	\$ 81.98	\$ (538,225)	(6,566)
2	Minnesota Power Inc.	\$ 12.42	\$ 228,605	18,410
3	Cambridge Electric Light Company	\$ 7.70	\$ 80,065	10,398
4	Bangor Hydro Electric Company	\$ 5.86	\$ 131,698	22,457
5	Hawaiian Electric Company Inc.	\$ 4.05	\$ 108,261	26,749
6	Commonwealth Edison Company	\$ 3.87	\$ 6,305,874	1,631,475
7	Northwestern Public Service	\$ 3.68	\$ 69,899	18,996
8	Kingsport Power Company	\$ 3.67	\$ (48,624)	(13,246)
9	Atlantic City Electric Company	\$ 3.11	\$ 697,038	223,945
10	PacifiCorp	\$ 3.03	\$ 866,121	286,137
11	Southwestern Public Service Company	\$ 2.99	\$ 81,358	27,170
12	Newport Electric Corporation	\$ 2.93	\$ 45,469	15,539
13	MDU Resources Group Inc.	\$ 2.19	\$ 28,419	12,960
14	Commonwealth Electric Company	\$ 1.93	\$ 155,435	80,450
15	Central Maine Power Company	\$ 1.87	\$ 67,370	36,004
16	Consumers Energy Company	\$ 1.50	\$ 962,766	640,038
17	Superior Water, Light, and Power Company	\$ 1.49	\$ (2,909)	(1,953)
18	The United Illuminating Company	\$ 1.49	\$ 86,099	57,977
19	Central Illinois Public Service Company	\$ 1.41	\$ 186,780	132,801
20	Public Service Company of New Hampshire	\$ 1.38	\$ 197,914	143,729
21	Indianapolis Power and Light Company	\$ 1.37	\$ 323,585	236,108
22	Interstate Power Company	\$ 1.29	\$ 66,154	51,142
23	Central Vermont Public Service Corporation	\$ 1.26	\$ 31,604	25,107
24	Lockhart Power Company	\$ 0.94	\$ 2,593	2,745
25	Maine Public Service Company	\$ 0.94	\$ (10,514)	(11,131)
26	The Detroit Edison Company	\$ 0.91	\$ 1,238,846	1,365,663
27	The Connecticut Light and Power Company	\$ 0.89	\$ 321,767	360,302
28	Portland General Electric Company	\$ 0.89	\$ 478,646	538,347
29	Madison Gas and Electric Company	\$ 0.87	\$ 71,956	82,681
30	Entergy Arkansas Inc.	\$ 0.86	\$ (68,079)	(79,399)
31	Gulf Power Company	\$ 0.82	\$ 245,056	299,419
32	Illinois Power Company	\$ 0.80	\$ 521,878	648,429

Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Energy	Growth in Transformers and Substations O&M Expense	Growth in System Energy
33	Boston Edison Company	\$ 0.80	\$ 266,386	331,604
34	Florida Power and Light Company	\$ 0.71	\$ 1,845,366	2,589,582
35	Delmarva Power and Light Company	\$ 0.67	\$ 160,637	238,844
36	Idaho Power Company	\$ 0.65	\$ 207,926	321,128
37	Potomac Electric Power Company	\$ 0.59	\$ 176,321	296,796
38	Alaska Electric Light and Power Company	\$ 0.58	\$ 805	1,387
39	Pennsylvania Power Company	\$ 0.57	\$ 85,053	148,963
40	Public Service Company of New Mexico	\$ 0.51	\$ 101,125	197,029
41	Fitchburg Gas and Electric Light Company	\$ 0.47	\$ 15,941	33,635
42	Central Illinois Light Company	\$ 0.43	\$ 57,703	135,742
43	West Texas Utilities Company	\$ 0.42	\$ 98,808	233,525
44	Central Power and Light Company	\$ 0.38	\$ 308,875	816,669
45	PP&L Inc.	\$ 0.35	\$ 157,989	450,536
46	Virginia Electric and Power Company	\$ 0.32	\$ 673,881	2,092,244
47	Western Resources Inc.	\$ 0.30	\$ 99,927	333,223
48	Public Service Electric and Gas Company	\$ 0.30	\$ 121,747	411,429
49	Niagara Mohawk Power Corporation	\$ 0.28	\$ (48,661)	(172,600)
50	El Paso Electric Company	\$ 0.28	\$ (29,458)	(105,283)
51	Rockland Electric Company	\$ 0.28	\$ 11,801	42,826
52	Savannah Electric and Power Company	\$ 0.27	\$ 23,534	87,511
53	Southwestern Electric Power Company	\$ 0.26	\$ 161,236	621,928
54	Connecticut Valley Electric Company Inc.	\$ 0.24	\$ 210	894
55	Western Massachusetts Electric Company	\$ 0.22	\$ 14,026	62,440
56	Tampa Electric Company	\$ 0.22	\$ 112,359	505,705
57	The Potomac Edison Company	\$ 0.19	\$ 66,607	348,978
58	Metropolitan Edison Company	\$ 0.18	\$ (150,146)	(820,561)
59	The Empire District Electric Company	\$ 0.18	\$ 26,621	149,438
60	Sierra Pacific Power Company	\$ 0.16	\$ 55,935	354,230
61	Alabama Power Company	\$ 0.13	\$ 221,180	1,653,858
62	Union Electric Company	\$ 0.12	\$ 90,852	761,219
63	Wisconsin Public Service Corporation	\$ 0.11	\$ 31,183	283,258
64	Green Mountain Power Corporation	\$ 0.09	\$ 4,641	50,232
65	Mt. Carmel Public Utility Company	\$ 0.07	\$ (593)	(8,905)
66	Arizona Public Service Company	\$ 0.04	\$ 31,276	742,514
67	Kentucky Utilities Company	\$ 0.03	\$ 16,482	579,149
68	Carolina Power and Light Company	\$ 0.00	\$ 2,873	1,004,602

Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Energy	Growth in Transformers and Substations O&M Expense	Growth in System Energy
69	South Beloit Water, Gas, and Electric Company	\$ 0.00	\$ 0	4,517
70	Black Hills Corporation	\$ (0.01)	\$ (410)	60,803
71	Jersey Central Power and Light Company	\$ (0.01)	\$ (4,675)	398,921
72	Exeter and Hampton Electric Company	\$ (0.02)	\$ (284)	15,856
73	The Montana Power Company	\$ (0.02)	\$ 14,105	(717,993)
74	Southern Indiana Gas and Electric Company	\$ (0.03)	\$ (6,804)	249,264
75	Utilicorp United Inc.	\$ (0.03)	\$ (6,914)	223,479
76	Entergy Mississippi Inc.	\$ (0.04)	\$ (17,863)	454,837
77	Florida Power Corporation	\$ (0.05)	\$ (71,987)	1,597,236
78	Ohio Edison Company	\$ (0.05)	\$ (21,957)	479,662
79	Cleco Utility Group Inc.	\$ (0.05)	\$ (22,191)	432,772
80	Ohio Power Company	\$ (0.05)	\$ (187,700)	3,417,693
81	Kentucky Power Company	\$ (0.06)	\$ (7,937)	124,296
82	Wisconsin Power and Light Company	\$ (0.09)	\$ (24,965)	285,115
83	Puget Sound Energy Inc.	\$ (0.12)	\$ (63,920)	516,861
84	Pennsylvania Electric Company	\$ (0.13)	\$ 112,004	(837,015)
85	Entergy New Orleans Inc.	\$ (0.15)	\$ (14,568)	95,456
86	TXU Electric Company	\$ (0.17)	\$ (430,322)	2,484,908
87	Wheeling Power Company	\$ (0.18)	\$ (2,379)	13,597
88	Northern States Power Company (Wisconsin)	\$ (0.20)	\$ (30,458)	154,087
89	IES Utilities Inc.	\$ (0.20)	\$ (52,064)	257,399
90	Entergy Gulf States Inc.	\$ (0.22)	\$ (254,188)	1,156,210
91	South Carolina Electric and Gas Company	\$ (0.23)	\$ 148,494	(656,859)
92	St. Joseph Light and Power Company	\$ (0.23)	\$ (10,977)	47,612
93	Upper Peninsula Power Company	\$ (0.28)	\$ (4,196)	14,931
94	PSI Energy Inc.	\$ (0.29)	\$ (257,294)	896,887
95	Public Service Company of Colorado	\$ (0.29)	\$ (194,637)	672,221
96	New Hampshire Electric Cooperative Inc.	\$ (0.29)	\$ 9,565	(32,934)
97	West Penn Power Company	\$ (0.30)	\$ (166,111)	553,291
98	Otter Tail Power Company	\$ (0.30)	\$ (48,533)	161,079
99	Louisville Gas and Electric Company	\$ (0.38)	\$ (95,390)	253,225
100	Wisconsin Electric Power Company	\$ (0.38)	\$ (177,420)	461,154
101	Tucson Electric Power Company	\$ (0.48)	\$ (91,577)	191,833
102	Monongahela Power Company	\$ (0.48)	\$ (135,303)	279,501
103	Kansas Gas and Electric Company	\$ (0.49)	\$ (38,932)	79,667
104	Indiana Michigan Power Company	\$ (0.50)	\$ (274,088)	548,055

Rank	Company	Growth in Transformers and Substations O&M Expense per Growth in System Energy	Growth in Transformers and Substations O&M Expense	Growth in System Energy
105	Pacific Gas and Electric Company	\$ (0.51)	\$ (794,748)	1,571,964
106	Columbus Southern Power Company	\$ (0.56)	\$ (272,821)	484,040
107	The Toledo Edison Company	\$ (0.58)	\$ (113,091)	193,480
108	Concord Electric Company	\$ (0.62)	\$ (7,371)	11,979
109	The Cincinnati Gas and Electric Company	\$ (0.62)	\$ (365,788)	591,406
110	Duke Energy Corporation	\$ (0.67)	\$ (659,480)	985,347
111	Northern Indiana Public Service Company	\$ (0.84)	\$ (85,546)	102,372
112	Baltimore Gas and Electric Company	\$ (0.97)	\$ (413,409)	426,366
113	Citizens' Electric Company	\$ (0.98)	\$ (574)	587
114	Consolidated Edison Company of New York Inc.	\$ (1.02)	\$ 927,657	(911,497)
115	Central Hudson Gas and Electric Corporation	\$ (1.09)	\$ 52,877	(48,363)
116	Kansas City Power and Light Company	\$ (1.14)	\$ (435,743)	383,186
117	Eastern Edison Company	\$ (1.60)	\$ (48,897)	30,554
118	Chugach Electric Association Inc.	\$ (1.67)	\$ (66,557)	39,919
119	Oklahoma Gas and Electric Company	\$ (2.00)	\$ (606,778)	302,880
120	The Cleveland Electric Illuminating Company	\$ (2.13)	\$ (446,443)	209,977
121	Appalachian Power Company	\$ (2.25)	\$ (349,580)	155,679
122	San Diego Gas and Electric Company	\$ (2.52)	\$ 637,068	(252,336)
123	Blackstone Valley Electric Company	\$ (2.80)	\$ (36,861)	13,147
124	The Dayton Power and Light Company	\$ (4.50)	\$ (1,071,127)	238,192

Statistical Summary		
Standard Deviation	\$	7.55
Average	\$	1.10
Correlation		0.22



Appendix W

Growth in Lines and Feeders O&M Expense per Growth in System Energy

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Energy	Growth in Lines and Feeders O&M Expense	Growth in System Energy
1	Hawaiian Electric Company Inc.	\$ 1,446	\$ 38,691,795	26,749
2	Southwestern Public Service Company	\$ 840	\$ 22,812,817	27,170
3	Central Maine Power Company	\$ 673	\$ 24,243,357	36,004
4	Connecticut Valley Electric Company Inc.	\$ 624	\$ 557,710	894
5	Citizens' Electric Company	\$ 598	\$ 350,955	587
6	Alaska Electric Light and Power Company	\$ 533	\$ 739,752	1,387
7	PacifiCorp	\$ 477	\$ 136,558,867	286,137
8	Appalachian Power Company	\$ 468	\$ 72,875,903	155,679
9	Minnesota Power Inc.	\$ 347	\$ 6,387,472	18,410
10	Central Vermont Public Service Corporation	\$ 309	\$ 7,769,365	25,107
11	MDU Resources Group Inc.	\$ 305	\$ 3,947,892	12,960
12	Public Service Electric and Gas Company	\$ 283	\$ 116,440,597	411,429
13	Pacific Gas and Electric Company	\$ 279	\$ 438,789,844	1,571,964
14	Cambridge Electric Light Company	\$ 275	\$ 2,863,947	10,398
15	Northern Indiana Public Service Company	\$ 266	\$ 27,263,345	102,372
16	Interstate Power Company	\$ 258	\$ 13,181,368	51,142
17	Potomac Electric Power Company	\$ 249	\$ 73,946,910	296,796
18	Bangor Hydro Electric Company	\$ 234	\$ 5,245,304	22,457
19	Baltimore Gas and Electric Company	\$ 229	\$ 97,518,496	426,366
20	Kansas Gas and Electric Company	\$ 217	\$ 17,292,698	79,667
21	The Connecticut Light and Power Company	\$ 213	\$ 76,893,712	360,302
22	Wisconsin Electric Power Company	\$ 213	\$ 98,216,114	461,154
23	Northwestern Public Service	\$ 211	\$ 4,011,288	18,996
24	The United Illuminating Company	\$ 208	\$ 12,080,106	57,977
25	Boston Edison Company	\$ 206	\$ 68,362,977	331,604
26	Eastern Edison Company	\$ 196	\$ 5,975,158	30,554
27	PP&L Inc.	\$ 184	\$ 83,075,894	450,536
28	Public Service Company of New Hampshire	\$ 182	\$ 26,111,499	143,729
29	Commonwealth Electric Company	\$ 180	\$ 14,459,384	80,450
30	Jersey Central Power and Light Company	\$ 175	\$ 69,857,909	398,921
31	Arizona Public Service Company	\$ 174	\$ 129,169,962	742,514
32	Central Illinois Public Service Company	\$ 173	\$ 23,037,173	132,801

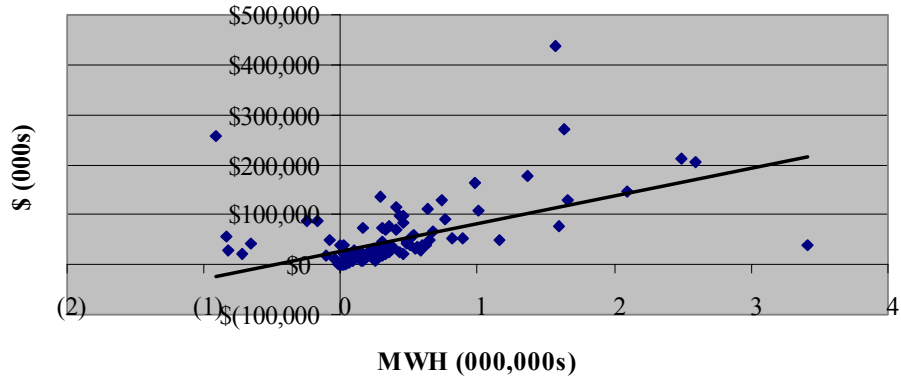
Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Energy	Growth in Lines and Feeders O&M Expense	Growth in System Energy
33	Consumers Energy Company	\$ 173	\$ 110,885,426	640,038
34	Blackstone Valley Electric Company	\$ 172	\$ 2,265,935	13,147
35	Lockhart Power Company	\$ 167	\$ 458,669	2,745
36	Wheeling Power Company	\$ 166	\$ 2,256,443	13,597
37	Commonwealth Edison Company	\$ 166	\$ 270,634,305	1,631,475
38	Duke Energy Corporation	\$ 166	\$ 163,083,856	985,347
39	Western Massachusetts Electric Company	\$ 160	\$ 9,976,219	62,440
40	Upper Peninsula Power Company	\$ 153	\$ 2,283,599	14,931
41	Oklahoma Gas and Electric Company	\$ 147	\$ 44,589,050	302,880
42	Concord Electric Company	\$ 145	\$ 1,741,355	11,979
43	Delmarva Power and Light Company	\$ 138	\$ 32,980,780	238,844
44	Entergy New Orleans Inc.	\$ 132	\$ 12,584,066	95,456
45	Exeter and Hampton Electric Company	\$ 131	\$ 2,075,342	15,856
46	The Detroit Edison Company	\$ 130	\$ 177,101,518	1,365,663
47	Central Illinois Light Company	\$ 128	\$ 17,377,610	135,742
48	Wisconsin Power and Light Company	\$ 127	\$ 36,130,078	285,115
49	Utilicorp United Inc.	\$ 126	\$ 28,105,552	223,479
50	Green Mountain Power Corporation	\$ 126	\$ 6,304,992	50,232
51	Kentucky Power Company	\$ 125	\$ 15,580,535	124,296
52	IES Utilities Inc.	\$ 125	\$ 32,148,135	257,399
53	Public Service Company of New Mexico	\$ 123	\$ 24,332,783	197,029
54	The Cleveland Electric Illuminating Company	\$ 123	\$ 25,856,297	209,977
55	Chugach Electric Association Inc.	\$ 118	\$ 4,710,692	39,919
56	Newport Electric Corporation	\$ 118	\$ 1,831,061	15,539
57	Union Electric Company	\$ 117	\$ 89,306,251	761,219
58	Portland General Electric Company	\$ 113	\$ 60,612,677	538,347
59	Puget Sound Energy Inc.	\$ 110	\$ 56,896,314	516,861
60	Carolina Power and Light Company	\$ 109	\$ 109,585,909	1,004,602
61	The Empire District Electric Company	\$ 108	\$ 16,179,630	149,438
62	Atlantic City Electric Company	\$ 102	\$ 22,907,000	223,945
63	The Dayton Power and Light Company	\$ 101	\$ 24,058,221	238,192
64	The Potomac Edison Company	\$ 100	\$ 35,069,410	348,978
65	Northern States Power Company (Wisconsin)	\$ 100	\$ 15,471,020	154,087
66	Public Service Company of Colorado	\$ 99	\$ 66,227,162	672,221
67	Savannah Electric and Power Company	\$ 97	\$ 8,502,294	87,511
68	Idaho Power Company	\$ 97	\$ 31,107,226	321,128
69	Indianapolis Power and Light Company	\$ 96	\$ 22,650,938	236,108

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Energy	Growth in Lines and Feeders O&M Expense	Growth in System Energy
70	Kansas City Power and Light Company	\$ 95	\$ 36,269,432	383,186
71	South Beloit Water, Gas, and Electric Company	\$ 92	\$ 414,782	4,517
72	Ohio Edison Company	\$ 92	\$ 43,956,106	479,662
73	Tucson Electric Power Company	\$ 89	\$ 17,147,511	191,833
74	Columbus Southern Power Company	\$ 89	\$ 42,922,088	484,040
75	Monongahela Power Company	\$ 86	\$ 24,132,841	279,501
76	TXU Electric Company	\$ 85	\$ 210,468,758	2,484,908
77	Florida Power and Light Company	\$ 80	\$ 206,366,354	2,589,582
78	Madison Gas and Electric Company	\$ 79	\$ 6,551,382	82,681
79	The Toledo Edison Company	\$ 78	\$ 15,164,470	193,480
80	St. Joseph Light and Power Company	\$ 77	\$ 3,686,558	47,612
81	Alabama Power Company	\$ 77	\$ 127,531,728	1,653,858
82	Tampa Electric Company	\$ 75	\$ 38,055,249	505,705
83	Sierra Pacific Power Company	\$ 74	\$ 26,247,367	354,230
84	Illinois Power Company	\$ 74	\$ 47,759,031	648,429
85	Black Hills Corporation	\$ 72	\$ 4,385,994	60,803
86	Virginia Electric and Power Company	\$ 70	\$ 147,056,480	2,092,244
87	Louisville Gas and Electric Company	\$ 68	\$ 17,092,769	253,225
88	The Cincinnati Gas and Electric Company	\$ 66	\$ 38,957,768	591,406
89	West Penn Power Company	\$ 65	\$ 36,055,463	553,291
90	Gulf Power Company	\$ 64	\$ 19,152,301	299,419
91	Fitchburg Gas and Electric Light Company	\$ 63	\$ 2,133,802	33,635
92	Central Power and Light Company	\$ 63	\$ 51,607,941	816,669
93	Rockland Electric Company	\$ 63	\$ 2,703,722	42,826
94	Western Resources Inc.	\$ 63	\$ 20,991,429	333,223
95	Southwestern Electric Power Company	\$ 62	\$ 38,428,630	621,928
96	West Texas Utilities Company	\$ 61	\$ 14,349,043	233,525
97	PSI Energy Inc.	\$ 60	\$ 54,224,995	896,887
98	Cleco Utility Group Inc.	\$ 57	\$ 24,878,416	432,772
99	Wisconsin Public Service Corporation	\$ 57	\$ 16,076,011	283,258
100	Indiana Michigan Power Company	\$ 55	\$ 30,236,737	548,055
101	Pennsylvania Power Company	\$ 52	\$ 7,771,902	148,963
102	Entergy Mississippi Inc.	\$ 49	\$ 22,384,051	454,837
103	Florida Power Corporation	\$ 49	\$ 78,545,213	1,597,236
104	Kentucky Utilities Company	\$ 49	\$ 28,237,165	579,149
105	Entergy Gulf States Inc.	\$ 43	\$ 49,192,129	1,156,210
106	Otter Tail Power Company	\$ 39	\$ 6,257,115	161,079

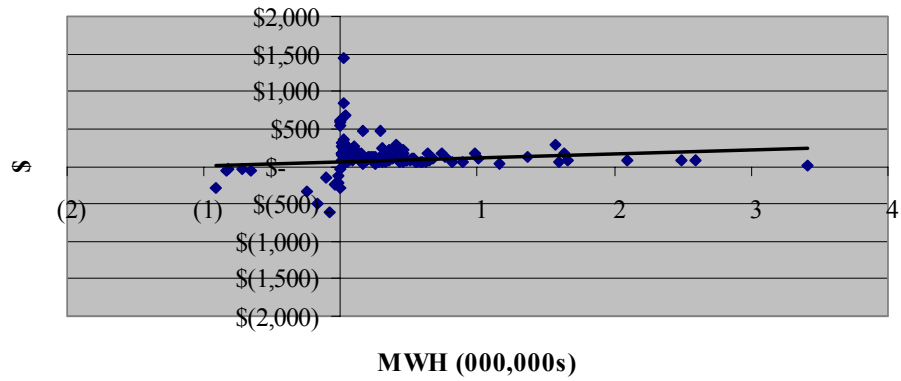
Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in System Energy	Growth in Lines and Feeders O&M Expense	Growth in System Energy
107	Southern Indiana Gas and Electric Company	\$ 29	\$ 7,264,057	249,264
108	Ohio Power Company	\$ 11	\$ 37,290,195	3,417,693
109	The Montana Power Company	\$ (29)	\$ 20,659,090	(717,993)
110	Mt. Carmel Public Utility Company	\$ (35)	\$ 308,910	(8,905)
111	Metropolitan Edison Company	\$ (35)	\$ 28,930,834	(820,561)
112	South Carolina Electric and Gas Company	\$ (66)	\$ 43,511,594	(656,859)
113	Pennsylvania Electric Company	\$ (67)	\$ 55,755,197	(837,015)
114	Maine Public Service Company	\$ (133)	\$ 1,477,818	(11,131)
115	El Paso Electric Company	\$ (159)	\$ 16,779,484	(105,283)
116	New Hampshire Electric Cooperative Inc.	\$ (217)	\$ 7,130,319	(32,934)
117	Kingsport Power Company	\$ (219)	\$ 2,905,133	(13,246)
118	Central Hudson Gas and Electric Corporation	\$ (233)	\$ 11,281,419	(48,363)
119	Consolidated Edison Company of New York Inc.	\$ (283)	\$ 258,164,963	(911,497)
120	Superior Water, Light, and Power Company	\$ (289)	\$ 564,625	(1,953)
121	San Diego Gas and Electric Company	\$ (342)	\$ 86,346,502	(252,336)
122	Niagara Mohawk Power Corporation	\$ (498)	\$ 85,944,341	(172,600)
123	Entergy Arkansas Inc.	\$ (621)	\$ 49,303,572	(79,399)
124	Entergy Louisiana Inc.	\$ (6,150)	\$ 40,376,880	(6,566)

Statistical Summary		
Standard Deviation	\$	606
Average	\$	74
Correlation		0.53

**Growth in Lines & Feeders O&M Expense
vs. Growth in System Energy
(5 Yr. Average 1995-1999)**



**Growth in Lines & Feeders O&M
vs. Growth in System Energy
(5 Yr. Average 1995-1999)**



Appendix X

Growth in Transformers and Substations O&M Expense per Growth in Number of Customers

Rank	Company	Growth in Transformers & Substations O&M Expense per Growth in Number of Customers	Growth in Transformers & Substations O&M Expense	Growth in Number of Customers
1	Wheeling Power Company	\$ 6,354	\$ (2,379)	44
2	Boston Edison Company	\$ 5,666	\$ 266,386	2,798
3	Connecticut Valley Electric Company Inc.	\$ 5,027	\$ 210	30
4	St. Joseph Light and Power Company	\$ 3,677	\$ (10,977)	469
5	Potomac Electric Power Company	\$ 3,231	\$ 176,321	5,421
6	Chugach Electric Association Inc.	\$ 3,139	\$ (66,557)	1,091
7	Cambridge Electric Light Company	\$ 2,996	\$ 80,065	272
8	West Texas Utilities Company	\$ 2,584	\$ 98,808	1,118
9	Hawaiian Electric Company Inc.	\$ 2,538	\$ 108,261	1,879
10	Otter Tail Power Company	\$ 2,417	\$ (48,533)	636
11	Niagara Mohawk Power Corporation	\$ 2,318	\$ (48,661)	6,807
12	Illinois Power Company	\$ 2,216	\$ 521,878	3,300
13	Baltimore Gas and Electric Company	\$ 2,203	\$ (413,409)	9,347
14	Southern Indiana Gas and Electric Company	\$ 2,167	\$ (6,804)	1,365
15	Consolidated Edison Company of New York Inc.	\$ 1,990	\$ 927,657	14,935
16	Pennsylvania Electric Company	\$ 1,971	\$ 112,004	2,698
17	UNION ELECTRIC COMPANY	\$ 1,934	\$ 90,852	9,673
18	Southwestern Public Service Company	\$ 1,792	\$ 81,358	3,887
19	Central Hudson Gas and Electric Corporation	\$ 1,609	\$ 52,877	2,216
20	IES Utilities Inc.	\$ 1,569	\$ (52,064)	2,766
21	Entergy Louisiana Inc.	\$ 1,548	\$ (538,225)	6,167
22	Black Hills Corporation	\$ 1,534	\$ (410)	705
23	Northwestern Public Service	\$ 1,515	\$ 69,899	441
24	Central Vermont Public Service Corporation	\$ 1,513	\$ 31,604	1,004
25	Pacific Gas and Electric Company	\$ 1,510	\$ (794,748)	50,129
26	Interstate Power Company	\$ 1,358	\$ 66,154	1,102
27	Concord Electric Company	\$ 1,327	\$ (7,371)	265
28	Southwestern Electric Power Company	\$ 1,313	\$ 161,236	4,550
29	Appalachian Power Company	\$ 1,309	\$ (349,580)	10,343
30	Kentucky Power Company	\$ 1,260	\$ (7,937)	1,666

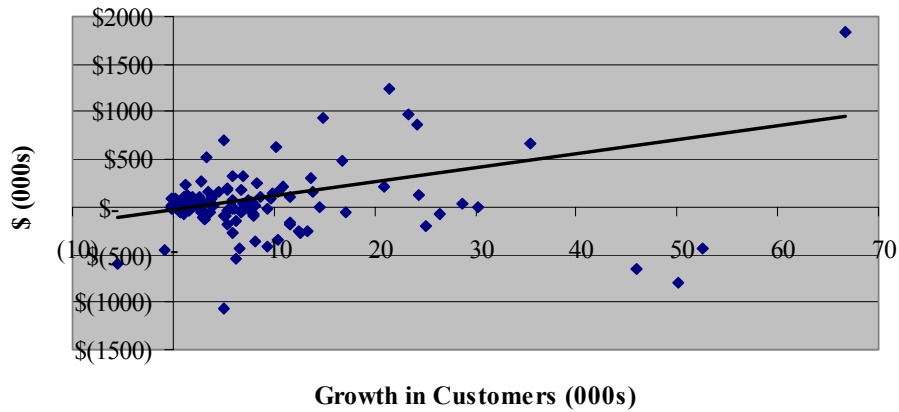
Rank	Company	Growth in Transformers & Substations O&M Expense per Growth in Number of Customers	Growth in Transformers & Substations O&M Expense	Growth in Number of Customers
31	The Detroit Edison Company	\$ 1,257	\$ 1,238,846	21,499
32	Monongahela Power Company	\$ 1,236	\$ (135,303)	3,104
33	PP&L Inc.	\$ 1,206	\$ 157,989	10,442
34	Alabama Power Company	\$ 1,127	\$ 221,180	20,896
35	Central Illinois Light Company	\$ 1,125	\$ 57,703	1,462
36	PacifiCorp	\$ 1,113	\$ 866,121	24,198
37	The Montana Power Company	\$ 1,081	\$ 14,105	4,059
38	Entergy Arkansas Inc.	\$ 1,077	\$ (68,079)	7,889
39	Entergy Mississippi Inc.	\$ 1,051	\$ (17,863)	5,594
40	Minnesota Power Inc.	\$ 1,011	\$ 228,605	1,235
41	Ohio Power Company	\$ 961	\$ (187,700)	5,319
42	Portland General Electric Company	\$ 949	\$ 478,646	16,749
43	South Carolina Electric and Gas Company	\$ 926	\$ 148,494	9,897
44	The Dayton Power and Light Company	\$ 919	\$ (1,071,127)	4,998
45	Consumers Energy Company	\$ 915	\$ 962,766	23,280
46	The Toledo Edison Company	\$ 912	\$ (113,091)	2,945
47	PSI Energy Inc.	\$ 911	\$ (257,294)	13,358
48	Bangor Hydro Electric Company	\$ 903	\$ 131,698	1,381
49	Lockhart Power Company	\$ 891	\$ 2,593	108
50	Maine Public Service Company	\$ 886	\$ (10,514)	154
51	The Potomac Edison Company	\$ 873	\$ 66,607	7,377
52	Rockland Electric Company	\$ 850	\$ 11,801	865
53	Indiana Michigan Power Company	\$ 844	\$ (274,088)	5,911
54	Public Service Electric and Gas Company	\$ 834	\$ 121,747	24,398
55	Kansas City Power and Light Company	\$ 820	\$ (435,743)	6,589
56	Green Mountain Power Corporation	\$ 800	\$ 4,641	697
57	Upper Peninsula Power Company	\$ 779	\$ (4,196)	276
58	Wisconsin Power and Light Company	\$ 763	\$ (24,965)	7,412
59	Western Massachusetts Electric Company	\$ 763	\$ 14,026	965
60	El Paso Electric Company	\$ 761	\$ (29,458)	6,001
61	Western Resources Inc.	\$ 758	\$ 99,927	3,749
62	The Cincinnati Gas and Electric Company	\$ 753	\$ (365,788)	8,087
63	Wisconsin Electric Power Company	\$ 746	\$ (177,420)	11,582

Rank	Company	Growth in Transformers & Substations O&M Expense per Growth in Number of Customers	Growth in Transformers & Substations O&M Expense	Growth in Number of Customers
64	The Empire District Electric Company	\$ 717	\$ 26,621	3,151
65	Northern Indiana Public Service Company	\$ 672	\$ (85,546)	5,010
66	San Diego Gas and Electric Company	\$ 671	\$ 637,068	10,218
67	Public Service Company of Colorado	\$ 665	\$ (194,637)	25,051
68	Northern States Power Company (Wisconsin)	\$ 661	\$ (30,458)	5,299
69	Kansas Gas and Electric Company	\$ 648	\$ (38,932)	3,019
70	Jersey Central Power and Light Company	\$ 640	\$ (4,675)	14,544
71	Kingsport Power Company	\$ 627	\$ (48,624)	701
72	The Connecticut Light and Power Company	\$ 611	\$ 321,767	6,888
73	Metropolitan Edison Company	\$ 601	\$ (150,146)	6,320
74	Virginia Electric and Power Company	\$ 591	\$ 673,881	35,458
75	Atlantic City Electric Company	\$ 573	\$ 697,038	4,969
76	West Penn Power Company	\$ 563	\$ (166,111)	11,608
77	Kentucky Utilities Company	\$ 563	\$ 16,482	8,095
78	Commonwealth Edison Company	\$ 532	\$ 6,305,874	28,421
79	Sierra Pacific Power Company	\$ 531	\$ 55,935	7,803
80	Indianapolis Power and Light Company	\$ 517	\$ 323,585	5,977
81	New Hampshire Electric Cooperative Inc.	\$ 504	\$ 9,565	672
82	Florida Power Corporation	\$ 483	\$ (71,987)	26,541
83	Florida Power and Light Company	\$ 479	\$ 1,845,366	66,767
84	Public Service Company of New Mexico	\$ 471	\$ 101,125	8,742
85	Columbus Southern Power Company	\$ 471	\$ (272,821)	12,574
86	Cleco Utility Group Inc.	\$ 454	\$ (22,191)	5,853
87	Gulf Power Company	\$ 427	\$ 245,056	8,308
88	Entergy Gulf States Inc.	\$ 422	\$ (254,188)	12,394
89	Idaho Power Company	\$ 409	\$ 207,926	10,844
90	Savannah Electric and Power Company	\$ 408	\$ 23,534	2,311
91	Delmarva Power and Light Company	\$ 404	\$ 160,637	13,887
92	Alaska Electric Light and Power Company	\$ 403	\$ 805	310
93	Central Illinois Public Service Company	\$ 401	\$ 186,780	6,793
94	TXU Electric Company	\$ 391	\$ (430,322)	52,582
95	Carolina Power and Light Company	\$ 391	\$ 2,873	30,221
96	Louisville Gas and Electric Company	\$ 390	\$ (95,390)	5,136

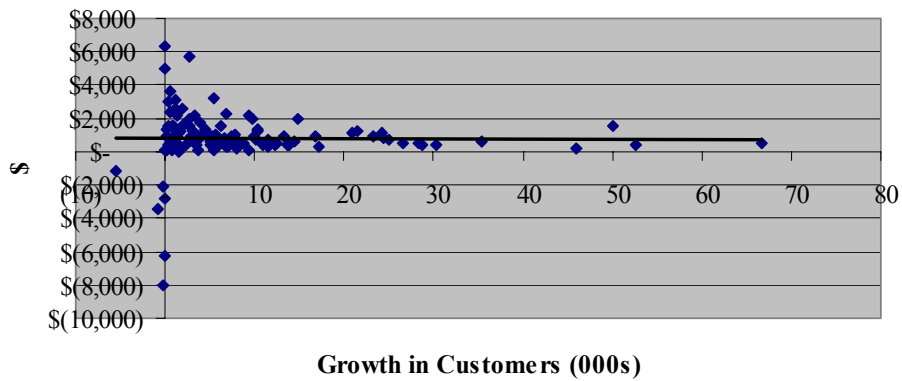
Rank	Company	Growth in Transformers & Substations O&M Expense per Growth in Number of Customers	Growth in Transformers & Substations O&M Expense	Growth in Number of Customers
97	Commonwealth Electric Company	\$ 387	\$ 155,435	3,428
98	Arizona Public Service Company	\$ 368	\$ 31,276	28,787
99	Central Power and Light Company	\$ 362	\$ 308,875	13,669
100	Blackstone Valley Electric Company	\$ 362	\$ (36,861)	1,622
101	Tampa Electric Company	\$ 337	\$ 112,359	11,593
102	Wisconsin Public Service Corporation	\$ 332	\$ 31,183	6,902
103	MDU Resources Group Inc.	\$ 315	\$ 28,419	1,319
104	Utilicorp United Inc.	\$ 303	\$ (6,914)	7,063
105	Puget Sound Energy Inc.	\$ 301	\$ (63,920)	17,193
106	Newport Electric Corporation	\$ 285	\$ 45,469	600
107	Central Maine Power Company	\$ 253	\$ 67,370	5,882
108	Duke Energy Corporation	\$ 243	\$ (659,480)	45,960
109	Tucson Electric Power Company	\$ 224	\$ (91,577)	8,016
110	The United Illuminating Company	\$ 222	\$ 86,099	1,835
111	Citizens' Electric Company	\$ 130	\$ (574)	80
112	Eastern Edison Company	\$ 120	\$ (48,897)	3,627
113	Superior Water, Light, and Power Company	\$ 115	\$ (2,909)	70
114	Exeter and Hampton Electric Company	\$ 95	\$ (284)	769
115	Ohio Edison Company	\$ 91	\$ (21,957)	9,335
116	South Beloit Water, Gas, and Electric Company	\$ 61	\$ 0	185
117	Public Service Company of New Hampshire	\$ 45	\$ 197,914	5,381
118	Madison Gas and Electric Company	\$ 14	\$ 71,956	1,567
119	Oklahoma Gas and Electric Company	\$ (1,114)	\$ (606,778)	(5,564)
120	Pennsylvania Power Company	\$ (2,047)	\$ 85,053	(184)
121	Mt. Carmel Public Utility Company	\$ (2,783)	\$ (593)	(11)
122	The Cleveland Electric Illuminating Company	\$ (3,440)	\$ (446,443)	(886)
123	Fitchburg Gas and Electric Light Company	\$ (6,252)	\$ 15,941	(115)
124	Entergy New Orleans Inc.	\$ (7,983)	\$ (14,568)	(121)

Statistical Summary		
Standard Deviation	\$	1,575.36
Average	\$	814.64
Correlation		0.25

**Growth in Transformers & Substation O&M Expense vs.
Growth in Number of Customers (5 Yr. Average 1995-1999)**



**Growth in Transformers & Substations O&M Expense Per
Growth in Customers vs. Growth in Customers
(5 Yr. Average 1995-1999)**



Appendix Y

Growth in Lines and Feeders O&M Expense per Growth in Number of Customers

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in Number of Customers	Growth in Lines and Feeders O&M Expense	Growth in Number of Customers
1	Central Vermont Public Service Corporation	\$ 932	\$ 935,901	1,004
2	Cambridge Electric Light Company	\$ 793	\$ 215,575	272
3	Maine Public Service Company	\$ 792	\$ 122,165	154
4	Minnesota Power Inc.	\$ 677	\$ 835,661	1,235
5	Illinois Power Company	\$ 541	\$ 1,784,470	3,300
6	The Toledo Edison Company	\$ 528	\$ 1,554,365	2,945
7	San Diego Gas and Electric Company	\$ 515	\$ 5,257,377	10,218
8	The Detroit Edison Company	\$ 513	\$ 11,029,657	21,499
9	Bangor Hydro Electric Company	\$ 489	\$ 674,933	1,381
10	PacifiCorp	\$ 462	\$ 11,169,696	24,198
11	Commonwealth Edison Company	\$ 442	\$ 12,548,093	28,421
12	Green Mountain Power Corporation	\$ 430	\$ 299,741	697
13	Western Massachusetts Electric Company	\$ 415	\$ 400,819	965
14	Potomac Electric Power Company	\$ 378	\$ 2,047,370	5,421
15	New Hampshire Electric Cooperative Inc.	\$ 373	\$ 251,074	672
16	Pacific Gas and Electric Company	\$ 370	\$ 18,559,662	50,129
17	Entergy Louisiana Inc.	\$ 363	\$ 2,240,472	6,167
18	Kansas Gas and Electric Company	\$ 358	\$ 1,082,036	3,019
19	Niagara Mohawk Power Corporation	\$ 345	\$ 2,347,524	6,807
20	West Texas Utilities Company	\$ 330	\$ 368,783	1,118
21	Commonwealth Electric Company	\$ 329	\$ 1,127,001	3,428
22	Atlantic City Electric Company	\$ 327	\$ 1,625,526	4,969
23	Entergy Arkansas Inc.	\$ 312	\$ 2,463,379	7,889
24	Otter Tail Power Company	\$ 288	\$ 183,357	636
25	Western Resources Inc.	\$ 276	\$ 1,034,584	3,749
26	Consolidated Edison Company of New York Inc.	\$ 274	\$ 4,097,313	14,935
27	Superior Water, Light, and Power Company	\$ 236	\$ 16,551	70
28	Rockland Electric Company	\$ 230	\$ 198,586	865
29	Central Hudson Gas and Electric Corporation	\$ 223	\$ 495,219	2,216
30	Southwestern Electric Power Company	\$ 209	\$ 949,584	4,550
31	PP&L Inc.	\$ 202	\$ 2,112,640	10,442
32	South Carolina Electric and Gas Company	\$ 193	\$ 1,910,094	9,897

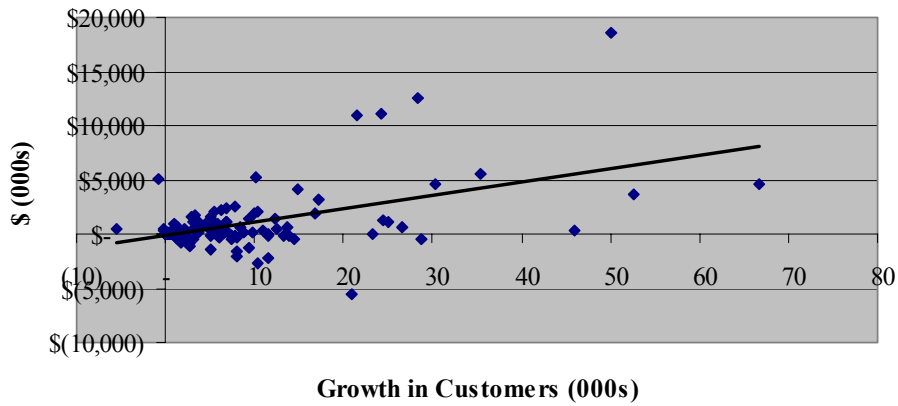
Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in Number of Customers	Growth in Lines and Feeders O&M Expense	Growth in Number of Customers
33	Puget Sound Energy Inc.	\$ 186	\$ 3,197,956	17,193
34	Central Illinois Public Service Company	\$ 171	\$ 1,160,772	6,793
35	Entergy Mississippi Inc.	\$ 167	\$ 935,124	5,594
36	The Empire District Electric Company	\$ 167	\$ 526,257	3,151
37	Central Maine Power Company	\$ 162	\$ 950,303	5,882
38	Southwestern Public Service Company	\$ 158	\$ 614,519	3,887
39	Virginia Electric and Power Company	\$ 156	\$ 5,532,984	35,458
40	Ohio Edison Company	\$ 154	\$ 1,437,994	9,335
41	The Connecticut Light and Power Company	\$ 153	\$ 1,057,288	6,888
42	Carolina Power and Light Company	\$ 150	\$ 4,534,131	30,221
43	Wisconsin Public Service Corporation	\$ 150	\$ 1,034,959	6,902
44	The Montana Power Company	\$ 150	\$ 607,681	4,059
45	Northwestern Public Service	\$ 146	\$ 64,546	441
46	Upper Peninsula Power Company	\$ 136	\$ 37,485	276
47	St. Joseph Light and Power Company	\$ 118	\$ 55,208	469
48	Public Service Company of New Hampshire	\$ 114	\$ 611,245	5,381
49	Portland General Electric Company	\$ 110	\$ 1,850,629	16,749
50	Entergy Gulf States Inc.	\$ 110	\$ 1,368,158	12,394
51	MDU Resources Group Inc.	\$ 107	\$ 140,537	1,319
52	Blackstone Valley Electric Company	\$ 98	\$ 159,520	1,622
53	Black Hills Corporation	\$ 83	\$ 58,291	705
54	TXU Electric Company	\$ 71	\$ 3,715,323	52,582
55	Gulf Power Company	\$ 70	\$ 584,206	8,308
56	Florida Power and Light Company	\$ 68	\$ 4,544,947	66,767
57	Northern States Power Company (Wisconsin)	\$ 64	\$ 339,905	5,299
58	Madison Gas and Electric Company	\$ 61	\$ 96,238	1,567
59	Northern Indiana Public Service Company	\$ 58	\$ 288,233	5,010
60	Savannah Electric and Power Company	\$ 56	\$ 129,989	2,311
61	Eastern Edison Company	\$ 55	\$ 200,315	3,627
62	Public Service Electric and Gas Company	\$ 51	\$ 1,248,284	24,398
63	Public Service Company of Colorado	\$ 47	\$ 1,171,557	25,051
64	Central Power and Light Company	\$ 43	\$ 581,645	13,669
65	Newport Electric Corporation	\$ 41	\$ 24,362	600
66	Concord Electric Company	\$ 40	\$ 10,478	265
67	Columbus Southern Power Company	\$ 38	\$ 474,543	12,574
68	Idaho Power Company	\$ 34	\$ 372,347	10,844

Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in Number of Customers	Growth in Lines and Feeders O&M Expense	Growth in Number of Customers
69	El Paso Electric Company	\$ 33	\$ 197,205	6,001
70	Kansas City Power and Light Company	\$ 29	\$ 194,336	6,589
71	Indiana Michigan Power Company	\$ 29	\$ 170,693	5,911
72	Lockhart Power Company	\$ 23	\$ 2,480	108
73	Florida Power Corporation	\$ 22	\$ 583,052	26,541
74	Public Service Company of New Mexico	\$ 21	\$ 184,528	8,742
75	Exeter and Hampton Electric Company	\$ 17	\$ 12,988	769
76	Alaska Electric Light and Power Company	\$ 16	\$ 4,819	310
77	Union Electric Company	\$ 13	\$ 122,983	9,673
78	Utilicorp United Inc.	\$ 11	\$ 79,872	7,063
79	Duke Energy Corporation	\$ 6	\$ 254,913	45,960
80	South Beloit Water, Gas, and Electric Company	\$ (0)	\$ (9)	185
81	Consumers Energy Company	\$ (1)	\$ (11,994)	23,280
82	Wisconsin Electric Power Company	\$ (3)	\$ (32,769)	11,582
83	Ohio Power Company	\$ (5)	\$ (25,716)	5,319
84	PSI Energy Inc.	\$ (6)	\$ (81,225)	13,358
85	Delmarva Power and Light Company	\$ (8)	\$ (109,153)	13,887
86	Kingsport Power Company	\$ (11)	\$ (7,622)	701
87	Metropolitan Edison Company	\$ (12)	\$ (76,770)	6,320
88	Tampa Electric Company	\$ (13)	\$ (155,475)	11,593
89	Arizona Public Service Company	\$ (14)	\$ (410,720)	28,787
90	Sierra Pacific Power Company	\$ (16)	\$ (124,922)	7,803
91	Chugach Electric Association Inc.	\$ (22)	\$ (24,388)	1,091
92	Hawaiian Electric Company Inc.	\$ (25)	\$ (46,517)	1,879
93	Wisconsin Power and Light Company	\$ (25)	\$ (184,056)	7,412
94	Louisville Gas and Electric Company	\$ (26)	\$ (132,061)	5,136
95	Jersey Central Power and Light Company	\$ (29)	\$ (427,780)	14,544
96	Tucson Electric Power Company	\$ (32)	\$ (254,450)	8,016
97	Cleco Utility Group Inc.	\$ (34)	\$ (198,372)	5,853
98	Indianapolis Power and Light Company	\$ (54)	\$ (319,866)	5,977
99	The Potomac Edison Company	\$ (60)	\$ (443,560)	7,377
100	Oklahoma Gas and Electric Company	\$ (74)	\$ 412,533	(5,564)
101	Central Illinois Light Company	\$ (106)	\$ (155,089)	1,462
102	Citizens' Electric Company	\$ (122)	\$ (9,805)	80
103	Fitchburg Gas and Electric Light Company	\$ (136)	\$ 15,580	(115)
104	Baltimore Gas and Electric Company	\$ (144)	\$ (1,349,110)	9,347

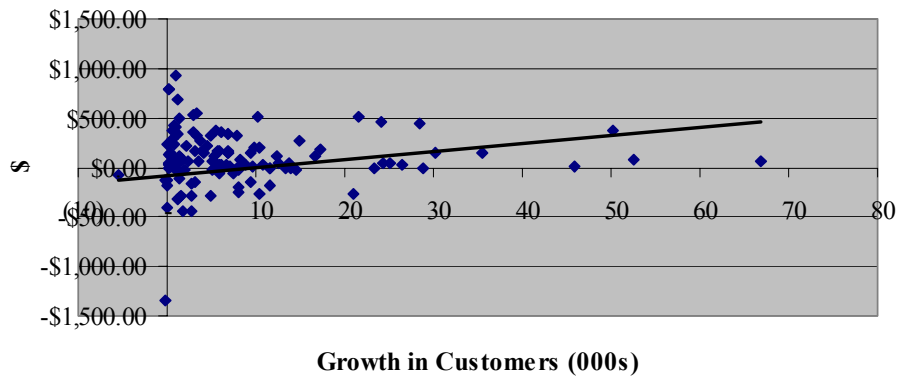
Rank	Company	Growth in Lines and Feeders O&M Expense per Growth in Number of Customers	Growth in Lines and Feeders O&M Expense	Growth in Number of Customers
105	Monongahela Power Company	\$ (154)	\$ (478,346)	3,104
106	IES Utilities Inc.	\$ (161)	\$ (444,073)	2,766
107	Connecticut Valley Electric Company Inc.	\$ (186)	\$ (5,565)	30
108	West Penn Power Company	\$ (187)	\$ (2,165,735)	11,608
109	Kentucky Utilities Company	\$ (203)	\$ (1,642,570)	8,095
110	The Cincinnati Gas and Electric Company	\$ (246)	\$ (1,991,365)	8,087
111	Alabama Power Company	\$ (264)	\$ (5,508,031)	20,896
112	Appalachian Power Company	\$ (264)	\$ (2,729,397)	10,343
113	The Dayton Power and Light Company	\$ (283)	\$ (1,415,441)	4,998
114	Kentucky Power Company	\$ (287)	\$ (477,394)	1,666
115	Boston Edison Company	\$ (289)	\$ (807,411)	2,798
116	Southern Indiana Gas and Electric Company	\$ (300)	\$ (409,315)	1,365
117	Interstate Power Company	\$ (316)	\$ (348,291)	1,102
118	Wheeling Power Company	\$ (416)	\$ (18,204)	44
119	Pennsylvania Electric Company	\$ (434)	\$ (1,170,463)	2,698
120	The United Illuminating Company	\$ (445)	\$ (817,231)	1,835
121	Pennsylvania Power Company	\$ (1,349)	\$ 247,668	(184)
122	Mt. Carmel Public Utility Company	\$ (3,358)	\$ 38,286	(11)
123	Entergy New Orleans Inc.	\$ (3,483)	\$ 421,503	(121)
124	The Cleveland Electric Illuminating Company	\$ (5,674)	\$ 5,024,498	(886)

Statistical Summary		
Standard Deviation	\$	730.97
Average	\$	(17.49)
Correlation		0.51

**Growth in Lines & Feeders O&M
vs. Growth in Customers
(5 Yr. Average 1995-1999)**



**Growth in Lines & Feeders O&M Expense per Growth in
Customers vs. Growth in Customers
(5 Yr. Average 1995-1999)**



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13. ABSTRACT (<i>Maximum 200 words</i>) This report is the collection of appendices to the Distribution System Cost Methodologies for Distributed Generation report. It presents data detailing the actual costs of distribution utilities in the United States and draws from a number of sources to demonstrate the significant deviation between particular distribution expansion costs and average marginal and average embedded costs. While the analysis here cannot provide the basis for making individual choices for specific projects, it does demonstrate that there are opportunities to implement distributed resources in lieu of traditional wires and transformers solutions. This report provides the regulator the data and shows the trends that might lead to some guidelines about the important aspects of distribution costs and a framework for assessing the avoided costs of the distribution system. This report is one in the State Electricity Regulatory Policy and Distributed Resources series developed under contract to NREL (see Annual Technical Status Report of the Regulatory Assistance Project: September 2000–September 2001, NREL/SR-560-32733). Other titles in this series are: <ul style="list-style-type: none"> • Accommodating Distributed Resources in Wholesale Markets, NREL/SR-560-32497 • Distributed Resource Distribution Credit Pilot Programs - Revealing the Value to Consumers and Vendors, NREL/SR-560-32499 • Distributed Resources and Electric System Reliability, NREL/SR-560-32498 • Distribution System Cost Methodologies for Distributed Generation, NREL/SR-560-32500. 				
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