18-MONTH OUTLOOK:

Ontario Demand Forecast

From October 2005 to March 2007

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Executive Summary

The IESO has a responsibility to forecast the demand for electricity on the IESO-controlled grid and to assess whether the existing and proposed generation and transmission facilities are adequate to meet Ontario's needs. This document presents the demand forecast for the 18-month period from October 2005 to March 2007 and supersedes that portion of the previous 18-month forecast released in June 2005.

Economic Outlook

The economic assumptions that underpin the forecast have been updated to reflect the most recent outlook for the Ontario economy. The economic outlook remains mixed as a strong dollar and high oil prices have had a negative impact on Ontario's manufacturers. Employment in the manufacturing sector has continued to decline throughout 2005 since the highs experienced in the summer of 2004. Previously, higher commodity prices had overcome the impact of the higher dollar but recently, declining prices have put increased pressure on the resource sectors. However, historically low interest rates have continued to foster business investment and consumption, and in particular housing construction. Growth is thereby being primarily driven by the service sector and construction. Overall, the economic outlook is mostly unchanged from the previous forecast.

Actual Demand

Actual and weather-corrected energy demand was greater than forecasted for the months of June, July and August 2005. The weather-corrected demand for June was significantly higher than forecast (3.0%) whereas the values for July and August were only 0.7% higher than expected. Overall, energy demand for the summer was 4.6% higher than the weather-corrected energy demand for the summer of 2004. On a year-to-date basis, weather-corrected energy demand has grown by 1.9% over the previous year.

Actual and weather-corrected peak demands were higher than forecast for the summer months. Actual monthly peak demands were 2,500 MW higher on average and weather-corrected monthly peak demands were 725 MW higher on average.

The weather for June was significantly warmer than normal and the humidity was very high. Taking into consideration the heat and humidity, June 2005 was the most extreme June over the past 35 years. July by comparison was also much higher than normal but was not significantly higher than July 1999 or July 2002. August by comparison was more seasonal, though still on the high side of Normal weather. In general, much of the tone of the summer was set by the time June had ended.

Methodology

The methodology to produce the demand forecast remains much the same as in previous forecasts. The weather scenarios were updated to include actual weather through the end of July 2005.

Demand Forecast

The demand forecast is similar to the previous forecast except that the impact of this past summers' experience is reflected in the forecast going forward. Since the economic outlook is very similar, there is not a significant change in demand due to the economic drivers. This is seen in the very small changes in the energy demand forecast. Annual energy demand is expected to grow by 1.2% in 2005 (155.5 TWh) and 0.9% in 2006 (156.8 TWh).

Compared to the previous forecast, the peak demand forecast has seen the greatest change. The peak forecast for the summer of 2006 is higher due to changes in the Weather Scenarios (inclusion of the actual weather data) and the increased sensitivity of the system to hot temperatures (inclusion of the demand data from summer 2005). Overall, peak demands are roughly 130 MW higher than the previous forecast.

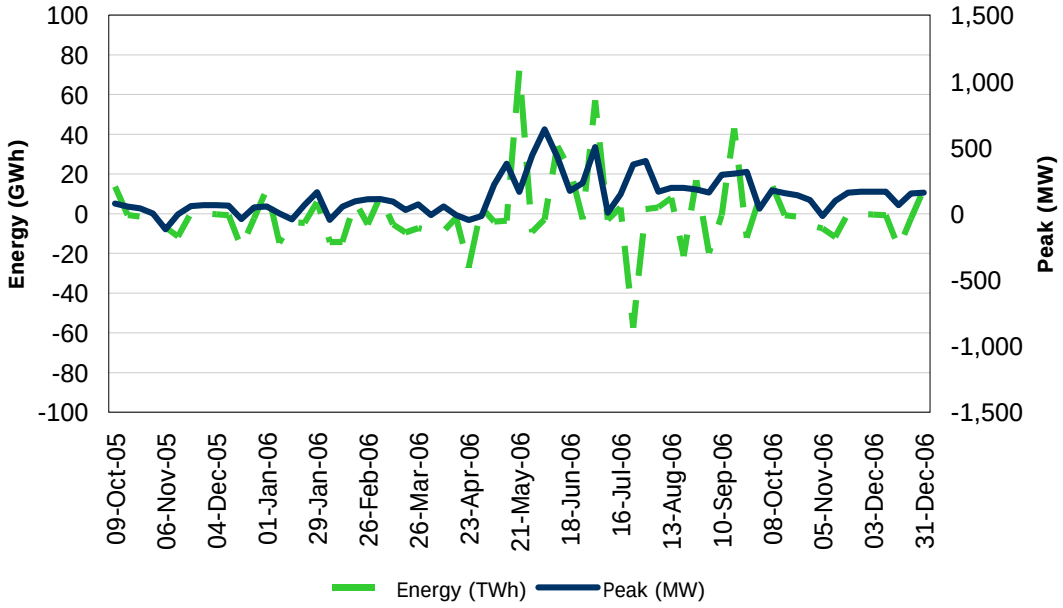
Table 1 has the Normal weather, Expected seasonal and Extreme weather peak demands for the seasons of the 18-month forecast.

Table 1: Forecasted Peak Demands

Season	Normal Weather Peak (MW)	Expected Seasonal Peak (MW)	Extreme Weather Peak (MW)
Winter 2006	24,272	24,889	25,791
Summer 2006	24,234	25,926	27,378
Winter 2007	24,526	25,146	26,069

Figure 1 graphically displays the difference in weekly energy and peak demand between this forecast and the previous 18-month forecast. The values are higher due to the change in the economic outlook and the inclusion of actual data.

Figure 1: Comparison of Current and Previous Forecast (Current less Previous)



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1.0 Introduction

1.1 Outlook Documents

The Ontario Electricity Market Rules (Chapter 5 Section 7.1) require that a demand forecast for the next 18 months be produced and published on a quarterly basis. This Ontario Demand Forecast meets this requirement and covers the 18-month period from October 2005 to March 2007. It supersedes the common portions of the previous forecast released June 27, 2005.

1.2 Demand Forecast Document

This document provides an 18-Month forecast of electricity demand for Ontario, based on the stated assumptions and using the methodology described in the document entitled "Methodology to Perform Long Term Assessments" (IESO_REP_0266) (found on the IESO web site at http://www.ieso.ca/imoweb/pubs/marketReports/Methodology_RTAA_2005sep.pdf). Readers may envision other possible scenarios, recognizing the uncertainties associated with various input assumptions, and are encouraged to use their own judgement in considering possible future scenarios. This forecast provides a base upon which changes in assumptions can be considered.

The Ontario demand is the sum of coincident loads plus the losses on the IESO-controlled grid. This demand forecast was based on actual demand, weather and economic data as of the end of July 2005. Actuals reported since the time of the forecast (August) have been incorporated into the tables and figures of this document.

Section 2.0 looks at historical demand. More historical demand detail can be found in the 10-Year Ontario Demand Forecast (IESO_REP_0246) document. Section 3.0 describes the assumptions used in this forecast of electricity demand and Section 4.0 presents the forecast. Appendices A through C contains additional demand forecast details and analysis.

Readers are invited to provide comments on this report or to give suggestions as to the content of future reports. To do so, please call the IESO Help Centre at 905-403-6900 or 1-888-448-7777 or send an email to helpcentre@ieso.ca, or to forecasts.demand@ieso.ca. Copies of the forecast and weather scenarios are available upon request.

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2.0 Historical Demand

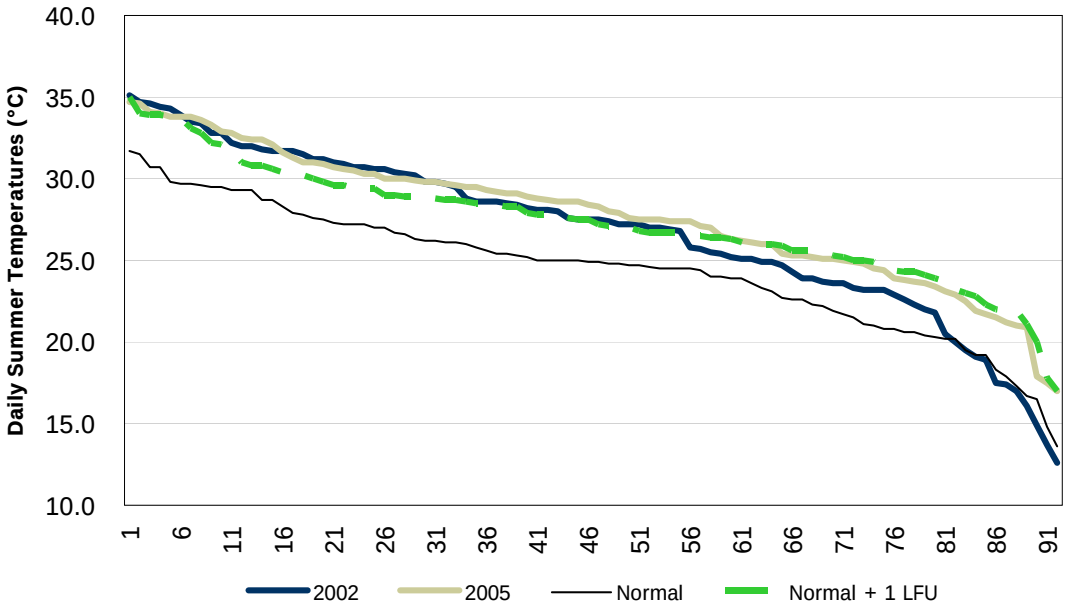
This section looks at historical weekly energy and peak demand. Ontario measures peak demand as the average over the course of a clock hour. The weather-corrected numbers are generated based on Normal weather.

2.1 Summer 2005 Weather

The historical database now includes the experiences of the summer of 2005. The summer was amongst the hottest on record. The weather was consistently above Normal and was similar to other hot summers such as 1988, 1999 and 2002. Figure 2.1 shows the daily maximum temperatures for the two weather scenarios (Normal and Normal + 1 LFU) and the summers of 2002 and 2005. The figure clearly shows how the temperatures for 2002 and 2005 were consistently in the range of the Normal + 1 LFU weather scenario.

Although the graph does not include the impacts of humidity it is quite clear that the story surrounding the summer of 2005 is that of significantly above average weather. The summer had the highest average temperature over the 1970-2005 timeframe. If one does factor in the impacts of humidity, wind and cloud, 2005 remains the "hottest" summer.

Figure 2.1: Energy Demand – 52-Week Moving Average



2.2 Historical Energy Demand

Given the weather, it is not surprising that the summer of 2005 had record energy demand of 41.6 TWh (39.5 TWh weather-corrected) surpassing the previous high from the summer of 2002 (40.0 TWh or 38.6 TWh weather-corrected). Since market opening, there have been 540 hours

where demand has exceeded 23,000 MW. The summer of 2005 accounted for 278 or 52% of those hours. This is due to the sustained nature of the weather. Without a break in the weather – even overnight temperatures remained quite high - there was little opportunity for demand to drop off. The demand figures could have been higher but the economic situation was such that industrial demand was 4.1% lower in the summer of 2005 than in the summer of 2002.

Figure 2.2 shows the 52-week moving average of actual and weather-corrected energy demand. The significant weather impact can be seen in the figure as it drives up energy demand at the tail end of the graph. The moving average of energy demand - both actual and weather-corrected - has exceeded the previous high-water mark set in the spring of 2003.

Figure 2.2: Energy Demand – 52-Week Moving Average

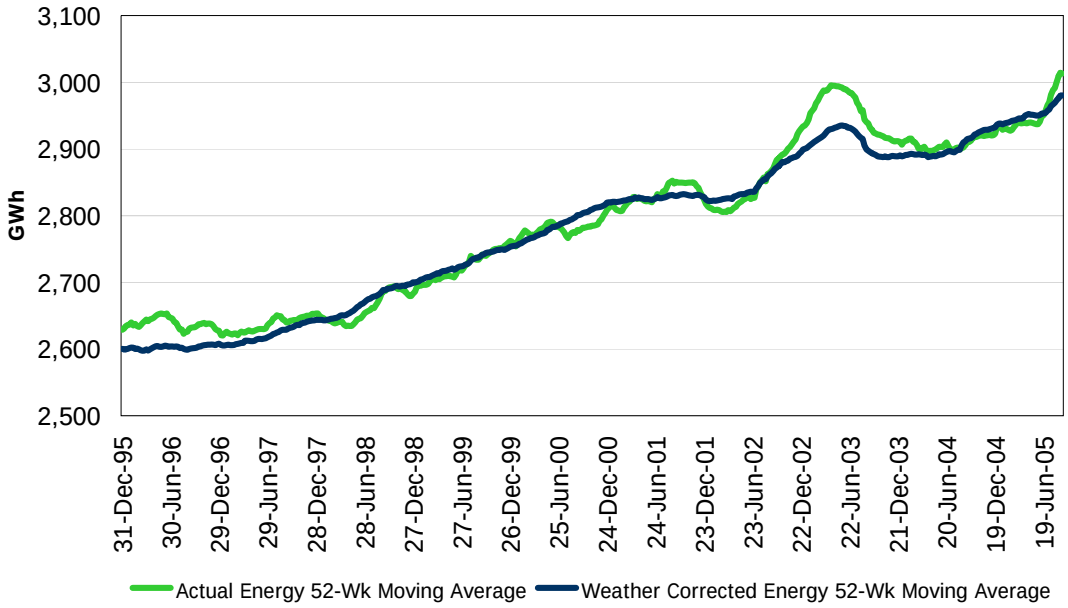


Table 2.1 shows the weekly energy demand for the past twelve months. The table has the actual and weather-corrected demand for each week. If the weather correction is positive it means that the weather was milder than normal. As well, the table notes any item of significance for the week.

Over the course of the summer there were a number of occasions where Public Appeals were issued and on two days where voltage reductions were utilized to maintain reliability. The impacts of the appeals are unclear as there are a number of factors at play and there is not a definitive reaction when they are announced. The voltage reductions for August 3rd and 4th had an impact of reducing demand by roughly 500 MW.

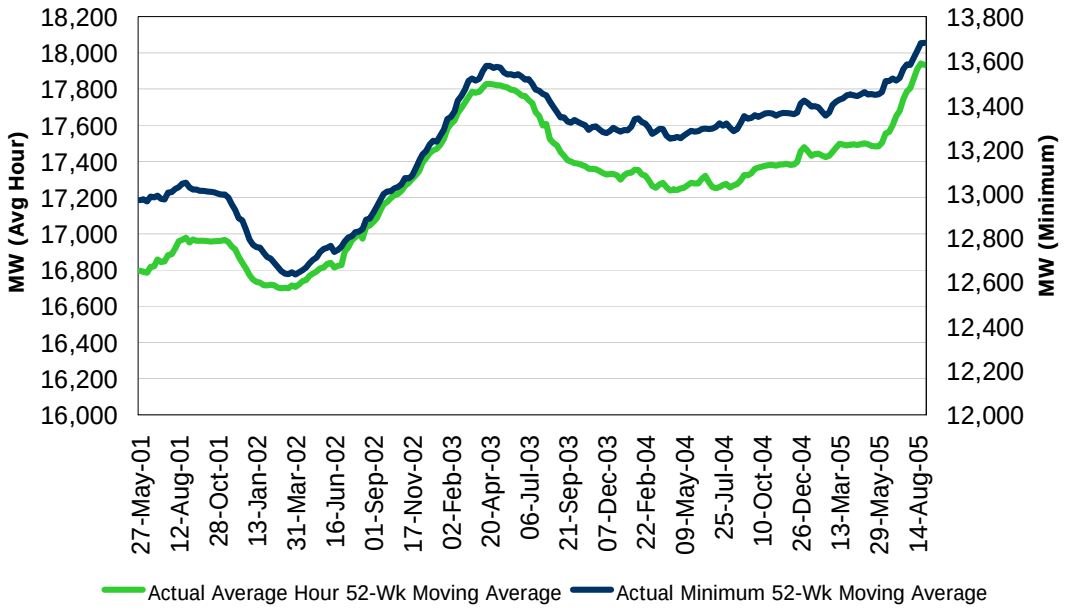
Table 2.1: Actual and Weather Corrected Weekly Energy Demand

Week Ending	Actual Energy (GWh)	Weather Corrected Energy (GWh)	Weather Correction (GWh)	Week Number	Notes for Week
05-Sep-04	2,949	2,871	-79	36	
12-Sep-04	2,847	2,813	-34	37	
19-Sep-04	2,878	2,813	-65	38	
26-Sep-04	2,893	2,827	-66	39	
03-Oct-04	2,780	2,830	50	40	
10-Oct-04	2,745	2,791	46	41	
17-Oct-04	2,716	2,754	38	42	Thanksgiving
24-Oct-04	2,826	2,821	-5	43	
31-Oct-04	2,796	2,897	101	44	
07-Nov-04	2,859	2,897	38	45	
14-Nov-04	2,964	2,945	-18	46	Rememberance Day
21-Nov-04	2,885	3,031	147	47	
28-Nov-04	3,005	3,060	56	48	
05-Dec-04	3,096	3,160	64	49	
12-Dec-04	3,170	3,213	43	50	
19-Dec-04	3,258	3,180	-77	51	
26-Dec-04	3,229	3,098	-131	52	New All-Time Winter Peak, Christmas & Boxing Day
02-Jan-05	2,906	2,970	64	53	New Years Day
09-Jan-05	3,186	3,228	42	1	
16-Jan-05	3,215	3,312	97	2	
23-Jan-05	3,529	3,357	-172	3	
30-Jan-05	3,422	3,339	-83	4	
06-Feb-05	3,164	3,297	133	5	
13-Feb-05	3,140	3,246	106	6	
20-Feb-05	3,213	3,229	16	7	
27-Feb-05	3,226	3,135	-91	8	
06-Mar-05	3,169	3,151	-18	9	
13-Mar-05	3,206	3,117	-89	10	
20-Mar-05	3,041	3,038	-3	11	Good Friday
27-Mar-05	2,884	2,908	25	12	Easter Monday
03-Apr-05	2,869	2,925	56	13	
10-Apr-05	2,772	2,898	127	14	5% Voltage Reduction April 7
17-Apr-05	2,706	2,795	89	15	
24-Apr-05	2,738	2,756	18	16	
01-May-05	2,756	2,688	-68	17	
08-May-05	2,662	2,664	1	18	
15-May-05	2,676	2,688	12	19	
22-May-05	2,637	2,652	14	20	
29-May-05	2,617	2,641	24	21	Victoria Day
05-Jun-05	2,827	2,737	-90	22	
12-Jun-05	3,348	2,943	-405	23	
19-Jun-05	2,964	2,878	-86	24	
26-Jun-05	3,090	2,969	-122	25	Power Warning June 24
03-Jul-05	3,207	2,998	-209	26	Power Warning June 28-29, Canada Day
10-Jul-05	3,050	2,936	-114	27	
17-Jul-05	3,486	3,128	-357	28	New All-Time Peak Demand
24-Jul-05	3,353	3,121	-232	29	Power Warning July 18-21
31-Jul-05	3,069	3,058	-11	30	
07-Aug-05	3,312	3,075	-238	31	Power Warning & 5% Voltage Reduction August 3-4
14-Aug-05	3,309	3,113	-196	32	Power Warning August 9-10
21-Aug-05	3,051	3,030	-21	33	
28-Aug-05	2,968	2,955	-13	34	

Figure 2.3 shows the 52-week moving average for the weekly minimum and weekly average hour. There is a substantial increase in demand starting in the summer of 2002 and tailing off in the spring of 2003. The summer of 2002 was very hot and the winter of 2003 was quite cold giving rise to the profile.

The spring of 2003 saw the start of the appreciation of the Canadian dollar versus the U.S. dollar and a subsequent reduction in industrial demand. Higher commodity prices in 2004 led to a resurgence in industrial demand throughout 2004. However as commodity prices started to fall so did demand. Heading into the summer industrial demand had been quite flat. Therefore the higher summer demand was predominantly weather driven. As well, the weather impacted price further curbing industrial demand. Heading into the fall, both the average and minimum hour should retreat from the levels seen this summer.

Figure 2.3: Minimum and Average Energy Demand – 52-Week Moving Past 4 Years



2.3 Historical Peak Demand

Peak demand is more heavily influenced by weather than energy demand and therefore shows a greater degree of variability. With the weather experience of 2005, a number of new records were set. A new all-time peak (26,157 MW) was set on June 27th and was surpassed two weeks later when demand reached 26,160 MW on July 13th. Since market opening, there have been 17 days where peak demand exceeded 25,000 MW and 11 or 65% of them occurred this summer.

The peaks for June, July and August were quite high as a result of the weather. Figure 2.4 displays the 52-week moving average of both actual and weather-corrected peak demands. The profile is similar to that of the energy demand, with the previous highpoint occurring in the spring of 2003. Whereas energy is shaped mostly by economics and then weather, the peaks are shaped mostly by weather and then by economics.

Table 2.2 contains the actual and weather-corrected weekly peak demands since September 2004. The table shows the daily afternoon maximum temperature for both the actual peak day and the Normal peak day (for Toronto).

Figure 2.4: Peak Demand – 52-Week Moving Average

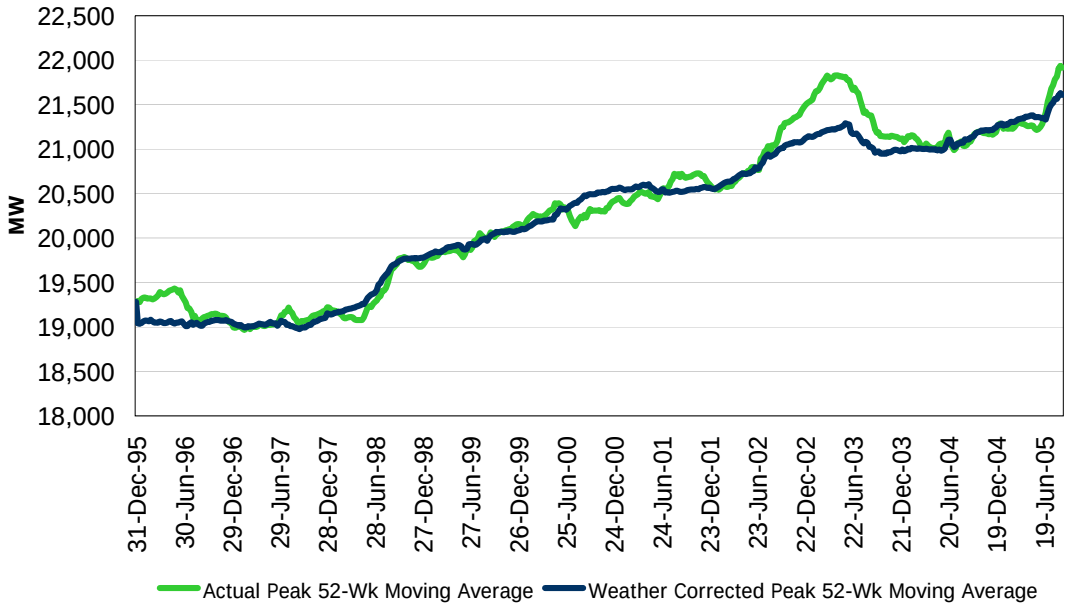


Table 2.2: Actual and Weather Corrected Weekly Peak Demand

Week Ending	Week Number	Peak Day	Actual Peak (MW)	Weather Corrected Peak (MW)	Actual Peak Day Temperature (°C)	Normal Peak Day Temperature (°C)
05-Sep-04	36	03-Sep-04	21,467	20,405	28.4	24.2
12-Sep-04	37	07-Sep-04	21,067	20,263	24.6	29.6
19-Sep-04	38	15-Sep-04	21,911	20,586	25.8	19.6
26-Sep-04	39	23-Sep-04	21,545	20,125	27.5	12.8
03-Oct-04	40	27-Sep-04	20,063	20,506	23.6	10.1
10-Oct-04	41	07-Oct-04	19,594	19,816	26.8	9.5
17-Oct-04	42	14-Oct-04	19,478	19,806	13.4	9.8
24-Oct-04	43	18-Oct-04	19,829	20,079	8.8	5.6
31-Oct-04	44	27-Oct-04	19,538	20,538	11.4	4.0
07-Nov-04	45	04-Nov-04	20,768	21,169	6.2	3.8
14-Nov-04	46	08-Nov-04	21,136	21,188	5.2	1.0
21-Nov-04	47	15-Nov-04	20,691	21,876	13.4	-0.3
28-Nov-04	48	24-Nov-04	21,881	22,196	3.4	0.0
05-Dec-04	49	03-Dec-04	22,118	22,480	-0.6	-3.1
12-Dec-04	50	06-Dec-04	23,445	23,646	-1.7	-3.9
19-Dec-04	51	14-Dec-04	23,431	23,211	-4.9	-4.7
26-Dec-04	52	20-Dec-04	24,979	23,787	-12.3	-4.8
02-Jan-05	53	27-Dec-04	21,348	21,391	-8.5	-4.8
09-Jan-05	1	06-Jan-05	23,233	23,668	-2.7	-6.2
16-Jan-05	2	11-Jan-05	22,640	22,948	-1.6	-7.6
23-Jan-05	3	18-Jan-05	24,362	23,572	-14.5	-14.7
30-Jan-05	4	27-Jan-05	24,353	23,993	-14.6	-12.0
06-Feb-05	5	31-Jan-05	22,629	23,732	-1.5	-8.6
13-Feb-05	6	09-Feb-05	22,322	22,990	-3.9	-9.6
20-Feb-05	7	18-Feb-05	22,269	22,295	-9.3	-6.1
27-Feb-05	8	24-Feb-05	22,321	22,184	-5.7	-6.0

(Table 2.2 continued)

Week Ending	Week Number	Peak Day	Actual Peak (MW)	Weather Corrected Peak (MW)	Actual Peak Day Temperature (°C)	Normal Peak Day Temperature (°C)
06-Mar-05	9	28-Feb-05	22,187	22,240	1.8	-4.3
13-Mar-05	10	08-Mar-05	22,724	22,145	-8.5	-5.5
20-Mar-05	11	14-Mar-05	20,975	21,319	-0.8	-3.7
27-Mar-05	12	23-Mar-05	20,777	20,931	1.5	-1.5
03-Apr-05	13	28-Mar-05	19,649	19,928	6.6	1.1
10-Apr-05	14	04-Apr-05	19,343	20,583	10.9	0.2
17-Apr-05	15	11-Apr-05	18,695	19,286	7.9	5.3
24-Apr-05	16	20-Apr-05	18,534	18,974	16.2	3.4
01-May-05	17	25-Apr-05	19,336	19,183	6.5	7.1
08-May-05	18	02-May-05	18,341	18,242	8.6	7.1
15-May-05	19	11-May-05	18,623	18,640	22.6	12.0
22-May-05	20	16-May-05	18,362	19,038	11.0	26.4
29-May-05	21	26-May-05	18,779	19,532	24.2	27.5
05-Jun-05	22	02-Jun-05	20,001	18,943	26.0	27.2
12-Jun-05	23	10-Jun-05	24,793	21,120	30.5	27.9
19-Jun-05	24	14-Jun-05	24,995	23,259	29.7	30.7
26-Jun-05	25	24-Jun-05	23,802	21,845	34.0	31.7
03-Jul-05	26	27-Jun-05	26,157	23,975	31.6	29.8
10-Jul-05	27	04-Jul-05	23,463	23,214	29.5	31.5
17-Jul-05	28	13-Jul-05	26,160	24,609	34.6	29.5
24-Jul-05	29	18-Jul-05	25,857	24,405	33.3	29.5
31-Jul-05	30	25-Jul-05	25,068	23,644	33.8	29.3
07-Aug-05	31	04-Aug-05	25,050	22,772	32.8	27.5
14-Aug-05	32	09-Aug-05	25,816	24,422	32.9	26.6
21-Aug-05	33	15-Aug-05	22,134	22,381	27.6	29.6
28-Aug-05	34	26-Aug-05	21,485	20,649	27.4	28.7

2.4 Percent of Time

Figure 2.5 displays the percent of time that the hourly demand on the system exceeds a certain level. The graph shows the percent of hours for the summer of 2005 (June-August), the winter of 2004-05 (November-March) and the summer of 2004. All curves are a product of the weather experienced in those seasons.

Generally, the summer curve tends to have more of a slope than the winter curve as the system is much more responsive to high temperatures as air conditioning load comes on. However, overnight the demand can tail off substantially as air conditioners are not running. During the winter however you do not get the same overnight phenomenon as heating systems tend to run around the clock.

The graphic presentation shows the startling difference between the summer of 2004 and the summer of 2005. The primary difference is the weather of the two seasons.

Figure 2.5: Percent of Time – Summer 2005, Winter 2004-05 and Summer 2004

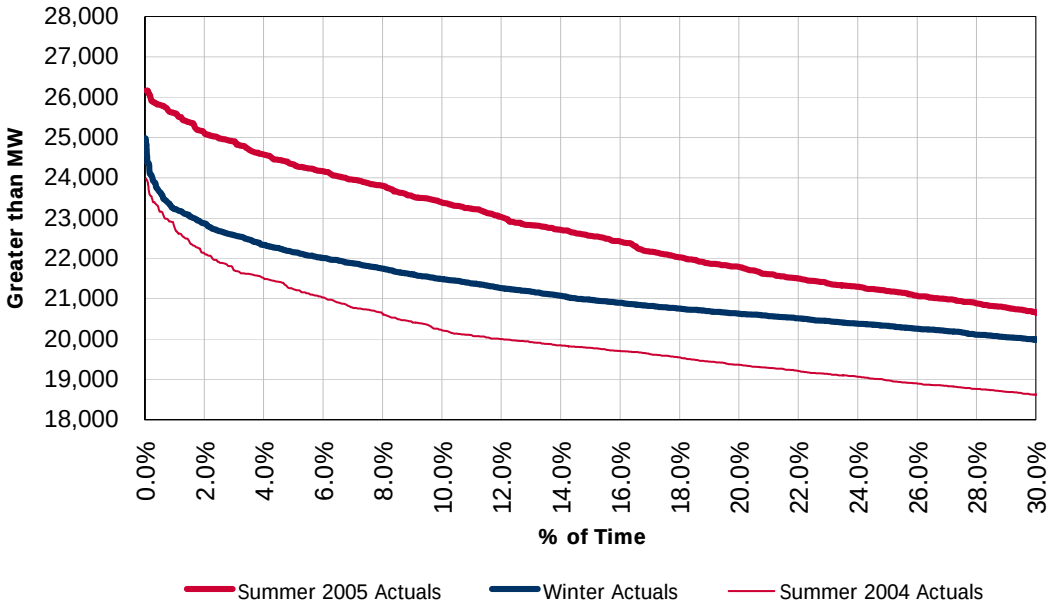


Figure 2.6: Percent of Time – Hourly Temperature (Summer 2005 Versus Summer 2004)

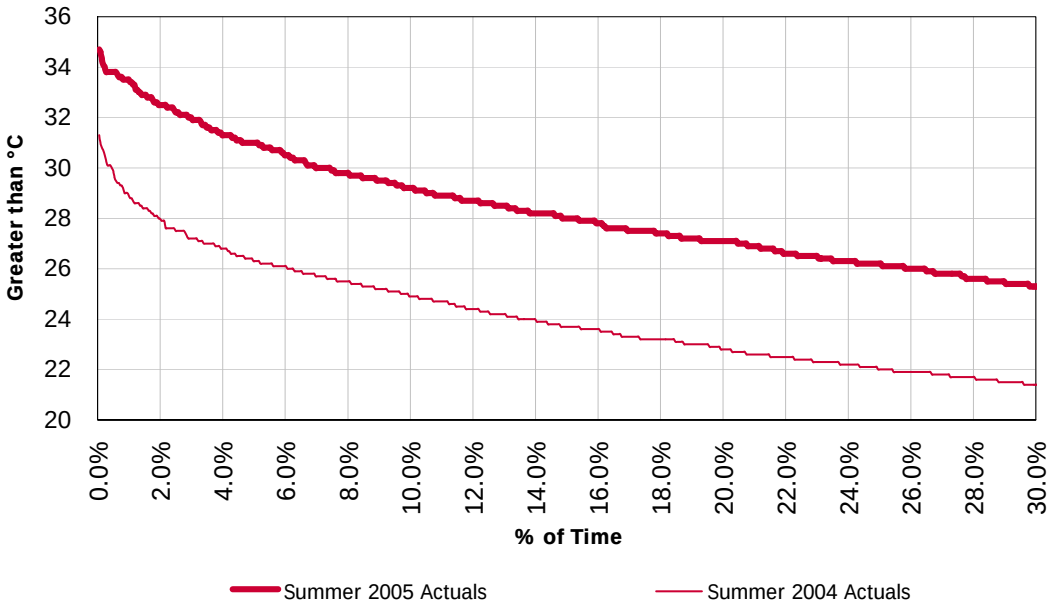


Table 2.2 contains some of the summary statistics for the winter of 2004-05 and the summer of 2006. The table has the maximum, minimum and average demand for the summer. As well, it shows the demand level at the 90th percentile and the percent and number of hours above 23,000 MW.

Table 2.3: Summary Statistics for the Winter of 2004-05 and Summer 2005

Seasonal Statistics	Winter 2004-05	Summer 2005
Maximum Hour (MW)	24,979	26,160
Average Hour (MW)	18,606	18,694
Minimum Hour (MW)	12,969	12,066
Standard Deviation (MW)	2,258	3,191
90th Percentile (MW)	21,484	23,222
Percent above 23,000 MW	1.7%	11.1%
# of Hours Above 23,000 MW	62	146

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3.0 Forecasting Process and Assumptions

A detailed description of the forecasting methodology can be found in the document entitled "Methodology to Perform Long Term Assessments" (IESO_REP_0266) (found on the IESO web site at http://www.ieso.ca/imoweb/pubs/marketReports/Methodology_RTAA_2005sep.pdf.

The forecast of electricity demand requires inputs and/or assumptions with respect to the three classes of drivers. Following is a look at each of the drivers generated for the forecast.

3.1 Calendar Drivers for Forecast

Calendar variables are addressed in the Methodology document. Essentially, forecasting the calendar impacts – days of the week, holidays, sunrise and sunset – are pretty straightforward.

3.2 Economic Drivers for Forecast

To produce an energy and peak demand forecast, an economic forecast of various drivers is required. A consensus of four major, publicly available provincial forecasts was utilized to generate the economic drivers used in the demand forecast. Table 3.2 summarizes the key economic drivers for energy and peak demand on the IESO-controlled grid. The Ontario growth index is a weighting of the economic drivers as they relate to electricity demand. The 18-Month outlook only considers the median economic growth scenario. High and low scenarios are used only in the 10-Year assessment.

Table 3.1: Forecast of Ontario Economic Drivers

Year	Ontario Employment		Ontario Housing Starts		Ontario Growth Index	
	Thousands	Annual Growth (%)	Thousands	Annual Growth (%)	Index	Annual Growth (%)
1995	5,091	2.0	31.9	-23.3	1.025	1.42
1996	5,152	1.2	39.5	23.9	1.035	1.04
1997	5,269	2.3	50.0	26.5	1.053	1.70
1998	5,438	3.2	50.1	0.2	1.077	2.23
1999	5,618	3.3	62.9	25.6	1.102	2.33
2000	5,797	3.2	67.4	7.1	1.128	2.39
2001	5,923	2.2	70.3	4.2	1.150	1.91
2002	6,018	1.6	79.6	13.3	1.169	1.69
2003	6,199	3.0	80.9	1.7	1.197	2.43
2004	6,309	1.8	79.9	-1.3	1.219	1.80
2005 (f)	6,367	0.9	69.7	-12.8	1.235	1.31
2006 (f)	6,437	1.1	64.5	-7.4	1.251	1.28
2007 (f)	6,508	1.1	64.5	0.0	1.266	1.25

3.3 Weather Drivers for Forecast

Since forecasting long-term weather is not possible, weather scenarios are generated based on historical data. For the purposes of assessing the adequacy of the system, the IESO uses Weekly normalized weather for three weather scenarios - Normal, Normal + 1 LFU and Extreme. Load

Forecast Uncertainty (LFU) represents one standard deviation in the weather elements underpinning the peak demand.

Weekly normalized weather is created using the following steps. First, the daily weather history is grouped into weeks within each year. Next, each day is then assigned a "weather impact" based on its weather conditions (temperature, wind speed, cloud cover and humidity). Within each week the daily weather factors are then sorted from highest to lowest. Then the highest ranked days for each Week 1 of the 31 years of history are combined to create the first day of Week 1 of the weather scenario. The second highest ranked days for Week 1 of the 31 years of history are combined to create the second day of Week 1 of the weather scenario. The process is repeated until all days of all weeks have been created for the weather scenario.

To generate the Normal weather scenario the median value is selected for each day of the week. To create the Extreme weather scenario the maximum value is selected. To create the Mild scenario the minimum value is selected.

Load Forecast Uncertainty (LFU), a measure of demand fluctuations due to weather variability, is also a critical part of the analysis. LFU is generated by taking the difference between the Normal weather scenario and the Normal + 1 LFU weather scenario. As stated earlier, LFU represents one standard deviation in the weather elements underpinning the peak demand.

The Normal weather scenario, in conjunction with LFU is valuable in determining a distribution of potential outcomes under various weather conditions. It should be recognized that for resource adequacy assessments, the Weekly Normal weather forecast is used in conjunction with a measure of Weekly LFU to consider a full range of peak demands that can occur with various weather conditions with varying probability of occurrence.

The Extreme weather scenario is valuable for studying situations where the system is under duress. The Weekly Extreme weather scenario is valuable when examining peak conditions but is unrealistic from an energy demand standpoint, as severe weather conditions do not persist over a longer time period.

Most of the analysis in the Outlook documents uses weekly normalization. Seasonally normalized weather is used to produce the Expected seasonal demand. Seasonal Normal weather is constructed using the same approach as weekly Normal weather. Each historical day is once again assigned its "weather impact". The days are then sorted for each season. The seasonal Normal weather underlying the Expected summer peak would be generated by selecting the median of the highest weather impact day of each of the last 31 summers.

At times, historical weather years are used to study load profiles. In these cases, the actual days are re-arranged within the week so that peak-eliciting weather does not fall on weekends or holidays. This makes year-over-year comparisons less complicated. Historic weather years are used in the percent of time analysis. This analysis looks at the number of hours at different load levels.

Table 3.2 contains information about the Weekly Normal and Extreme weather scenarios. For each week, the table shows the historical weather used for the peak day of that week. The table shows the daily high (temperature) and wind speed. Not shown but used in forecasting demand are humidity and cloud cover. The IESO uses six weather stations. The data in the table below is for Toronto. The weather scenarios were updated for data through the end of April 2005.

Table 3.2: Normal and Extreme Weather

Week	Normal Peak Date	Normal Temperature (°C)	Normal Wind Speed (km/hr)	Extreme Peak Date	Extreme Temperature (°C)	Extreme Wind Speed (km/hr)
1	31-Dec-90	-6.2	9.7	10-Jan-82	-15.8	41.3
2	11-Jan-96	-7.6	4.0	15-Jan-94	-21.4	19.5
3	17-Jan-03	-14.7	23.3	19-Jan-94	-19.0	35.7
4	30-Jan-93	-12.0	8.0	23-Jan-76	-18.3	10.7
5	02-Feb-89	-8.6	20.3	05-Feb-95	-17.6	40.7
6	07-Feb-84	-9.6	12.8	06-Feb-95	-15.4	18.7
7	13-Feb-95	-6.1	31.5	17-Feb-79	-19.4	14.7
8	19-Feb-79	-6.0	6.8	25-Feb-90	-15.9	27.8
9	28-Feb-01	-4.3	27.3	29-Feb-80	-14.4	35.0
10	08-Mar-95	-5.5	24.0	03-Mar-03	-14.3	6.3
11	17-Mar-89	-3.7	19.0	12-Mar-84	-11.3	7.0
12	24-Mar-90	-1.5	12.2	20-Mar-86	-11.1	29.2
13	01-Apr-93	1.1	14.0	25-Mar-02	-3.5	15.2
14	08-Apr-00	0.2	38.2	06-Apr-82	-7.4	38.0
15	17-Apr-83	5.3	17.2	07-Apr-03	-2.0	35.5
16	20-Apr-78	3.4	26.7	18-Apr-83	1.9	25.7
17	27-Apr-88	7.1	27.8	22-Apr-86	1.0	19.0
18	01-May-79	7.1	25.7	26-Apr-76	3.9	33.8
19	05-May-92	12.0	13.7	09-May-79	29.7	21.5
20	18-May-99	26.4	21.7	19-May-96	28.8	38.8
21	22-May-84	27.5	26.7	23-May-75	27.8	7.3
22	30-May-94	27.2	23.0	29-May-87	32.0	18.2
23	11-Jun-78	27.9	28.7	07-Jun-99	32.9	22.2
24	13-Jun-92	30.7	26.3	18-Jun-94	35.2	9.8
25	19-Jun-87	31.7	9.7	19-Jun-95	35.1	20.2
26	03-Jul-93	29.8	11.8	04-Jul-99	34.4	23.3
27	09-Jul-01	31.5	18.7	02-Jul-02	34.3	21.7
28	04-Jul-05	29.5	17.7	14-Jul-95	36.7	17.3
29	04-Jul-05	29.5	17.7	14-Jul-95	36.7	17.3
30	25-Jul-86	29.3	14.5	30-Jul-99	34.4	18.0
31	02-Aug-00	27.5	21.5	01-Aug-75	34.4	17.5
32	04-Aug-03	26.6	18.8	07-Aug-01	35.3	28.0
33	13-Aug-91	29.6	10.7	15-Aug-95	31.9	9.2
34	26-Aug-01	28.7	24.5	27-Aug-93	34.0	25.8
35	30-Aug-79	29.3	22.3	28-Aug-73	35.6	26.7
36	01-Sep-97	24.2	10.5	03-Sep-73	32.8	9.3
37	11-Sep-78	29.6	19.3	09-Sep-02	33.5	14.8
38	15-Sep-03	19.6	16.3	16-Sep-91	31.2	30.3
39	24-Sep-76	12.8	11.7	22-Sep-70	26.7	21.3
40	04-Oct-94	10.1	20.7	01-Oct-02	28.8	34.2
41	07-Oct-81	9.5	40.2	12-Oct-88	4.6	23.5
42	17-Oct-03	9.8	19.0	20-Oct-74	2.2	27.3
43	29-Oct-83	5.6	25.0	26-Oct-79	2.5	26.7
44	30-Oct-92	4.0	10.2	07-Nov-93	2.6	26.0
45	11-Nov-79	3.8	15.8	12-Nov-95	0.5	34.3
46	20-Nov-93	1.0	35.7	13-Nov-86	-4.2	11.5
47	22-Nov-81	-0.3	22.5	21-Nov-87	-8.0	22.7
48	25-Nov-75	0.0	24.7	03-Dec-89	-9.2	34.8
49	06-Dec-03	-3.1	5.5	11-Dec-77	-14.1	8.5
50	11-Dec-78	-3.9	5.5	15-Dec-89	-8.5	17.8
51	17-Dec-02	-4.7	12.3	26-Dec-93	-17.0	33.0
52	25-Dec-96	-4.8	21.0	27-Dec-93	-9.5	22.5

3.4 Conservation and Demand Response

Conservation has occurred throughout the history used to forecast energy and peak demand. Over time, less efficient appliances are replaced by more efficient ones, homes and buildings with better insulation replace older structures and businesses have altered their operations to reduce their exposure to higher electricity prices. All of these have been occurring naturally and as such are reflected in the demand forecast. Higher levels of conservation or demand management are possible but require more direct intervention in the market through incentives, standards or other mechanisms. The results of these initiatives can be substantial. However, the ability to quantify the demand reductions requires detailed information on the programs, tools or standards.

Therefore, the demand forecast does contain an element of conservation – which is growing through time – but does not take into account future programs or goals.

- End of Section -

4.0 Demand Forecast

This section presents information on the total system, more detailed information for the individual zones can be found in Appendices A and B.

The predicted weekly system energy demand forecast is illustrated in Figure 4.1. Evident in the graph is the seasonal pattern in energy demand. Winter energy demand is higher and longer than any other season. The week of Christmas vacation almost bisects the winter demand. Summer energy demand is much shorter and smaller than the winter season. Note that energy demand for the summer of 2006 is lower than that of 2005 but higher than 2004.

Figure 4.1: Weekly Energy Demand – History and Forecast

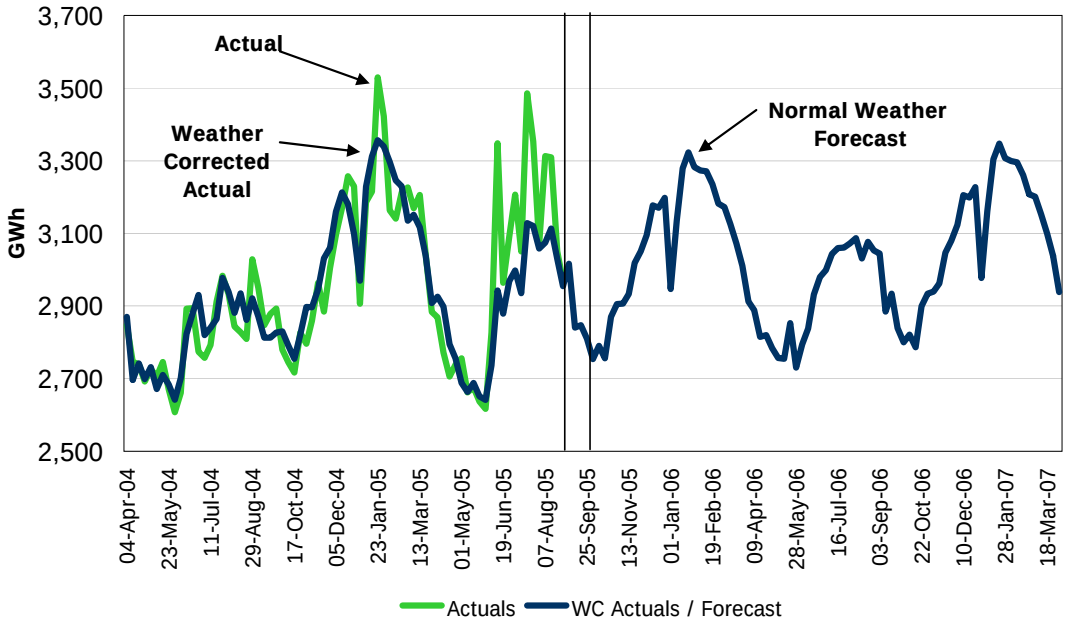

Figure 4.2 shows the range of weekly peak demands. The bottom of the peak demand range is generated via a Mild weather scenario. The Mild weather scenario is the opposite of the Extreme weather scenario, as it is based on warm temperatures in the winter and cool summer temperatures. The middle of the range (the heavy line) represents the Normal weather peak demand. The top of the range is generated by using the Extreme weather scenario. In general, it is the top half of the range that is the thrust of the analysis in the resource and transmission assessments.

Also in the chart are the actual and weather-corrected peak demands. The winter peak of December 2004 and the summer peak of July 2005 are evident in the graph.

The resource adequacy assessments take into consideration the full range of possible weather conditions on a probabilistic basis for each week. Allowance for the probability of demand being higher than that under Normal weather is made in the calculation of the required reserve.

Figure 4.2: Weekly Peak Demand Forecast – Weather Scenarios

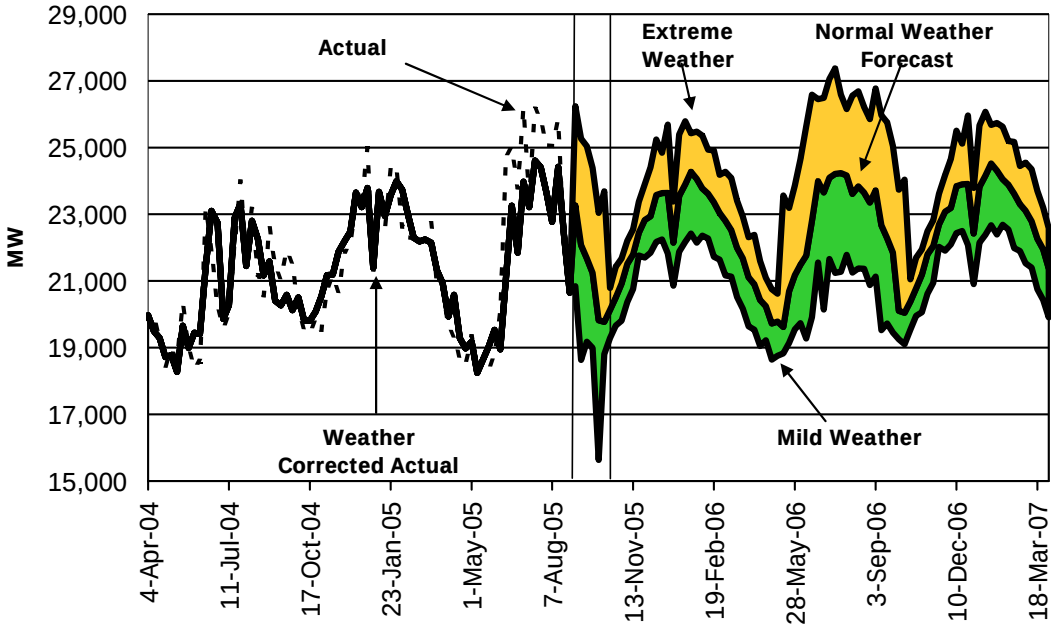

Table 4.1 contains the weekly forecast of energy and peak demand. As well, the table includes the week number and the Weekly Normal weather peak day temperature for Toronto. The table has the weekly peak demands for each of the Normal, Normal + 1 Load Forecast Uncertainty and Extreme weather scenarios (Weekly normalized). The last column of the table has the weekly energy demand forecast under Normal weather.

Demand in this table is demand prior to any price response as price responsive demand is treated as a resource in the reliability assessment and therefore is included in the demand forecast. It is reasonable to assume that some level of price responsive demand would reduce consumption in an extreme weather event. Under those circumstances we might see actual demand at a level lower than expected as loads are dispatched off and other price responsive demands curb their consumption.

Table 4.1: Forecasted Ontario Weekly Demand

Week Number	Week Ending	Normal Peak Day Temperature (°C)	Normal Peak (MW)	Normal + 1 LFU Peak (MW)	Extreme Peak (MW)	Normal Energy (GWh)
40	09-Oct-05	10.1	19,774	20,260	23,686	2,790
41	16-Oct-05	9.5	20,130	20,550	20,792	2,756
42	23-Oct-05	9.8	20,509	20,931	21,430	2,870
43	30-Oct-05	5.6	20,923	21,482	21,671	2,905
44	06-Nov-05	4.0	21,519	22,094	22,203	2,906
45	13-Nov-05	3.8	21,801	22,324	22,544	2,933
46	20-Nov-05	1.0	22,445	22,786	23,372	3,018
47	27-Nov-05	-0.3	22,830	23,394	23,898	3,051
48	04-Dec-05	0.0	22,938	23,483	24,409	3,095
49	11-Dec-05	-3.1	23,576	24,278	25,241	3,177
50	18-Dec-05	-3.9	23,630	24,323	24,844	3,170
51	25-Dec-05	-4.7	23,642	24,553	25,691	3,198
52	01-Jan-06	-4.8	22,149	22,792	23,385	2,947

(Table 4.1 continued)

Week Number	Week Ending	Normal Peak Day Temperature (°C)	Normal Peak (MW)	Normal + 1 LFU Peak (MW)	Extreme Peak (MW)	Normal Energy (GWh)
1	08-Jan-06	-6.2	23,546	24,383	25,389	3,135
2	15-Jan-06	-7.6	23,901	24,765	25,791	3,279
3	22-Jan-06	-14.7	24,272	25,198	25,426	3,323
4	29-Jan-06	-12.0	24,060	25,014	25,474	3,282
5	05-Feb-06	-8.6	23,772	24,479	25,363	3,273
6	12-Feb-06	-9.6	23,618	24,291	24,936	3,271
7	19-Feb-06	-6.1	23,358	24,174	24,912	3,235
8	26-Feb-06	-6.0	23,041	23,740	24,178	3,182
9	05-Mar-06	-4.3	22,807	23,629	24,275	3,172
10	12-Mar-06	-5.5	22,522	23,217	24,087	3,125
11	19-Mar-06	-3.7	21,993	22,732	23,405	3,071
12	26-Mar-06	-1.5	21,682	22,442	22,932	3,010
13	02-Apr-06	1.1	21,110	21,845	22,310	2,912
14	09-Apr-06	0.2	20,901	21,583	22,387	2,889
15	16-Apr-06	5.3	20,429	21,121	21,597	2,815
16	23-Apr-06	3.4	20,245	20,757	21,095	2,820
17	30-Apr-06	7.1	19,729	20,271	20,752	2,784
18	07-May-06	7.1	19,779	20,290	20,617	2,757
19	14-May-06	12.0	19,614	20,009	23,560	2,754
20	21-May-06	26.4	20,685	21,459	23,186	2,853
21	28-May-06	27.5	21,169	21,978	23,860	2,730
22	04-Jun-06	27.2	21,481	22,354	24,649	2,794
23	11-Jun-06	27.9	21,756	22,998	25,633	2,838
24	18-Jun-06	30.7	22,804	24,250	26,586	2,932
25	25-Jun-06	31.7	23,992	25,209	26,451	2,980
26	02-Jul-06	29.8	23,656	25,413	26,493	2,998
27	09-Jul-06	31.5	24,095	25,314	27,057	3,043
28	16-Jul-06	29.5	24,213	25,699	27,378	3,059
29	23-Jul-06	29.5	24,234	25,713	26,585	3,061
30	30-Jul-06	29.3	24,168	25,362	26,156	3,073
31	06-Aug-06	27.5	23,608	24,787	26,551	3,087
32	13-Aug-06	26.6	23,833	25,061	26,685	3,031
33	20-Aug-06	29.6	23,645	24,784	26,221	3,077
34	27-Aug-06	28.7	23,353	24,590	25,852	3,053
35	03-Sep-06	29.3	23,715	25,005	26,773	3,045
36	10-Sep-06	24.2	22,668	24,239	25,970	2,884
37	17-Sep-06	29.6	22,278	23,555	25,762	2,934
38	24-Sep-06	19.6	21,849	23,045	25,050	2,840
39	01-Oct-06	12.8	20,101	20,526	23,735	2,800
40	08-Oct-06	10.1	20,045	20,517	24,041	2,822
41	15-Oct-06	9.5	20,382	20,802	21,044	2,786
42	22-Oct-06	9.8	20,780	21,192	21,692	2,900
43	29-Oct-06	5.6	21,189	21,753	21,942	2,934
44	05-Nov-06	4.0	21,795	22,383	22,492	2,939
45	12-Nov-06	3.8	22,049	22,600	22,821	2,962
46	19-Nov-06	1.0	22,693	23,030	23,617	3,047
47	26-Nov-06	-0.3	23,078	23,665	24,170	3,080
48	03-Dec-06	0.0	23,186	23,732	24,658	3,123
49	10-Dec-06	-3.1	23,842	24,545	25,508	3,205
50	17-Dec-06	-3.9	23,896	24,595	25,115	3,199
51	24-Dec-06	-4.7	23,909	24,824	25,962	3,227
52	31-Dec-06	-4.8	22,420	23,177	23,790	2,977
1	07-Jan-07	-6.2	23,824	24,661	25,667	3,161
2	14-Jan-07	-7.6	24,155	25,043	26,069	3,304
3	21-Jan-07	-14.7	24,526	25,452	25,680	3,347
4	28-Jan-07	-12.0	24,314	25,277	25,736	3,307
5	04-Feb-07	-8.6	24,053	24,738	25,621	3,299
6	11-Feb-07	-9.6	23,880	24,553	25,198	3,296
7	18-Feb-07	-6.1	23,616	24,433	25,170	3,260
8	25-Feb-07	-6.0	23,304	24,007	24,444	3,208
9	04-Mar-07	-4.3	23,110	23,898	24,544	3,201
10	11-Mar-07	-5.5	22,791	23,486	24,355	3,153
11	18-Mar-07	-3.7	22,263	23,020	23,693	3,099
12	25-Mar-07	-1.5	21,952	22,712	23,201	3,038
13	01-Apr-07	1.1	21,379	22,114	22,579	2,939

4.1 Percent of Time - Winter 2005-06

This section looks at load levels under various weather scenarios for different seasons of the year. First is the winter of 2005-06 which spans the period from November 1st to March 31st.

The Normal, Normal + 1 LFU and Extreme weather scenarios are useful in studying peak demands. However, as with energy demand, the Normal + 1 LFU and Extreme weather scenarios are not well suited for percent of time analysis. This is due to the fact that the likelihood of observing consistent deviations from the mean is very unlikely. For this reason, three scenarios were generated by using actual weather from 1976-77, 1989-90 and 1993-94. In general, 1989-90 was slightly colder than normal, while 1976-77 and 1994-94 were significantly colder than normal winters.

Figure 4.3 shows the highest 5% of hourly demand under the Normal, 1976-77, 1989-90 and 19934-94 weather scenarios for the upcoming winter of 2005-06.

Figure 4.3: Percent of Time - Winter 2005-06

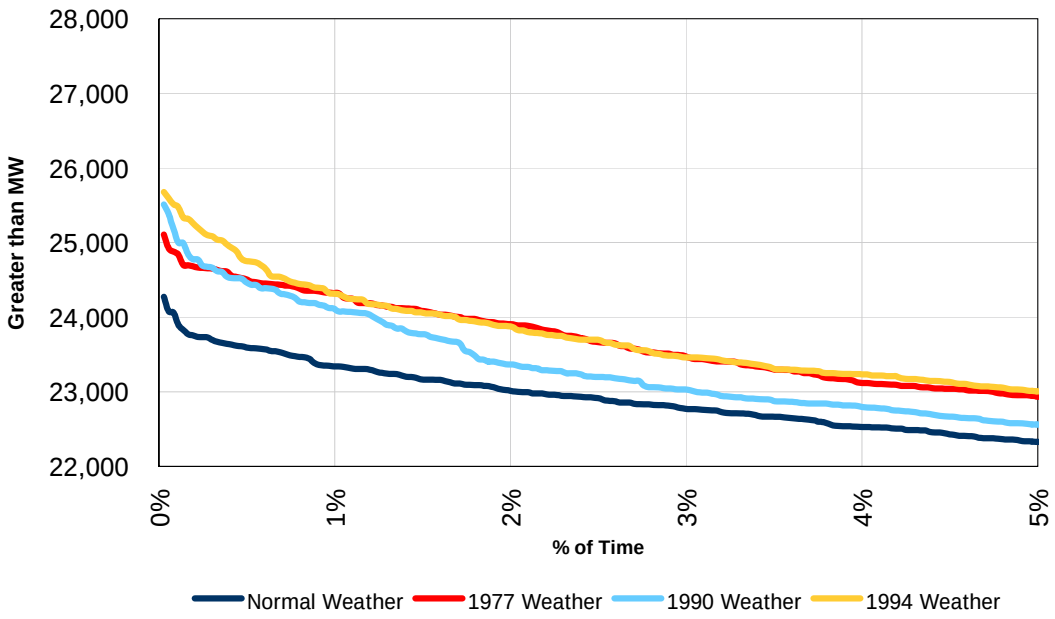

Table 4.2 shows some of the summary statistics for the winter of 2005-06 under the various scenarios. The table has the maximum, minimum and average demand for the summer. As well, it shows the demand level at the 90th percentile and the percent and number of hours above 23,000 MW. It is important to note that there is an upward bias in the numbers as peak eliciting weather is always placed mid-week to avoid holidays and weekends. In reality, the coldest weather of any week has a 2 in 7 chance of occurring on a weekend and therefore having a much lower demand impact.

Table 4.2: Summary Statistics for Winter 2005-06

Winter 2005-06 (November 1st to March 31st)	Normal Weather	1990 Weather	1977 Weather	1994 Weather
Maximum Hour (MW)	24,272	25,510	25,108	25,677
Average Hour (MW)	18,656	18,732	19,019	18,951
Minimum Hour (MW)	12,160	12,287	12,521	12,377
Standard Deviation (MW)	2,454	2,555	2,549	2,598
90th Percentile (MW)	21,656	21,851	22,263	22,306
Percent above 23,000 MW	2.1%	3.1%	4.8%	5.1%
# of Hours Above 23,000 MW	76	112	174	185

4.2 Percent of Time – Summer 2006

For the purpose of this forecast analysis, the summer includes the month of September and spans the period June 1st, 2006 to September 30th, 2006. As with the winter analysis, the Normal + 1 LFU and Extreme weather scenarios are more valuable in analyzing peak demand than in percent of time analysis.

Figure 4.4 shows the highest 5% of hourly demand under the Normal, 1990, 1999 and 2002 weather scenarios. These years were chosen as 1990 represents a fairly typical summer, whereas 1999 and 2002 are summers that were hot.

Figure 4.4: Percent of Time - Summer 2006

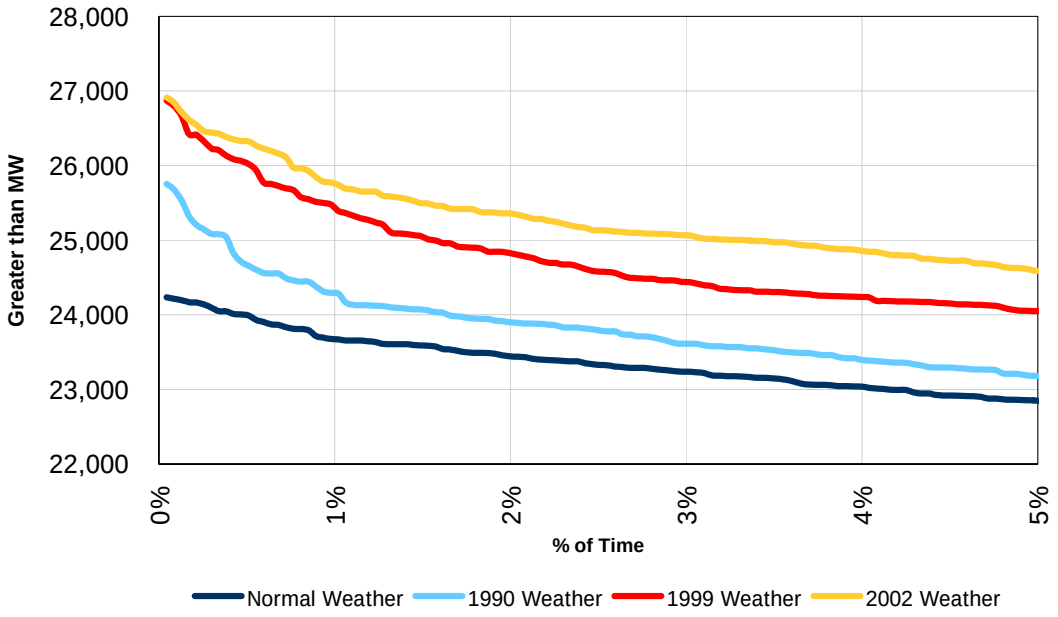

Table 4.3 shows the summary statistics for the summer of 2006 under the various scenarios. The table has the maximum, minimum and average demand for the winter. As well, it shows the demand level at the 90th percentile and the percent and number of hours above 23,000 MW.

Table 4.3: Summary Statistics for Summer 2006

Summer 2006 (June 1st to September 30th)	Normal Weather	1990 Weather	1999 Weather	2002 Weather
Maximum Hour (MW)	24,234	25,754	26,873	26,913
Average Hour (MW)	17,730	17,803	18,259	18,455
Minimum Hour (MW)	11,667	11,628	11,632	11,525
Standard Deviation (MW)	3,155	3,239	3,441	3,563
90th Percentile (MW)	22,001	22,182	23,059	23,357
Percent above 23,000 MW	3.3%	5.0%	10.3%	12.6%
# of Hours Above 23,000 MW	97	146	302	369

4.3 Comparison of Current and Previous Forecast

This section compares the current forecast with that released June 27, 2005.

The most significant changes result from the inclusion of the actual demand and weather experience for the past summer. In general, the energy demand is fairly close whereas the peak demands are higher.

Table 4.4 shows the difference between the current and previous forecast for the seasons common to both forecasts.

Table 4.4: Current versus Previous Forecast

Week Ending	Energy Demand (GWh)	Normal Weather Peak Demand (MW)	Extreme Weather Peak Demand (MW)
Fall 2005	24,625	22,078	26,001
Difference (Current - Previous)	7	0	0
Winter 2005-2006	67,608	24,272	25,791
Difference (Current - Previous)	-91	65	60
Spring 2006	24,390	21,685	24,649
Difference (Current - Previous)	21	360	535
Summer 2006	39,638	24,234	27,378
Difference (Current - Previous)	51	145	109
Fall 2006	24,955	22,668	26,357
Difference (Current - Previous)	25	294	345

- End of Section -

Appendix A Energy Demand Forecast Details

Table A1: Weekly Zonal Energy Forecast, Normal Weather

Week Ending	Weeky Energy (GWh)										
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System
09-Oct-05	146	224	181	125	207	924	107	7	548	323	2,790
16-Oct-05	145	233	169	144	203	898	104	7	539	314	2,756
23-Oct-05	149	241	168	169	213	930	108	8	561	323	2,870
30-Oct-05	150	246	171	183	215	931	108	8	567	326	2,905
06-Nov-05	154	244	161	170	212	943	110	9	576	330	2,906
13-Nov-05	154	243	196	153	217	945	110	9	577	329	2,933
20-Nov-05	155	245	206	159	224	978	112	9	593	337	3,018
27-Nov-05	157	248	221	157	221	990	113	9	596	340	3,051
04-Dec-05	157	259	221	165	229	1,002	113	9	600	341	3,095
11-Dec-05	160	257	240	170	243	1,030	113	9	613	341	3,177
18-Dec-05	160	257	248	166	240	1,023	114	9	611	343	3,170
25-Dec-05	159	258	246	172	246	1,029	115	9	618	346	3,198
01-Jan-06	144	247	226	175	236	924	99	8	569	319	2,947
08-Jan-06	159	258	230	180	239	1,000	111	9	609	340	3,135
15-Jan-06	161	268	247	182	259	1,047	117	9	634	355	3,279
22-Jan-06	164	274	259	181	267	1,053	118	9	641	357	3,323
29-Jan-06	165	271	248	181	255	1,047	116	9	637	353	3,282
05-Feb-06	166	271	249	177	252	1,040	116	9	638	354	3,273
12-Feb-06	164	259	253	174	245	1,050	117	10	643	356	3,271
19-Feb-06	164	261	249	172	243	1,037	116	10	633	351	3,235
26-Feb-06	160	261	229	177	237	1,024	115	10	620	349	3,182
05-Mar-06	159	260	238	167	236	1,023	115	10	617	347	3,172
12-Mar-06	160	254	240	163	231	1,004	114	10	607	343	3,125
19-Mar-06	157	249	225	167	229	986	113	9	601	338	3,071
26-Mar-06	155	247	215	164	221	963	112	9	592	332	3,010
02-Apr-06	151	245	202	158	215	926	110	8	574	325	2,912
09-Apr-06	149	235	198	142	213	933	108	8	576	327	2,889
16-Apr-06	147	235	175	159	206	900	105	8	560	319	2,815
23-Apr-06	146	228	187	153	202	914	106	7	559	316	2,820
30-Apr-06	147	220	148	176	196	908	106	7	557	318	2,784
07-May-06	145	221	144	175	198	894	104	7	554	314	2,757
14-May-06	144	220	146	176	200	893	105	7	550	314	2,754
21-May-06	145	215	182	159	203	952	106	6	559	326	2,853
28-May-06	140	219	166	158	196	896	103	6	531	315	2,730
04-Jun-06	142	215	179	153	199	922	105	6	549	325	2,794
11-Jun-06	145	211	183	141	199	939	109	6	560	344	2,838
18-Jun-06	148	208	200	145	207	989	108	6	581	339	2,932
25-Jun-06	146	204	193	146	212	1,015	113	7	592	352	2,980
02-Jul-06	138	204	209	134	204	1,026	117	7	598	361	2,998

(Table A1 continued)

Week Ending	Weeky Energy (GWh)										
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System
09-Jul-06	142	208	207	140	219	1,045	115	7	607	352	3,043
16-Jul-06	143	206	217	141	220	1,049	116	6	603	359	3,059
23-Jul-06	143	206	213	145	221	1,052	116	6	593	367	3,061
30-Jul-06	144	207	212	143	224	1,054	117	6	588	378	3,073
06-Aug-06	143	209	206	148	225	1,064	117	6	592	376	3,087
13-Aug-06	145	215	197	145	220	1,042	114	6	585	361	3,031
20-Aug-06	146	223	199	150	222	1,046	117	6	595	373	3,077
27-Aug-06	147	228	185	153	215	1,038	116	6	595	370	3,053
03-Sep-06	145	232	188	148	216	1,027	116	6	594	371	3,045
10-Sep-06	141	228	177	133	208	972	108	6	571	342	2,884
17-Sep-06	142	224	181	120	210	1,000	113	7	577	360	2,934
24-Sep-06	144	226	182	120	215	949	105	7	563	329	2,840
01-Oct-06	144	225	182	115	211	929	105	7	557	325	2,800
08-Oct-06	145	226	184	123	214	931	106	7	556	328	2,822
15-Oct-06	145	235	172	142	211	905	104	7	547	318	2,786
22-Oct-06	149	243	171	167	221	937	108	8	569	327	2,900
29-Oct-06	150	249	173	181	222	938	108	8	575	331	2,934
05-Nov-06	154	247	162	172	219	949	110	9	584	334	2,939
12-Nov-06	154	246	197	154	224	950	110	9	585	333	2,962
19-Nov-06	155	248	207	160	231	983	112	9	601	341	3,047
26-Nov-06	157	251	222	157	228	995	113	9	604	344	3,080
03-Dec-06	157	261	222	166	235	1,007	113	9	608	345	3,123
10-Dec-06	160	260	242	171	249	1,036	113	9	620	345	3,205
17-Dec-06	160	260	250	166	246	1,029	114	9	618	347	3,199
24-Dec-06	159	260	248	173	253	1,035	115	9	625	350	3,227
31-Dec-06	144	249	228	176	242	930	100	9	576	323	2,977
07-Jan-07	159	260	233	182	243	1,005	111	9	617	344	3,161
14-Jan-07	161	270	249	184	262	1,051	117	9	642	359	3,304
21-Jan-07	164	276	261	183	271	1,057	118	9	648	361	3,347
28-Jan-07	165	273	250	183	258	1,051	116	9	645	357	3,307
04-Feb-07	166	273	251	180	256	1,044	116	10	645	358	3,299
11-Feb-07	164	261	255	176	249	1,054	117	10	650	360	3,296
18-Feb-07	164	263	250	174	246	1,040	116	10	642	355	3,260
25-Feb-07	161	263	230	180	241	1,027	115	10	628	353	3,208
04-Mar-07	159	262	240	169	240	1,028	115	10	626	351	3,201
11-Mar-07	160	256	241	166	235	1,009	114	10	615	347	3,153
18-Mar-07	157	251	226	169	232	991	113	9	609	342	3,099
25-Mar-07	155	248	216	167	225	968	112	9	600	337	3,038
01-Apr-07	151	246	203	160	218	931	110	8	582	329	2,939

- End of Section -

Appendix B Peak Demand Forecast Details

Table B1: Weekly Zonal Coincident Peak Demand Forecast, Normal Weather

Week Ending	Hourly Coincident Peak Demand (MW)											
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System	Load Forecast Uncertainty
09-Oct-05	867	1,379	1,534	854	1,556	6,694	733	52	3,917	2,188	19,774	485
16-Oct-05	863	1,505	1,584	937	1,556	6,715	751	54	3,947	2,218	20,130	420
23-Oct-05	918	1,520	1,461	1,147	1,604	6,818	755	53	4,000	2,233	20,509	422
30-Oct-05	896	1,616	1,474	1,249	1,634	6,893	768	54	4,088	2,250	20,923	559
06-Nov-05	923	1,564	1,362	1,294	1,660	7,223	787	62	4,277	2,366	21,519	574
13-Nov-05	949	1,561	1,545	1,230	1,670	7,282	799	62	4,311	2,392	21,801	523
20-Nov-05	964	1,599	1,839	1,159	1,719	7,426	818	63	4,418	2,440	22,445	341
27-Nov-05	980	1,664	1,824	1,087	1,726	7,687	825	64	4,464	2,508	22,830	564
04-Dec-05	1,006	1,741	1,837	1,129	1,758	7,663	819	64	4,453	2,467	22,938	545
11-Dec-05	1,027	1,717	1,872	1,220	1,859	7,904	835	65	4,547	2,530	23,576	703
18-Dec-05	1,037	1,696	1,839	1,282	1,848	7,929	837	64	4,560	2,539	23,630	694
25-Dec-05	955	1,672	1,921	1,404	1,853	7,848	840	64	4,600	2,484	23,642	911
01-Jan-06	937	1,681	1,942	1,381	1,856	6,946	760	57	4,282	2,306	22,149	643
08-Jan-06	984	1,704	1,886	1,529	1,874	7,647	813	59	4,573	2,477	23,546	837
15-Jan-06	959	1,745	1,949	1,402	1,946	7,835	840	62	4,604	2,559	23,901	864
22-Jan-06	970	1,758	2,078	1,346	2,009	7,953	840	64	4,721	2,533	24,272	926
29-Jan-06	959	1,743	2,202	1,296	2,040	7,858	821	63	4,624	2,454	24,060	954
05-Feb-06	1,014	1,718	2,241	1,202	1,923	7,757	814	64	4,578	2,461	23,772	707
12-Feb-06	983	1,671	2,000	1,266	1,899	7,825	821	65	4,614	2,474	23,618	673
19-Feb-06	978	1,640	2,173	1,114	1,821	7,714	818	66	4,563	2,471	23,358	816
26-Feb-06	954	1,645	1,771	1,378	1,871	7,610	827	65	4,457	2,463	23,041	699
05-Mar-06	955	1,649	2,141	1,104	1,802	7,517	804	66	4,394	2,374	22,807	822
12-Mar-06	939	1,582	2,190	1,026	1,719	7,440	802	64	4,349	2,412	22,522	696
19-Mar-06	936	1,559	2,000	1,084	1,735	7,275	774	61	4,271	2,297	21,993	739
26-Mar-06	906	1,551	1,879	1,080	1,701	7,190	779	58	4,239	2,300	21,682	760
02-Apr-06	887	1,535	2,016	939	1,684	6,876	766	53	4,084	2,270	21,110	735
09-Apr-06	897	1,455	1,966	752	1,647	6,934	767	57	4,128	2,297	20,901	682
16-Apr-06	917	1,454	1,365	1,036	1,566	6,835	774	54	4,075	2,353	20,429	691
23-Apr-06	889	1,484	1,606	940	1,562	6,720	739	53	4,028	2,225	20,245	512
30-Apr-06	873	1,406	1,227	1,086	1,483	6,632	746	51	3,981	2,243	19,729	542
07-May-06	935	1,425	1,384	1,065	1,434	6,628	733	49	3,921	2,206	19,779	511
14-May-06	953	1,393	967	1,372	1,395	6,621	733	43	3,910	2,226	19,614	395
21-May-06	898	1,397	1,490	1,192	1,533	7,868	738	41	4,166	2,361	21,685	774
28-May-06	880	1,359	1,468	1,224	1,472	7,787	795	42	4,092	2,548	21,669	809
04-Jun-06	869	1,351	1,475	1,133	1,470	7,830	810	40	4,103	2,600	21,681	872
11-Jun-06	894	1,377	1,464	1,148	1,451	7,737	828	39	4,137	2,681	21,756	1,242
18-Jun-06	912	1,320	1,645	1,116	1,589	8,219	835	45	4,438	2,684	22,804	1,446
25-Jun-06	923	1,298	1,623	1,093	1,646	8,752	928	48	4,709	2,972	23,992	1,217
02-Jul-06	855	1,272	1,713	1,008	1,547	8,652	938	51	4,689	2,931	23,656	1,757

(Table B1 continued)

Week Ending	Hourly Coincident Peak Demand (MW)											
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System	Load Forecast Uncertainty
09-Jul-06	882	1,334	1,669	1,092	1,691	8,826	929	44	4,718	2,910	24,095	1,219
16-Jul-06	885	1,325	1,759	1,092	1,689	8,849	916	46	4,747	2,904	24,213	1,486
23-Jul-06	889	1,327	1,743	1,129	1,693	8,859	918	44	4,680	2,952	24,234	1,479
30-Jul-06	896	1,350	1,768	1,199	1,793	8,657	915	46	4,549	2,997	24,168	1,194
06-Aug-06	888	1,345	1,664	1,207	1,717	8,506	883	45	4,461	2,891	23,608	1,179
13-Aug-06	904	1,384	1,701	1,174	1,773	8,642	862	44	4,534	2,814	23,833	1,228
20-Aug-06	913	1,443	1,619	1,118	1,728	8,516	883	41	4,511	2,873	23,645	1,139
27-Aug-06	898	1,429	1,559	1,252	1,625	8,396	866	46	4,463	2,819	23,353	1,237
03-Sep-06	901	1,503	1,563	1,176	1,668	8,465	920	43	4,492	2,985	23,715	1,290
10-Sep-06	889	1,476	1,454	963	1,565	8,197	859	43	4,438	2,787	22,668	1,571
17-Sep-06	865	1,403	1,349	952	1,462	8,072	896	45	4,323	2,910	22,278	1,277
24-Sep-06	900	1,430	1,566	952	1,758	7,725	765	46	4,232	2,475	21,849	1,197
01-Oct-06	851	1,415	1,502	832	1,592	6,905	725	50	3,959	2,268	20,101	425
08-Oct-06	862	1,397	1,554	842	1,618	6,772	736	53	3,989	2,223	20,045	472
15-Oct-06	857	1,524	1,607	918	1,618	6,789	754	54	4,009	2,251	20,382	420
22-Oct-06	912	1,538	1,481	1,137	1,666	6,898	759	54	4,067	2,267	20,780	413
29-Oct-06	891	1,637	1,493	1,235	1,695	6,972	770	55	4,154	2,285	21,189	563
05-Nov-06	919	1,590	1,376	1,304	1,713	7,297	791	63	4,343	2,399	21,795	588
12-Nov-06	944	1,581	1,553	1,232	1,724	7,352	803	63	4,374	2,424	22,049	551
19-Nov-06	960	1,619	1,848	1,160	1,773	7,495	821	64	4,482	2,472	22,693	336
26-Nov-06	977	1,687	1,832	1,093	1,773	7,753	828	65	4,530	2,541	23,078	587
03-Dec-06	1,004	1,764	1,845	1,134	1,805	7,729	822	66	4,519	2,499	23,186	545
10-Dec-06	985	1,683	2,022	1,341	1,915	7,854	843	67	4,601	2,530	23,842	703
17-Dec-06	1,036	1,717	1,857	1,289	1,892	8,002	840	66	4,625	2,571	23,896	698
24-Dec-06	952	1,690	1,940	1,408	1,903	7,924	845	66	4,664	2,516	23,909	915
31-Dec-06	935	1,701	1,961	1,389	1,905	7,019	766	59	4,347	2,339	22,420	757
07-Jan-07	981	1,719	1,916	1,542	1,908	7,722	819	61	4,643	2,513	23,824	837
14-Jan-07	956	1,759	1,970	1,414	1,981	7,901	845	63	4,672	2,593	24,155	887
21-Jan-07	966	1,774	2,099	1,358	2,045	8,018	845	65	4,789	2,567	24,526	926
28-Jan-07	955	1,758	2,224	1,307	2,075	7,922	826	64	4,692	2,489	24,314	962
04-Feb-07	1,008	1,744	2,260	1,213	1,963	7,822	820	65	4,657	2,501	24,053	684
11-Feb-07	979	1,687	2,021	1,286	1,934	7,889	826	66	4,683	2,508	23,880	672
18-Feb-07	975	1,657	2,194	1,129	1,856	7,777	823	68	4,633	2,504	23,616	816
25-Feb-07	949	1,659	1,788	1,396	1,908	7,673	833	66	4,533	2,499	23,304	703
04-Mar-07	948	1,670	2,158	1,122	1,844	7,603	811	67	4,473	2,413	23,110	788
11-Mar-07	934	1,595	2,213	1,038	1,756	7,516	809	66	4,417	2,447	22,791	695
18-Mar-07	932	1,573	2,022	1,096	1,772	7,351	781	63	4,340	2,333	22,263	757
25-Mar-07	901	1,567	1,900	1,092	1,738	7,265	785	59	4,307	2,337	21,952	760
01-Apr-07	883	1,549	2,036	954	1,721	6,948	772	55	4,154	2,305	21,379	736

Table B2: Weekly Zonal Non-Coincident Peak Demand Forecast, Normal Weather

	Hourly Non-Coincident Peak Demand (MW)											
Week	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	System	Zonal Total
09-Oct-05	987	1,520	1,629	1,092	1,594	6,694	737	59	3,917	2,242	19,774	20,471
16-Oct-05	976	1,576	1,632	1,245	1,556	6,890	751	58	3,947	2,326	20,130	20,957
23-Oct-05	1,011	1,621	1,472	1,357	1,612	6,818	761	59	4,000	2,247	20,509	20,958
30-Oct-05	998	1,673	1,474	1,490	1,634	6,893	768	58	4,088	2,250	20,923	21,326
06-Nov-05	1,014	1,663	1,362	1,490	1,660	7,289	787	68	4,277	2,372	21,519	21,982
13-Nov-05	1,050	1,699	1,645	1,275	1,735	7,383	799	67	4,311	2,392	21,801	22,356
20-Nov-05	1,050	1,722	1,841	1,317	1,719	7,516	818	66	4,423	2,448	22,445	22,920
27-Nov-05	1,035	1,762	1,980	1,312	1,733	7,687	828	66	4,464	2,508	22,830	23,375
04-Dec-05	1,062	1,796	1,986	1,415	1,761	7,663	823	66	4,453	2,467	22,938	23,492
11-Dec-05	1,090	1,801	2,014	1,419	1,865	7,904	838	68	4,547	2,530	23,576	24,076
18-Dec-05	1,081	1,839	2,103	1,435	1,876	7,929	843	67	4,560	2,539	23,630	24,272
25-Dec-05	1,053	1,835	2,025	1,445	1,874	7,973	841	66	4,612	2,510	23,642	24,234
01-Jan-06	1,052	1,838	1,949	1,425	1,856	7,030	760	62	4,282	2,313	22,149	22,567
08-Jan-06	1,094	1,842	1,923	1,544	1,874	7,746	813	64	4,573	2,487	23,546	23,960
15-Jan-06	1,107	1,837	2,031	1,447	2,016	7,918	840	66	4,604	2,579	23,901	24,445
22-Jan-06	1,125	1,881	2,103	1,478	2,034	7,953	840	69	4,721	2,540	24,272	24,744
29-Jan-06	1,135	1,829	2,249	1,443	2,040	7,888	822	67	4,624	2,493	24,060	24,590
05-Feb-06	1,147	1,834	2,305	1,473	1,923	7,763	832	68	4,578	2,553	23,772	24,476
12-Feb-06	1,115	1,795	2,119	1,330	1,899	7,825	826	71	4,614	2,476	23,618	24,070
19-Feb-06	1,157	1,789	2,277	1,312	1,879	7,714	818	70	4,563	2,471	23,358	24,050
26-Feb-06	1,093	1,766	1,894	1,394	1,871	7,612	827	73	4,457	2,477	23,041	23,464
05-Mar-06	1,102	1,789	2,141	1,303	1,802	7,546	812	73	4,411	2,446	22,807	23,425
12-Mar-06	1,112	1,751	2,190	1,356	1,758	7,448	802	70	4,349	2,434	22,522	23,270
19-Mar-06	1,072	1,663	2,000	1,342	1,735	7,275	793	67	4,271	2,353	21,993	22,571
26-Mar-06	1,041	1,659	1,879	1,308	1,701	7,190	779	65	4,239	2,316	21,682	22,177
02-Apr-06	1,010	1,640	2,016	1,306	1,684	6,876	768	61	4,084	2,274	21,110	21,719
09-Apr-06	1,047	1,594	1,966	1,213	1,647	6,955	767	64	4,129	2,297	20,901	21,679
16-Apr-06	1,039	1,599	1,560	1,399	1,611	6,835	774	64	4,075	2,353	20,429	21,309
23-Apr-06	991	1,540	1,726	1,288	1,562	6,750	741	60	4,028	2,225	20,245	20,911
30-Apr-06	1,014	1,478	1,281	1,431	1,530	6,693	751	59	3,981	2,243	19,729	20,461
07-May-06	1,028	1,534	1,426	1,340	1,507	6,706	741	55	3,979	2,206	19,779	20,522
14-May-06	993	1,493	1,237	1,376	1,516	6,676	742	54	3,910	2,226	19,614	20,223
21-May-06	962	1,472	1,538	1,284	1,559	7,868	784	49	4,166	2,518	21,685	22,200
28-May-06	959	1,513	1,540	1,323	1,488	7,787	795	54	4,092	2,548	21,669	22,099
04-Jun-06	969	1,501	1,557	1,294	1,485	7,830	810	54	4,103	2,600	21,681	22,203
11-Jun-06	1,010	1,445	1,524	1,186	1,469	7,737	828	46	4,137	2,698	21,756	22,080
18-Jun-06	976	1,405	1,789	1,140	1,599	8,219	838	48	4,438	2,699	22,804	23,151
25-Jun-06	969	1,369	1,742	1,254	1,657	8,752	932	52	4,709	2,988	23,992	24,424
02-Jul-06	938	1,459	1,915	1,123	1,591	8,652	938	53	4,689	2,942	23,656	24,300

(Table B2 continued)

Week	Hourly Non-Coincident Peak Demand (MW)											
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	System	Zonal Total
09-Jul-06	960	1,420	1,784	1,196	1,712	8,826	932	49	4,718	2,910	24,095	24,507
16-Jul-06	938	1,418	1,932	1,157	1,711	8,849	921	48	4,747	2,905	24,213	24,626
23-Jul-06	944	1,431	1,905	1,189	1,716	8,859	923	45	4,681	2,957	24,234	24,650
30-Jul-06	938	1,440	1,929	1,207	1,814	8,657	929	46	4,563	3,054	24,168	24,577
06-Aug-06	938	1,429	1,794	1,217	1,738	8,506	888	47	4,477	2,895	23,608	23,929
13-Aug-06	956	1,481	1,831	1,213	1,793	8,642	866	47	4,545	2,827	23,833	24,201
20-Aug-06	972	1,535	1,706	1,220	1,751	8,516	891	47	4,513	2,908	23,645	24,059
27-Aug-06	980	1,601	1,651	1,263	1,661	8,396	866	47	4,473	2,819	23,353	23,757
03-Sep-06	969	1,559	1,634	1,277	1,717	8,465	921	49	4,492	2,989	23,715	24,072
10-Sep-06	972	1,545	1,545	1,116	1,627	8,197	860	47	4,438	2,787	22,668	23,134
17-Sep-06	963	1,582	1,462	1,124	1,584	8,072	898	49	4,323	2,910	22,278	22,967
24-Sep-06	971	1,530	1,798	987	1,819	7,725	768	51	4,233	2,475	21,849	22,357
01-Oct-06	984	1,520	1,502	997	1,615	7,114	744	59	3,974	2,332	20,101	20,841
08-Oct-06	992	1,541	1,657	1,070	1,658	6,778	741	60	3,989	2,291	20,045	20,777
15-Oct-06	981	1,591	1,661	1,237	1,618	6,985	754	59	4,009	2,372	20,382	21,267
22-Oct-06	1,015	1,645	1,496	1,336	1,674	6,898	763	60	4,067	2,281	20,780	21,235
29-Oct-06	1,001	1,695	1,498	1,482	1,695	6,972	770	59	4,154	2,285	21,189	21,611
05-Nov-06	1,018	1,689	1,376	1,506	1,713	7,347	791	69	4,343	2,402	21,795	22,254
12-Nov-06	1,054	1,723	1,653	1,272	1,787	7,437	803	68	4,374	2,424	22,049	22,595
19-Nov-06	1,053	1,746	1,850	1,318	1,773	7,568	821	68	4,482	2,476	22,693	23,155
26-Nov-06	1,038	1,787	1,992	1,312	1,790	7,753	833	68	4,530	2,541	23,078	23,644
03-Dec-06	1,065	1,816	1,998	1,417	1,817	7,729	826	68	4,519	2,499	23,186	23,754
10-Dec-06	1,094	1,824	2,038	1,425	1,915	7,968	843	69	4,607	2,560	23,842	24,343
17-Dec-06	1,085	1,863	2,129	1,445	1,922	8,002	848	69	4,625	2,571	23,896	24,559
24-Dec-06	1,057	1,860	2,054	1,452	1,922	8,034	846	68	4,671	2,538	23,909	24,502
31-Dec-06	1,035	1,866	1,970	1,430	1,905	7,089	781	63	4,347	2,342	22,420	22,828
07-Jan-07	1,098	1,861	1,954	1,554	1,908	7,802	819	66	4,643	2,518	23,824	24,223
14-Jan-07	1,111	1,851	2,053	1,465	2,052	7,969	845	68	4,672	2,609	24,155	24,695
21-Jan-07	1,129	1,896	2,125	1,493	2,070	8,018	845	70	4,789	2,573	24,526	25,008
28-Jan-07	1,139	1,846	2,273	1,458	2,075	7,936	828	69	4,692	2,524	24,314	24,840
04-Feb-07	1,151	1,849	2,323	1,492	1,963	7,822	838	69	4,658	2,587	24,053	24,752
11-Feb-07	1,120	1,813	2,141	1,343	1,934	7,889	832	72	4,683	2,510	23,880	24,337
18-Feb-07	1,161	1,803	2,299	1,330	1,916	7,777	823	72	4,633	2,504	23,616	24,318
25-Feb-07	1,098	1,785	1,915	1,407	1,908	7,673	833	75	4,533	2,510	23,304	23,737
04-Mar-07	1,107	1,807	2,158	1,315	1,844	7,629	819	74	4,493	2,480	23,110	23,726
11-Mar-07	1,116	1,764	2,213	1,372	1,795	7,521	809	73	4,417	2,470	22,791	23,550
18-Mar-07	1,077	1,676	2,022	1,365	1,772	7,351	799	69	4,340	2,387	22,263	22,858
25-Mar-07	1,046	1,673	1,900	1,318	1,738	7,265	785	67	4,307	2,352	21,952	22,451
01-Apr-07	1,016	1,643	2,036	1,317	1,721	6,948	775	64	4,154	2,311	21,379	21,985

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Appendix C Analytical Factors

Table C1: Factors Affecting Demand

Factors Affecting Daily Energy Demand			
Variable Class	Variable	Change in Variable	Impact On Daily Energy Demand (MWh)
Weather	**Daily Avg Temperature**		
	> 16º C	1ºC Increase	7,450 MWh Increase
	10ºC > and < 16º C	1ºC Increase	600 MWh Increase
	< 10ºC	1ºC Decrease	2,730 MWh Increase
	Daily Humidity - Dewpoint		
	> 16º C	1ºC Increase	2,710 MWh Increase
	10ºC > and < 16º C	1ºC Increase	220 MWh Increase
	< 10ºC	1ºC Decrease	990 MWh Increase
	Wind		
	Summer	1 km/hr Decrease	230 MWh Increase
	Winter	1 km/hr Increase	110 MWh Increase
	Cloud		
	Summer	Decrease of 1 on Scale	1,260 MWh Decrease
	Winter	Increase of 1 on Scale	1,410 MWh Increase
Economic	**Employment**	Increase of 1,000 jobs	20 MWh Increase
	Housing Stock	Increase of 1,000 houses	25 MWh Increase
Calendar	**Holidays**	New Year's Day	68,000 MWh Decrease
		Good Friday	45,000 MWh Decrease
		Victoria Day	53,000 MWh Decrease
		Canada Day	35,000 MWh Decrease
		August Civic Holiday	37,000 MWh Decrease
		Labour Day	57,000 MWh Decrease
		Thanksgiving Day	55,000 MWh Decrease
		Remembrance Day	8,000 MWh Decrease
		Christmas	82,000 MWh Decrease
		Boxing Day	80,000 MWh Decrease
		New Year's Eve	5,000 MWh Decrease
	Day of Week	Monday vs Sunday	45,000 MWh Increase
		Tuesday vs Sunday	46,000 MWh Increase
		Wednesday vs Sunday	47,000 MWh Increase
		Thursday vs Sunday	46,000 MWh Increase
		Friday vs Sunday	43,000 MWh Increase
		Saturday vs Sunday	11,000 MWh Increase

(Table C1 continued)

Factors Affecting Daily Peak Demand			
Variable Class	Variable	Change in Variable	Impact On Daily Peak Demand (MW)
Weather	**Temperature**		
	> 16º C	1ºC Increase	420 MW Increase
	10ºC > and < 16º C	1ºC Increase	80 MW Increase
	< 10ºC	1ºC Decrease	110 MW Increase
	Humidity - Dewpoint		
	> 16º C	1ºC Increase	150 MW Increase
	10ºC > and < 16º C	1ºC Increase	30 MW Increase
	< 10ºC	1ºC Decrease	40 MW Increase
	Wind		
	Summer	1 km/hr Decrease	13 MW Increase
	Winter	1 km/hr Increase	10 MW Increase
	Cloud		
	Summer	Decrease of 1 on Scale	100 MW Increase
	Winter	Increase of 1 on Scale	70 MW Increase
Economic	**Employment**	Increase of 1,000 jobs	1 MW Increase
	Housing Stock	Increase of 1,000 houses	1 MW Increase
Calendar	**Holidays**	New Year's Day	3,000 MW Decrease
		Good Friday	2,100 MW Decrease
		Victoria Day	2,500 MW Decrease
		Canada Day	1,600 MW Decrease
		August Civic Holiday	1,500 MW Decrease
		Labour Day	2,400 MW Decrease
		Thanksgiving Day	2,400 MW Decrease
		Remembrance Day	200 MW Decrease
		Christmas	4,400 MW Decrease
		Boxing Day	3,600 MW Decrease
		New Year's Eve	600 MW Decrease
	Day of Week	Monday vs Sunday	2,000 MW Increase
		Tuesday vs Sunday	2,000 MW Increase
		Wednesday vs Sunday	2,000 MW Increase
		Thursday vs Sunday	1,900 MW Increase
		Friday vs Sunday	1,600 MW Increase
		Saturday vs Sunday	200 MW Increase

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