

## Appendix A – Electricity Demand Forecast Details

### List of Tables

Table A1 Electricity Demand Forecast.....	3
Table A2 Actual & Forecast Summer and Winter 20-Minute System Peak Demand .....	5

### List of Figures

Figure A1 – Transmission Zones Used to Derive the Peak Demand Forecasts .....	2
---	---

**Figure A1 – Transmission Zones Used to Derive the Peak Demand Forecasts**

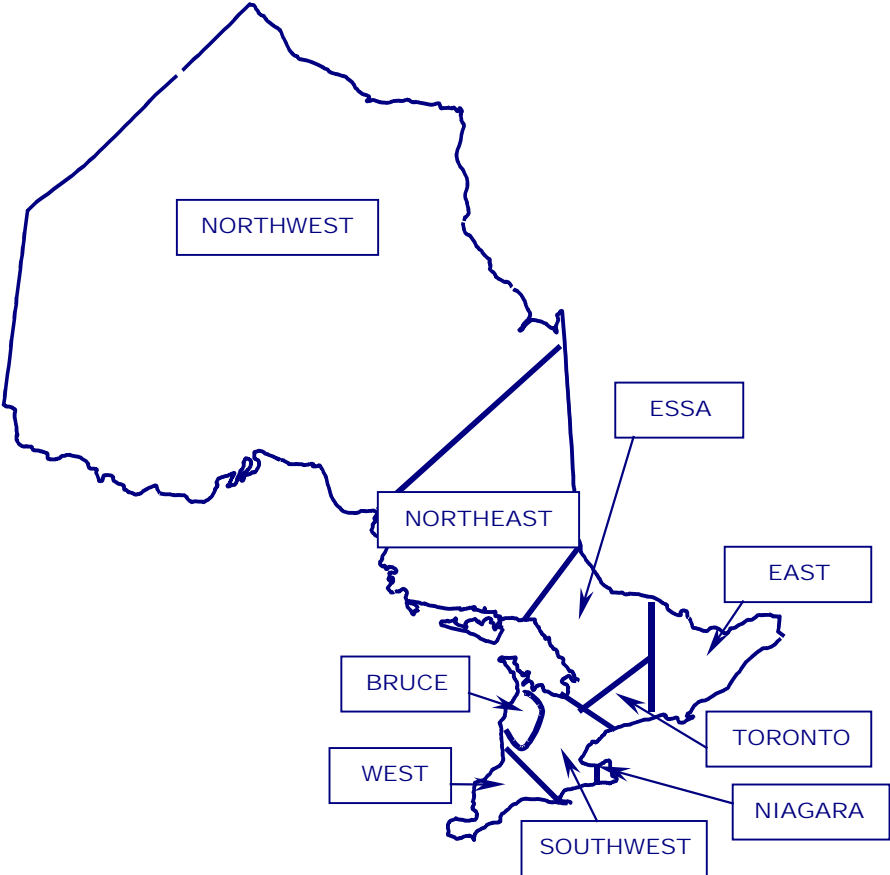


Table A1 Electricity Demand Forecast

Week Ending Day	20-Minute Peak Demand by Transmission Zone – Normal Weather Conditions - MW									Total System 20-min. Peak Demand MW – Various Weather		
	Northwest	Northeast	East	Essa	Toronto	Southwest	Niagara	Bruce	West	Normal Weather <sup>1</sup>	Normal +1 Standard Dev. Weather <sup>2</sup>	Extreme Weather <sup>3</sup>
8-Oct-00	974	1606	3227	798	5450	3659	803	344	2121	18980	19417	19854
15-Oct-00	974	1611	3237	800	5466	3670	806	345	2128	19037	19499	19961
22-Oct-00	974	1647	3308	818	5586	3751	823	353	2175	19434	19926	20418
29-Oct-00	974	1662	3339	825	5639	3786	831	356	2195	19605	20124	20643
5-Nov-00	1048	1717	3449	853	5825	3911	859	368	2268	20297	20869	21441
12-Nov-00	1048	1771	3558	879	6008	4034	886	379	2339	20901	21459	22017
19-Nov-00	1048	1801	3618	894	6109	4102	901	386	2378	21237	21712	22187
26-Nov-00	1048	1818	3652	903	6169	4141	909	389	2401	21427	21984	22541
3-Dec-00	1101	1841	3698	914	6244	4193	920	394	2431	21736	22361	22986
10-Dec-00	1101	1747	3925	1139	6576	4243	931	126	2281	22069	22837	23605
17-Dec-00	1101	1768	3974	1153	6656	4296	943	127	2309	22327	23081	23835
24-Dec-00	1101	1787	4016	1165	6729	4342	953	129	2334	22556	23394	24232
31-Dec-00	1101	1723	3873	1123	6488	4187	919	124	2251	21790	22587	23384
7-Jan-01	1080	1745	3943	1155	6677	4274	938	127	2295	22235	23029	23823
14-Jan-01	1080	1775	4011	1175	6790	4347	954	129	2334	22596	23478	24360
21-Jan-01	1080	1778	4017	1177	6803	4355	956	129	2338	22632	23624	24616
28-Jan-01	1080	1756	3968	1162	6718	4301	944	128	2310	22367	23249	24131
4-Feb-01	1080	1753	3962	1160	6708	4294	943	128	2306	22333	23100	23867
11-Feb-01	1063	1746	3945	1156	6679	4276	939	127	2296	22227	22957	23687
18-Feb-01	1063	1726	3899	1142	6601	4226	928	125	2269	21979	22774	23569
25-Feb-01	1063	1696	3831	1122	6487	4153	912	123	2230	21618	22420	23222
4-Mar-01	1063	1679	3794	1111	6424	4112	903	122	2208	21415	22160	22905
11-Mar-01	1007	1658	3745	1097	6341	4060	891	121	2180	21100	21835	22570
18-Mar-01	1007	1634	3693	1082	6252	4003	879	119	2149	20818	21555	22292
25-Mar-01	1007	1612	3642	1067	6166	3948	867	117	2120	20545	21152	21759
1-Apr-01	1007	1582	3574	1047	6053	3874	850	115	2081	20183	20802	21421
8-Apr-01	978	1671	3375	841	5757	3837	842	361	2221	19884	20480	21076
15-Apr-01	978	1645	3321	828	5666	3776	829	355	2186	19584	20192	20800
22-Apr-01	978	1592	3214	801	5483	3655	802	344	2116	18985	19482	19979
29-Apr-01	978	1587	3206	799	5468	3645	800	343	2110	18936	19457	19978
6-May-01	978	1575	3181	793	5428	3617	794	340	2094	18798	19207	19616
13-May-01	924	1568	3166	789	5400	3599	790	339	2084	18659	19160	19661
20-May-01	924	1572	3175	792	5416	3610	792	340	2090	18711	19428	20145
27-May-01	924	1569	3167	790	5403	3601	791	339	2085	18669	19587	20505
3-Jun-01	937	1600	3232	806	5513	3674	807	346	2127	19042	20073	21104
10-Jun-01	937	1256	3596	874	6025	3906	857	150	2134	19735	20966	22197
17-Jun-01	937	1295	3708	901	6212	4027	884	155	2200	20319	21691	23063
24-Jun-01	937	1312	3757	913	6295	4081	896	157	2229	20576	21978	23380
1-Jul-01	937	1318	3776	918	6326	4101	900	158	2240	20675	22020	23365
8-Jul-01	947	1351	3869	941	6483	4203	923	162	2296	21174	22527	23880
15-Jul-01	947	1390	3981	968	6669	4324	949	166	2362	21756	23005	24254
22-Jul-01	947	1390	3982	968	6672	4325	949	167	2362	21760	22965	24170
29-Jul-01	947	1376	3941	958	6603	4281	940	165	2338	21548	22721	23894
5-Aug-01	951	1353	3876	942	6494	4210	924	162	2300	21211	22340	23469

<sup>1</sup> The values shown are under 'normal' conditions which covers 50% of time weather conditions in that week from a normal distribution of the demand in that week. (This bell curve is used in the calculation of the generation reserve requirement in each week.) Total demand may not match the sum of the zones due to rounding.

<sup>2</sup> The values shown are under 'normal plus one standard deviation' conditions which covers 84.1% of time weather conditions in that week. Such a demand could be expected to occur on some days over a season. The maximum value over a season is provided to the Northeast Power Coordinating Council for seasonal assessments.

<sup>3</sup> The values shown are under 'normal plus two standard deviations' conditions which covers 97.7% of time conditions in that week. Such values are used to assess the adequacy of the transmission system.

Week Ending Day	20-Minute Peak Demand by Transmission Zone – Normal Weather Conditions - MW									Total System 20-min. Peak Demand MW – Various Weather		
	Northwest	Northeast	East	Essa	Toronto	Southwest	Niagara	Bruce	West	Normal Weather <sup>1</sup>	Normal +1 Standard Dev. Weather <sup>2</sup>	Extreme Weather <sup>3</sup>
12-Aug-01	951	1331	3812	927	6386	4140	909	159	2262	20877	21916	22955
19-Aug-01	951	1331	3811	926	6384	4139	909	159	2261	20870	21955	23040
26-Aug-01	951	1319	3777	918	6328	4103	901	158	2241	20696	21881	23066
2-Sep-01	956	1311	3756	913	6292	4079	895	157	2228	20588	21838	23088
9-Sep-01	958	1251	3582	871	6001	3891	854	150	2125	19682	20802	21922
16-Sep-01	958	1236	3540	860	5931	3845	844	148	2100	19462	20449	21436
23-Sep-01	958	1211	3468	843	5811	3767	827	145	2058	19088	19909	20730
30-Sep-01	958	1199	3433	834	5752	3729	819	144	2037	18904	19427	19950
7-Oct-01	974	1602	3235	806	5518	3678	807	346	2129	19095	19531	19967
14-Oct-01	974	1618	3266	814	5572	3714	815	350	2150	19273	19713	20153
21-Oct-01	974	1641	3314	826	5654	3768	827	355	2182	19541	20054	20567
28-Oct-01	974	1659	3350	835	5716	3809	836	359	2205	19744	20259	20774
4-Nov-01	1048	1692	3417	852	5830	3885	853	366	2250	20193	20724	21255
11-Nov-01	1048	1759	3552	885	6059	4038	886	380	2338	20946	21509	22072
18-Nov-01	1048	1791	3616	902	6169	4112	903	387	2381	21308	21815	22322
25-Nov-01	1048	1810	3656	911	6237	4156	912	391	2406	21527	22051	22575
2-Dec-01	1082	1831	3697	922	6306	4203	923	396	2433	21791	22413	23035
9-Dec-01	1107	1738	3927	1150	6648	4256	934	126	2286	22173	22880	23587
16-Dec-01	1107	1763	3983	1167	6744	4317	948	128	2318	22475	23226	23977
23-Dec-01	1107	1783	4028	1180	6821	4366	958	130	2344	22715	23533	24351
30-Dec-01	1107	1706	3855	1129	6527	4179	917	124	2244	21788	22586	23384
6-Jan-02	1107	1754	3983	1177	6810	4328	950	131	2323	22555	23356	24157
13-Jan-02	1081	1775	4029	1191	6880	4378	961	132	2350	22778	23613	24448
20-Jan-02	1081	1780	4041	1195	6901	4391	964	133	2356	22840	23827	24814
27-Jan-02	1081	1761	3998	1182	6827	4345	954	131	2332	22611	23548	24485
3-Feb-02	1081	1757	3988	1179	6809	4333	951	131	2326	22555	23364	24173
10-Feb-02	1063	1742	3954	1169	6751	4297	943	130	2306	22354	23099	23844
17-Feb-02	1063	1728	3923	1160	6699	4263	936	129	2288	22189	22960	23731
24-Feb-02	1063	1696	3851	1139	6576	4185	919	127	2246	21801	22654	23507
3-Mar-02	1063	1683	3820	1129	6524	4151	911	125	2228	21634	22379	23124
10-Mar-02	1007	1660	3769	1114	6436	4096	899	124	2198	21302	22045	22788
17-Mar-02	1007	1639	3722	1100	6355	4044	888	122	2170	21048	21795	22542
24-Mar-02	1007	1612	3659	1082	6249	3977	873	120	2134	20713	21314	21915
31-Mar-02	1007	1583	3595	1063	6138	3906	858	118	2096	20365	21028	21691

**Table A2 Actual & Forecast Summer and Winter 20-Minute System Peak Demand**

Year	Summer Peak Demand (MW)	Winter Peak Demand (MW)	Summer Peak Demand / Winter Peak Demand Ratio
1990	20,453	22,311	0.917
1991	21,150	23,212	0.911
1992	19,857	23,487	0.845
1993	20,806	21,951	0.948
1994	20,923	24,007	0.872
1995	21,766	22,855	0.952
1996	21,428	22,321	0.960
1997	21,667	22,197	0.976
1998	22,443	22,067	1.017
1999	23,435	23,308	1.005
2000	23,222	23,428	0.991
2001 <sup>1</sup>	21,761 (f)	22,633 (f)	0.961
2002 <sup>2</sup>	22,088 (f)	22,841 (f)	0.967

(f) = forecast

<sup>1</sup> The forecast is based on normal weather.<sup>2</sup> The summer 2002 peak is not within the scope of this forecast. This estimate is provided in order to illustrate the relative changes in summer and winter peak