

System Impedance and Short Circuit Capabilities *

Division	Substation	Town	Base kV	----- Thevenin Impedances (Ohms) -----						
				--SLG--	--TPH--	Rpos	Xpos	Rzero	Xzero	
	Keene Road **	Chester	345							
	Orrington	Orrington	345							
	Orrington	Orrington	115							
	Betts Rd	Orrington	115							
	Keene Road	Chester	115	3725	5438	1.4546	+j 12.1227	6.5994	+j 28.3249	
	Graham	Veazie	115	28339	27044	0.1561	+j 2.4501	0.2727	+j 2.1251	
	Boggy Brook	Ellsworth Falls	115	5256	6854	1.4349	+j 9.5799	4.0343	+j 18.0928	
	Chester	Chester	115	3617	5309	1.5009	+j 12.4156	6.9510	+j 29.2781	
	Deblois	Deblois	115	2768	2894	6.2555	+j 22.0708	4.8749	+j 25.3028	
	Ellsworth Falls	Ellsworth Falls	115	4978	6565	1.6063	+j 9.9853	4.5770	+j 19.2623	
	Enfield Sw. Sta.	Enfield	115	4668	6095	1.1711	+j 10.8302	4.0526	+j 20.5111	
	Epping	Columbia	115	2008	2548	6.2628	+j 25.2910	11.7101	+j 45.2391	
	Harrington	Harrington	115	1768	2300	7.3095	+j 27.9338	14.1567	+j 52.6702	
	Indeck5	Enfield	115	4429	5568	1.5600	+j 11.8226	3.8249	+j 20.7699	
	Perc	Orrington	115	9379	11835	1.4382	+j 5.4225	3.2507	+j 9.5085	
	Powersville	TA R7 Wels	115	3425	3960	1.7772	+j 16.6737	3.0430	+j 24.4252	
	Rebel Hill	Clifton	115	5846	7746	1.1933	+j 8.4879	5.3779	+j 16.1808	
	Trenton	Trenton	115	2131	3711	2.8802	+j 17.6580	9.4904	+j 56.9260	
	Waltham	Ellsworth	115	4519	6168	1.6213	+j 10.6413	4.5265	+j 22.0924	
	Washington County	Jonesboro	115	1407	2044	8.0949	+j 31.4671	25.2283	+j 72.0300	
Bangor	B.I.A.	Bangor	44	1982	4010	1.3695	+j 6.1860	3.9508	+j 25.4950	
	B.I.A.	Bangor	12.5	5454	4837	0.1807	+j 1.4811	0.0704	+j 0.9839	
	Broadway	Bangor	44	5573	11299	0.4387	+j 2.2051	1.5075	+j 9.0550	
	Broadway	Bangor	12.5	11348	10367	0.0752	+j 0.6920	0.0395	+j 0.5143	
	Costigan	Milford	44	1746	3075	3.0466	+j 7.6795	5.9901	+j 26.5444	
	Costigan	Milford	12.5	2065	1946	0.5006	+j 3.6745	0.2546	+j 3.0546	
	East Bangor	Bangor	44	3967	7647	0.8190	+j 3.2194	2.1398	+j 12.3952	
	East Bangor	Bangor	12.5	7970	7261	0.1145	+j 0.9873	0.0485	+j 0.7276	
	East Corinth	Corinth	44	796	1380	9.1579	+j 15.9622	14.7172	+j 57.9635	
	East Corinth	Bangor	13.2	2177	1890	1.0693	+j 3.8877	0.2451	+j 2.4511	
	Eastern Ave. Sub	Bangor	44	4520	7509	1.1160	+j 3.1937	2.0219	+j 9.9189	
	Eastern Ave. Sub	Brewer	4.16	7513	7290	0.0398	+j 0.3271	0.0299	+j 0.2986	
	Graham	Veazie	44	29852	28483	0.0640	+j 0.8896	0.0446	+j 0.7678	
	Graham	Veazie	12.5	9759	10803	0.0663	+j 0.6647	0.4028	+j 0.8193	
	Graham_T9L	Veazie	44	29852	28483	0.0640	+j 0.8896	0.0446	+j 0.7678	
	Green Point Rd.	Brewer	44	5434	8737	0.4782	+j 2.8680	1.2390	+j 8.1054	
	Green Point Rd.	Brewer	12.5	4969	4716	0.1463	+j 1.5232	0.1077	+j 1.2917	
	Hampden	Hampden	44	4973	7981	0.6201	+j 3.1219	1.3632	+j 8.8387	
	Hampden	Hampden	12.5	11646	10246	0.0735	+j 0.7006	0.0235	+j 0.4486	
	Hermon	Hermon	44	2216	4379	1.1362	+j 5.6892	3.2736	+j 22.4954	
	Hermon	Hermon	12.5	7683	6994	0.1196	+j 1.0250	0.0449	+j 0.7188	
	Hogan Rd.	Bangor	44	8347	15213	0.2789	+j 1.6464	0.9171	+j 5.7167	
	Hogan Rd.	Bangor	12.5	14392	13213	0.0592	+j 0.5430	0.0369	+j 0.4104	
	James River Treatmen	Old Town	44	2495	4620	2.0382	+j 5.1073	5.1578	+j 18.8595	
	Lower Main St.	Bangor	12.5	7158	7983	0.1196	+j 0.8961	0.3647	+j 1.1701	
	Lucerne	Dedham	44	2150	3694	2.7085	+j 6.3211	4.4264	+j 21.4187	
	Lucerne	Dedham	12.5	4276	3865	0.3208	+j 1.8393	0.1022	+j 1.3292	
	Milford	Milford	44	2176	4093	2.0012	+j 5.8759	5.2769	+j 21.9590	
	Milford	Milford	12.5	4373	3981	0.2714	+j 1.7925	0.1098	+j 1.3183	
	Orono	Orono	44	3918	6904	1.1301	+j 3.5018	3.8391	+j 11.4412	
	Orono	Orono	12.5	8516	8647	0.1045	+j 0.8280	0.0804	+j 0.8655	
	Park Street	Bangor	12.5	6301	7457	0.1531	+j 0.9556	0.3689	+j 1.4577	
	Park Street	Bangor	4.16	10720	9249	0.0321	+j 0.2577	0.0152	+j 0.1521	
	Pushaw Road	Bangor	44	3875	7390	0.8345	+j 3.3345	2.1602	+j 12.6202	
	Red Shield	Old Town	44	2070	5464	0.8046	+j 4.5788	6.9480	+j 26.8102	
	Stillwater	Old Town	12.5	2898	2774	0.7011	+j 2.5055	0.3589	+j 2.2040	
	Tibbetts St.	Brewer	44	5077	7957	0.6049	+j 3.1350	1.4653	+j 8.4821	
	Tibbetts St.	Brewer	12.5	8580	7792	0.0905	+j 0.9218	0.0418	+j 0.6686	
	U of M	Orono	12.5	7058	7264	0.1358	+j 0.9843	0.1273	+j 1.0686	
	U of M	Orono	4.16	7109	6416	0.0413	+j 0.3721	0.0263	+j 0.2630	
	Univ. of ME	Orono	44	3043	5635	1.3843	+j 4.2907	4.2445	+j 15.4326	
	Univ. of ME	Orono	4.16	9462	8998	0.0313	+j 0.2651	0.0189	+j 0.2267	
	Veazie	Veazie	44	10795	15839	0.4466	+j 1.5404	0.8485	+j 3.7519	
	Water Works	Bangor	12.5	2582	4487	0.3780	+j 1.5635	1.8801	+j 4.7930	
	Water Works	Bangor	4.16	6215	5406	0.0685	+j 0.4390	0.0266	+j 0.2658	
	Webster Ave. North	Bangor	12.5	2879	4093	0.4673	+j 1.7000	1.4445	+j 3.7321	
	Webster Ave. North	Bangor	4.16	10308	4897	0.0813	+j 0.4836	0.0295	+j -0.2953	
Hancock	Bar Harbor	Bar Harbor	34.5	1666	2030	3.1924	+j 9.2761	4.1697	+j 15.8627	
	Bar Harbor	Bar Harbor	4.16	6119	5458	0.0763	+j 0.4334	0.0299	+j 0.2985	
	Blue Hill	Blue Hill	44	769	1225	10.2376	+j 18.0419	14.3496	+j 56.7605	
	Blue Hill	Blue Hill	12.5	1943	1697	1.0916	+j 4.1092	0.2654	+j 2.6536	
	Brooksville	Bangor	44	602	973	11.8576	+j 23.2690	18.1596	+j 72.9282	
	Brooksville	Brooksville	12.5	1746	1498	1.2348	+j 4.6558	0.2778	+j 2.7778	
	Burns Corner	Bar Harbor	34.5	5014	5529	0.6577	+j 3.5423	0.9587	+j 4.6608	
	Burns Corner	Bar Harbor	12.5	2958	2777	0.2980	+j 2.5817	0.2117	+j 2.1166	
	East Franklin	Franklin	34.5	2611	3545	1.8923	+j 5.2911	3.8978	+j 10.9690	
	East Franklin	Franklin	12.5	4099	3297	0.3942	+j 2.1529	0.0902	+j 0.9021	
	Ellsworth	Ellsworth	44	2982	3747	1.3574	+j 6.6417	1.3514	+j 11.9449	
	Ellsworth	Ellsworth	34.5	4364	6315	0.6225	+j 3.0919	1.1681	+j 7.2460	
	Ellsworth Falls	Ellsworth Falls	44	4486	4244	0.5894	+j 5.9564	0.3385	+j 4.9878	
	Ellsworth Falls	Ellsworth Falls	34.5	10573	9563	0.2558	+j 2.0671	0.1016	+j 1.4716	

	Gouldsboro	Gouldsboro	34.5	2247	2945	2.2242	+j	6.3886	4.6567	+j	12.2034
	Hancock	Hancock	34.5	4094	5238	0.9368	+j	3.6858	1.8023	+j	6.7524
	Hancock	Hancock	12.5	8852	7360	0.1552	+j	0.9682	0.0323	+j	0.4849
	Jackson Lab	Bar Harbor	34.5	1485	1866	3.7537	+j	9.9904	5.5760	+j	18.2282
	Mill St.	Ellsworth	34.5	5462	7064	0.4933	+j	2.7763	0.7579	+j	5.2224
	Mill St.	Ellsworth	12.5	4756	4403	0.1622	+j	1.6311	0.0975	+j	1.2668
	Nicolin	Ellsworth	44	2186	3378	2.4718	+j	7.1034	3.6126	+j	19.5940
	Nicolin	Ellsworth	8.32	2996	2840	0.2305	+j	1.6753	0.1421	+j	1.4210
	Northeast Harbor	Mount Desert Island	34.5	1362	1713	6.3522	+j	9.7387	8.7313	+j	18.9482
	Northeast Harbor	Mount Desert Island	4.16	5643	5009	0.1245	+j	0.4630	0.0321	+j	0.3214
	Raggedy Corner	Mount Desert Island	34.5	2628	2987	1.9260	+j	6.3851	1.8554	+j	9.3760
	Somesville	Mount Desert Island	34.5	2803	3741	1.0671	+j	5.2159	3.0023	+j	10.3014
	Southwest Harbor	Southwest Harbor	34.5	1262	1769	6.2388	+j	9.3700	11.2634	+j	22.2913
	Surry	Surry	44	1171	1835	4.7901	+j	12.9889	7.1434	+j	36.9242
	Surry	Surry	12.5	1818	1666	0.6553	+j	4.2827	0.2638	+j	3.2405
	Trenton	Trenton	34.5	7639	7032	0.4740	+j	2.7927	0.1811	+j	2.1749
	Youngs Corner	Bar Harbor	34.5	3515	3666	1.4234	+j	5.2438	0.8309	+j	6.2454
Wash.Cty	Bucks Harbor	Machiasport	34.5	1206	1833	3.8284	+j	10.1718	6.5357	+j	27.0933
	Bucks Harbor	Machiasport	4.16	3385	3157	0.1413	+j	0.7475	0.0860	+j	0.6007
	Cherryfield	Cherryfield	34.5	3024	3878	1.6177	+j	4.8746	3.3043	+j	8.8812
	Cherryfield	Cherryfield	12.5	1672	1591	0.5980	+j	4.4962	0.3857	+j	3.8563
	Cutler	Cutler	34.5	746	1010	11.1575	+j	16.2554	18.4038	+j	36.4348
	Cutler	Cutler	12.5	1164	1029	1.9256	+j	6.7433	0.4604	+j	4.6043
	Deblois Tap	Deblois	34.5	2426	2564	2.8821	+j	7.2156	1.6529	+j	9.0322
	Dennysville	Dennysville	34.5	956	1153	4.0926	+j	16.7808	7.2248	+j	27.0161
	Eastport	Eastport	34.5	914	879	5.1767	+j	22.0641	2.9849	+j	19.8482
	Eastport	Eastport	12.5	1209	1038	1.0771	+j	6.8715	0.3975	+j	3.9749
	Eastport	Eastport	4.16	9479	8144	0.0257	+j	0.2938	0.0144	+j	0.1697
	Harrington	Harrington	34.5	5046	4884	0.9375	+j	3.9692	0.4847	+j	3.6439
	Harrington	Harrington	12.5	2350	2202	0.5043	+j	3.2388	0.3065	+j	2.6368
	Jonesboro	Jonesboro	34.5	4668	4346	0.7976	+j	4.5131	0.5799	+j	3.5496
	Jonesboro	Jonesboro	12.5	896	874	0.8666	+j	8.2112	0.7619	+j	7.6186
	Jonesport	Jonesport	34.5	730	937	15.4569	+j	14.5880	19.7772	+j	35.0390
	Jonesport	Jonesport	4.16	5349	4407	0.2519	+j	0.4833	0.0271	+j	0.2712
	L25 Addison	Addison	34.5	1739	2295	5.0017	+j	7.0931	6.3723	+j	16.0020
	Lubec	Lubec	34.5	470	640	18.9382	+j	24.6793	30.1345	+j	58.1095
	Machias	Machias	34.5	2817	3348	1.6831	+j	5.7064	3.1248	+j	8.7469
	Machias	Machias	4.16	5341	5030	0.0636	+j	0.4732	0.0393	+j	0.3917
	Milbridge	Milbridge	34.5	2004	2768	2.4624	+j	6.7630	5.6012	+j	14.3519
	Pembroke	Pembroke	34.5	892	1004	5.0961	+j	19.1742	6.4564	+j	26.5375
	Pembroke	Pembroke	12.5	1600	1338	0.9651	+j	5.3053	0.2766	+j	2.7365
	Scotts Hill Rd.	East Machias	34.5	2676	3223	1.7818	+j	5.9178	3.2236	+j	9.4029
	Scotts Hill Rd.	East Machias	12.5	2866	2593	0.3988	+j	2.7550	0.1648	+j	1.9781
	Washington County	Jonesboro	34.5	7136	6060	0.4919	+j	3.2499	0.1237	+j	1.7611
	Whiting	Whiting	34.5	660	874	14.9679	+j	17.1858	22.9044	+j	39.1985
Northern	Beaverwood	Chester	44	3139	3295	1.2290	+j	7.6119	1.0450	+j	8.8654
	Chester	Chester	12.5	2255	2122	0.3658	+j	3.3809	0.2792	+j	2.7917
	Chester_T1L	Chester	44	3435	3443	1.0730	+j	7.3003	0.7581	+j	7.4544
	Chester_T2L	Chester	44	2670	3076	0.4427	+j	8.2473	0.4433	+j	11.5257
	East Millinocket	E. Millinocket	44	1759	1648	4.5162	+j	14.7367	2.6764	+j	12.6938
	East Millinocket	E. Millinocket	12.5	2054	1834	0.6332	+j	3.8847	0.2687	+j	2.6953
	Howland	Howland	44	2562	2729	2.7538	+j	8.8922	1.7562	+j	11.0188
	Howland	Howland	12.5	1136	1093	0.8056	+j	6.5509	0.5833	+j	5.8334
	J. R. Chip Mill	Milo	44	845	1429	4.4338	+j	17.2169	8.5316	+j	54.0345
	Keene Bog	Chester	44	2951	3195	1.3263	+j	7.8410	1.2397	+j	9.9132
	Keene Bog	Chester	12.5	2889	2660	0.3133	+j	2.6953	0.2062	+j	2.0624
	Lincoln	Lincoln	44	2902	3238	1.6073	+j	7.6801	1.8018	+j	10.4658
	Lincoln	Lincoln	12.5	3503	3177	0.2557	+j	2.2573	0.1260	+j	1.6375
	LP&P	Lincoln	44	2267	2991	0.5380	+j	8.4775	1.4349	+j	15.9844
	Mattawamkeag	Mattawamkeag	44	900	1357	9.7507	+j	15.9830	12.8577	+j	46.3742
	Mattawamkeag	Mattawamkeag	12.5	1449	1322	1.1901	+j	5.3259	0.4023	+j	4.0364
	Medway	Medway	44	2143	1811	3.1932	+j	13.6560	0.9361	+j	7.9278
	Millinocket	Millinocket	44	1034	1233	5.0747	+j	19.9679	5.6307	+j	32.4768
	Millinocket	Millinocket	12.5	3531	2767	0.5043	+j	2.5594	0.0948	+j	0.9478
	Milo	Milo	44	727	1274	6.1200	+j	18.9721	11.9062	+j	64.0400
	Milo	Milo	13.2	3420	2897	0.5317	+j	2.5763	0.1096	+j	1.4245
	Olamon	Greenbush	44	1745	2695	3.3524	+j	8.8108	4.9987	+j	24.4037
	Stanford	Enfield	44	3323	3108	2.0520	+j	7.9132	0.6079	+j	6.5796
	Stanford	Enfield	12.5	1620	1544	0.5656	+j	4.6387	0.3999	+j	4.0000

* - Values are based on system as of May 2011. Generators in the que to be interconnected are not represented. Updates will be made on an annual basis.

** - Harmonic impedances for this location are available if required for specific interconnection study work.