

**18-MONTH OUTLOOK:**

# Ontario Demand Forecast

From July 2007 to December 2008



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## Executive Summary

The IESO is responsible for forecasting electricity demand on the IESO-controlled grid and for assessing whether transmission and generation facilities are adequate to meet Ontario's needs. This document presents the demand forecast for the period from July 2007 to December 2008 and supersedes the previous forecast released in March 2007.

### Actual Weather and Demand

Since the last forecast the actual demand and weather data for February, March and April has been recorded. Here are the highlights:

#### February

- February was cold. It ranked as the third coldest February since 1970. The peak day was also the sixth coldest February peak day for the same period.
- The peak electricity demand of 23,935 MW was the highest February peak ever and the winter peak for 2006-07. Weather corrected peak demand was 23,434 MW.
- Energy demand for the month was 13.0 TWh, second to February 2003's 13.1 TWh. Weather-corrected energy demand was 12.7 TWh.
- Wholesale industrial energy demand was 5.8% lower than the previous February.

#### March

- March was milder than normal. However the peak day was the second coldest March peak day.
- Peak electricity demand for the month was 22,969 MW or 22,010 MW weather-corrected.
- Energy demand for the month was 13.2 TWh, the lowest demand level since 2002. On a weather-corrected basis demand was 13.3 TWh, also the lowest since 2002.
- Wholesale industrial customers' consumption was 5.5% lower than the previous March, a slight improvement from February

#### April

- April was colder than normal ranking as the 12<sup>th</sup> coldest April since 1970. Though there were a number of very cold days in April, the peak occurred on a slightly milder day.
- Peak electricity demand for the month was 20,016 MW or 19,500 MW weather-corrected.
- Energy demand for the month was 11.8 TWh and the weather-corrected demand was 11.7 TWh, the lowest since 2002.
- Wholesale industrial customers' consumption fell 4.5% compared to the previous April.

Overall, the weather experienced during the latter half of the winter was colder than normal and the electricity demand reflected that fact. Weather-corrected energy demand for the three months was 0.1% lower than the same period a year earlier and 0.4% lower than forecast.

## **Economic Outlook**

The IESO has updated the economic assumptions that underpin the forecast for the Ontario economy. The economic outlook is slightly pessimistic compared to the previous 18-Month Outlook. The key economic themes continue to dominate the Ontario economy.

- The high Canadian dollar hurts the competitiveness of Ontario firms exporting to the U.S.
- World demand has led to high commodity prices – in particular metals - helping the mining and processing sectors.
- Interest rates continue to foster business investment and domestic consumption, fuelling vehicle sales and construction activity.
- The growth in overall electricity demand will lag economic growth as large energy intensive industries are not growing as fast as the economy as a whole.

## **Methodology**

The methodology remains the same as in the previous Outlook. The demand models have been re-estimated based on the latest data. The economic drivers and weather scenarios were also updated.

This document presents demand both prior to and after the projected impacts of conservation.

## **Demand Forecast**

Peak demands are very similar to the previous forecast, slightly higher in the summer and slightly lower in the winter. The energy demand forecast is lower than the previous forecast as a result of the lighter industrial loads.

The Ontario Power Authority (OPA) and local distribution companies (LDC) have and continue to introduce a number of conservation and demand response programs. The demand response programs are included in our analysis and treated as a resource. The impacts of the additional conservation programs have been included in this document in the Planned Resource Scenario. In the Firm Resource scenario, demand numbers are presented prior to the impacts of conservation. A discussion of the impacts of conservation and demand response are included in section 3.4 of this document.

Table 1 summarizes the Firm Resource peak and energy demand forecast covered in this 18-month forecast. Figure 1 shows the difference between the previous and current forecast.

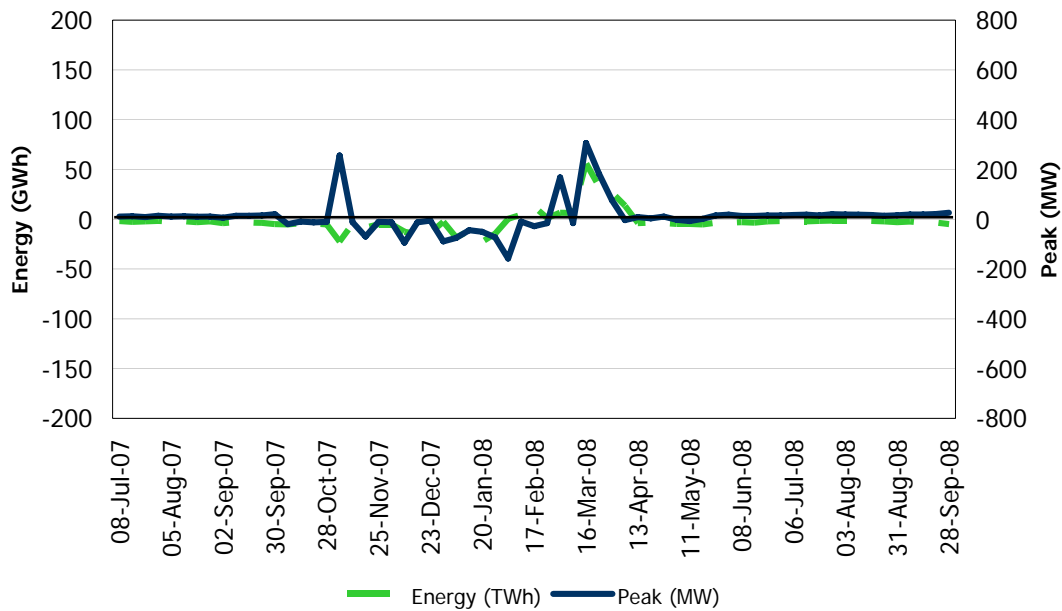
Table 1: Demand Forecast

Season	Weekly Normal Weather Peak (MW)	Monthly Normal Weather Peak (MW)	Seasonal Normal Weather Peak (MW)	Extreme Weather Peak (MW)
Summer 2007	24,287	25,525	25,773	27,585
Winter 2007-08	24,018	24,516	24,745	25,548
Summer 2008	24,542	25,779	26,028	27,840

Year	Actual TWh	% Growth	Weather Corrected TWh	% Growth
2004 Energy	153.4	1.1%	153.7	1.3%
2005 Energy	157.0	2.3%	154.9	0.8%
2006 Energy	151.1	-3.8%	152.3	-1.6%
2007 Energy (Forecast)	153.7	1.8%	153.7	0.9%
2008 Energy (Forecast)	155.9	1.4%	155.9	1.4%

Figure 1: Comparison - Current Less Previous Forecast



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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 period from July 2007 to December 2008. It supersedes the previous forecast released March 9, 2007.

## 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 "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\\_2007jun.pdf](http://www.ieso.ca/imoweb/pubs/marketReports/Methodology_RTAA_2007jun.pdf)). Readers may envision other 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.

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 through the end of March 2007. Data for April has been incorporated into the tables and figures of this document. This document is divided into the following sections:

- Section 2.0 looks at historical demand
- Section 3.0 describes the assumptions used in this forecast of electricity demand
- Section 4.0 has a summary of forecast results
- Appendices A through C contain additional forecast details and analysis.

Readers are invited to provide comments or suggestions regarding the content of this or future reports. To do so, please call the IESO Customer Relations at 905-403-6900 or 1-888-448-7777 or send an email to [customer.relations@ieso.ca](mailto:customer.relations@ieso.ca) or to [forecasts.demand@ieso.ca](mailto:forecasts.demand@ieso.ca).

Electronic copies of the forecast and weather scenarios are available upon request.

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## 2.0 Historical Demand

This section covers historical energy and peak demand. The weather-corrected numbers are generated based on normal weather.

### 2.1 February to April Review

The historical database now includes the experiences for February through April. The temperatures for this period were generally colder than normal and represented a marked contrast to the first part of the winter which was quite mild.

Figure 2.1 shows the daily temperature for the review period sorted from highest to lowest. The shaded area denotes the range of weather impacts experienced over the 1970-2006 time-frame.

**Figure 2.1: Daily Weather Impact – February to April**

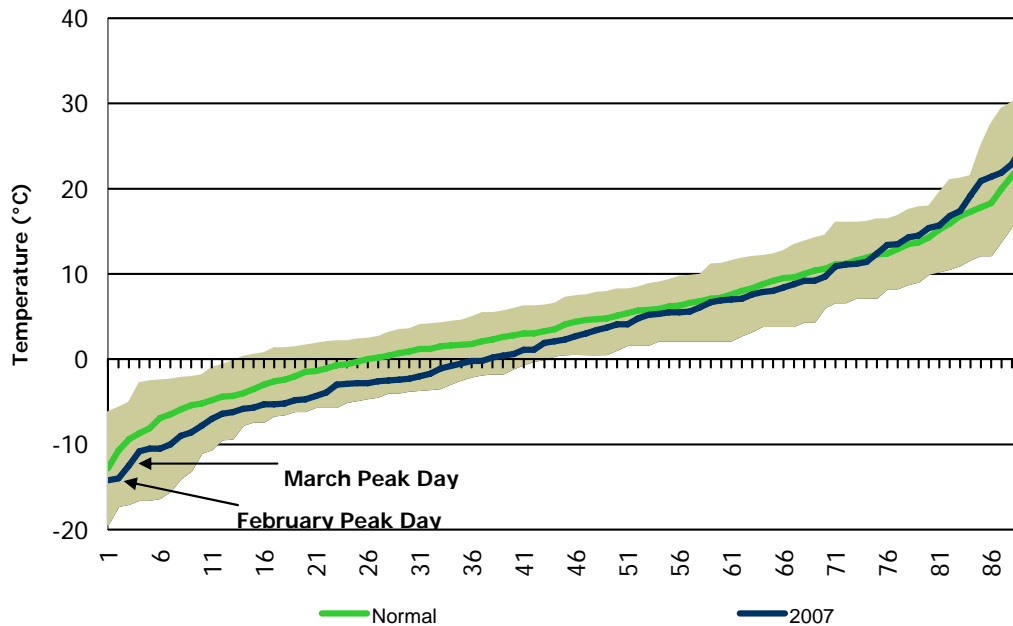


Table 2.1 contains a summary of the weather and demand for the review period. A couple of items to note:

- The February and winter peak occurred on a day with a daily high of -14.0°C (Toronto).
- The March peak occurred on a day with a daily high of -12.5°C (Toronto).
- The colder weather lifted energy demand for the three months to the highest level (38.1 TWh) since 2004. However, after correcting for weather, demand (37.6 TWh) was lower than 2006.

Table 2.1: Historical Weather and Demand Summary

Historical Analysis		February	March	April
Actual	Average Temperature (°C)	-5.2	4.0	9.9
	Minimum Temperature (°C)	-14.2	-12.5	-3.0
	Maximum Temperature (°C)	4.1	19.2	25.0
Monthly Normal	Monthly Normal Average Temperature (°C)	-1.9	2.8	10.9
	Monthly Normal Minimum Temperature (°C)	-13.5	-5.5	2.8
	Monthly Normal Maximum Temperature (°C)	7.0	12.4	25.0
Actual	Peak Demand (MW)	23,935	22,969	20,016
	Average Hour (MW)	19,401	17,732	16,427
	Minimum Hour (MW)	14,894	13,331	11,819
	90th Percentile (MW)	21,908	20,433	18,975
	Percent above 20,000 (MW)	41.7%	16.2%	0.1%
	# of Hours Above 20,000 (MW)	280	121	1
	Energy Demand (GWh)	13,038	13,193	11,828
Weather-Corrected	Peak Demand (MW)	23,434	22,010	19,500
	Energy Demand (GWh)	12,658	13,277	11,711
Forecast	Peak Demand (MW)	23,317	22,337	20,307
	Energy Demand (GWh)	12,893	13,801	14,348

Notes for Table 2.1 – Weather is for Toronto. Temperature is the daily high. Forecast is the most recent for that period.

Energy demand for the first four months of 2007 is up compared to the same period in 2006. However, once the weather is taken into consideration, energy demand is down 0.5% compared to 2006. The overall energy picture continues to be influenced by lower industrial demand and the drive to establish a conservation culture in Ontario.

Figure 2.2 shows the year over year change in wholesale customers' consumption. In general, we can see that their consumption has been falling since the start of 2005.

Figure 2.2: Wholesale Customer's Year over Year Change in Consumption



## 2.2 Historical Energy Demand

Actual energy demand was 38.1 TWh (37.6 TWh weather-corrected) for February through April. This was 2.1% higher than the same months a year earlier (0.1% lower on a weather-corrected basis). The lower demand numbers are a result of a number of factors – conservation and efficiency gains, declining levels of activity and fewer wholesale customers.

Figure 2.3 shows the 52-week moving average of the actual and weather-corrected energy demand since market opening. The deviations in the two lines can be traced back to significant weather impacts. The graph is dominated by the two large humps caused by the hot summers of 2002 and 2005. Since the start of 2006, energy demand has continued to tail off.

Figure 2.3: Energy Demand – 52-Week Moving Average

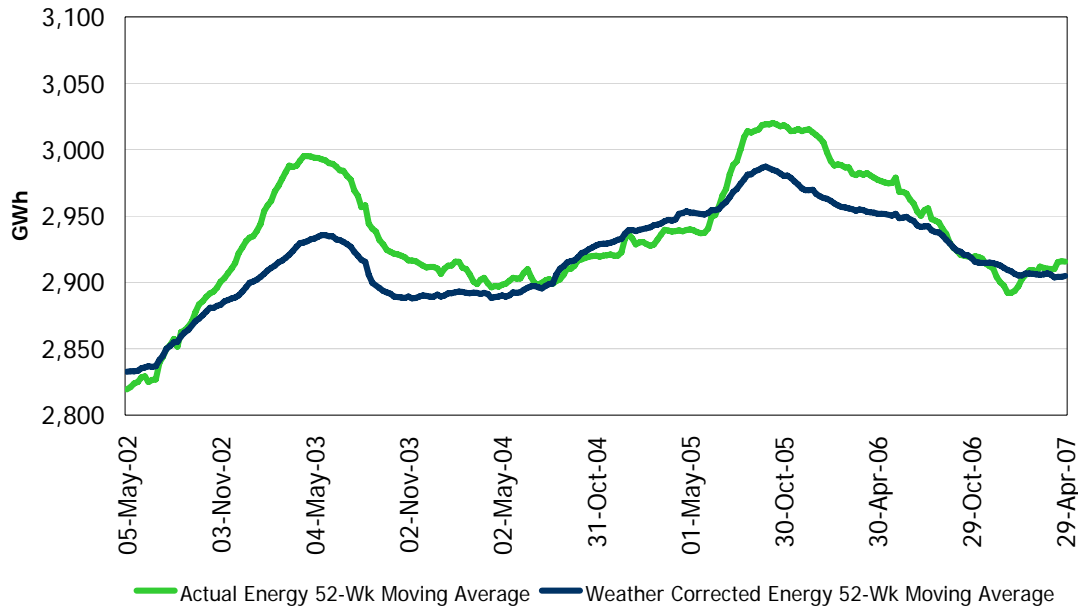


Table 2.2 shows the weekly energy demand for the past 52 weeks. The table has the actual and weather-corrected demand for each week. If the weather correction is positive it means that the weather was milder than normal. As well, the table notes any item of significance for the week.

Table 2.2: Actual and Weather Corrected Weekly Energy Demand

Week Ending	Actual Energy (GWh)	Weather Corrected Energy (GWh)	Weather Correction (GWh)	Week Number	Notes for Week
07-May-06	2,605	2,594	-11	18	
14-May-06	2,625	2,649	23	19	
21-May-06	2,604	2,612	8	20	Victoria Day
28-May-06	2,630	2,656	25	21	
04-Jun-06	3,032	2,881	-151	22	
11-Jun-06	2,792	2,774	-18	23	
18-Jun-06	2,959	2,951	-8	24	
25-Jun-06	3,024	3,003	-21	25	
02-Jul-06	2,981	2,939	-42	26	
09-Jul-06	2,901	2,803	-98	27	Canada Day
16-Jul-06	3,156	3,023	-134	28	
23-Jul-06	3,190	3,086	-105	29	
30-Jul-06	3,303	3,186	-117	30	
06-Aug-06	3,372	3,265	-107	31	Peak Demand record set Civic Holiday
13-Aug-06	2,892	2,907	15	32	
20-Aug-06	2,991	2,998	8	33	
27-Aug-06	2,892	2,900	8	34	
03-Sep-06	2,773	2,811	38	35	
10-Sep-06	2,694	2,736	43	36	Labour Day
17-Sep-06	2,718	2,743	25	37	
24-Sep-06	2,700	2,737	36	38	
01-Oct-06	2,663	2,665	2	39	
08-Oct-06	2,649	2,657	8	40	
15-Oct-06	2,639	2,615	-24	41	Thanksgiving
22-Oct-06	2,718	2,685	-33	42	
29-Oct-06	2,798	2,777	-20	43	
05-Nov-06	2,824	2,852	28	44	
12-Nov-06	2,785	2,847	62	45	
19-Nov-06	2,843	2,890	47	46	
26-Nov-06	2,865	2,911	46	47	
03-Dec-06	2,921	3,008	86	48	



(Table 2.2 continued)

Week Ending	Actual Energy (GWh)	Weather Corrected Energy (GWh)	Weather Correction (GWh)	Week Number	Notes for Week
10-Dec-06	3,122	3,227	105	49	Christmas & Boxing Day New Years Day
17-Dec-06	2,945	3,036	91	50	
24-Dec-06	2,899	3,001	101	51	
31-Dec-06	2,671	2,768	97	52	
07-Jan-07	2,783	2,913	131	1	
14-Jan-07	3,047	3,112	65	2	
21-Jan-07	3,212	3,262	50	3	
28-Jan-07	3,260	3,302	42	4	
04-Feb-07	3,289	3,252	-37	5	
11-Feb-07	3,347	3,248	-100	6	
18-Feb-07	3,341	3,238	-103	7	Good Friday Easter Monday
25-Feb-07	3,162	3,071	-91	8	
04-Mar-07	3,075	3,036	-40	9	
11-Mar-07	3,174	3,133	-41	10	
18-Mar-07	2,950	2,972	22	11	
25-Mar-07	2,947	2,954	6	12	
01-Apr-07	2,769	2,813	44	13	
08-Apr-07	2,839	2,764	-75	14	
15-Apr-07	2,891	2,838	-53	15	
22-Apr-07	2,695	2,716	21	16	
29-Apr-07	2,651	2,677	26	17	

### 2.3 Historical Peak Demand

Peak demands are driven by weather. This was evident this past winter when the winter peak occurred in February. Over the past 25 winters, only four of the peaks have occurred in February. In each of those instances it is a case of having a mild January combined with a cold February. For February and March both of the monthly peaks occurred on the coldest weekday. For April, the coldest days occurred on the Thursday to Monday of the Easter weekend. April peaks are generally driven by cold weather but the relationship is weaker than the winter months.

Figure 2.4 shows the weekly peak and the corresponding peak day temperature for the months of February, March and December. Of note is the inverse relationship between temperature and peak demands.

Figure 2.4: Weekly Peak Demand and Temperature

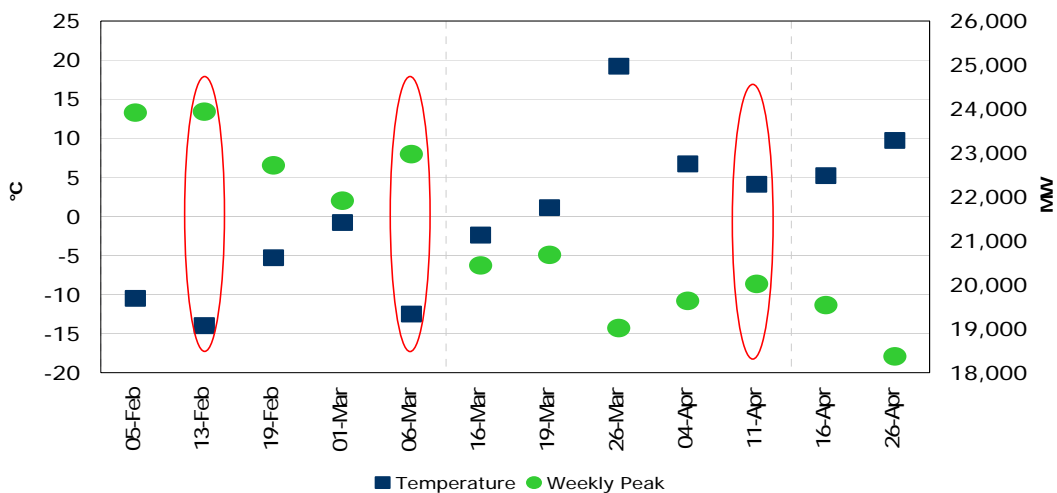


Figure 2.5 displays the 52-week moving average of both actual and weather-corrected peak demand. The profile is similar to that of the energy demand with the high-point being the summer/fall of 2005.

Figure 2.5: Peak Demand – 52-Week Moving Average

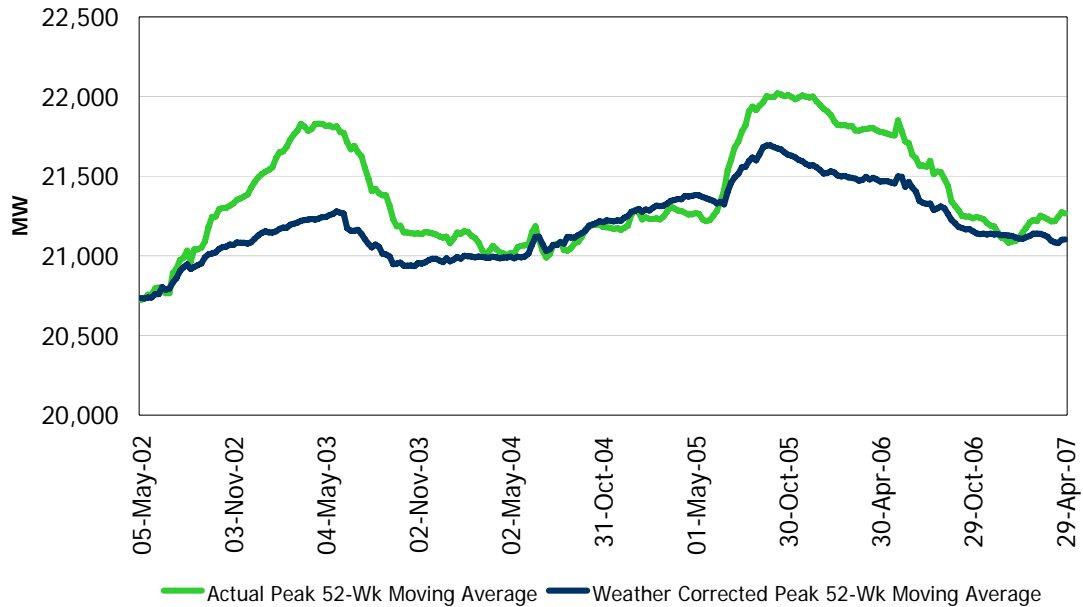


Table 2.3 contains the actual and weather-corrected weekly peak demand for the past 52 weeks. The table shows the daily afternoon maximum temperature for the actual peak day.

Table 2.3: 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)
07-May-06	18	04-May-06	18,063	18,224	23.0
14-May-06	19	10-May-06	18,303	18,710	23.4
21-May-06	20	18-May-06	17,986	18,178	14.5
28-May-06	21	26-May-06	18,624	18,758	18.8
04-Jun-06	22	30-May-06	24,857	21,287	32.8
11-Jun-06	23	07-Jun-06	21,249	20,764	27.1
18-Jun-06	24	17-Jun-06	21,635	20,266	33.3
25-Jun-06	25	22-Jun-06	23,349	23,433	30.6
02-Jul-06	26	28-Jun-06	22,298	22,148	26.2
09-Jul-06	27	04-Jul-06	22,299	22,035	28.9
16-Jul-06	28	14-Jul-06	23,802	21,479	30.0
23-Jul-06	29	17-Jul-06	25,898	23,923	33.8
30-Jul-06	30	26-Jul-06	24,630	23,322	30.5
06-Aug-06	31	01-Aug-06	27,005	22,890	36.4
13-Aug-06	32	08-Aug-06	21,444	22,522	24.6
20-Aug-06	33	18-Aug-06	23,008	22,783	30.4
27-Aug-06	34	22-Aug-06	21,350	21,350	27.5

(Table 2.3 continued)

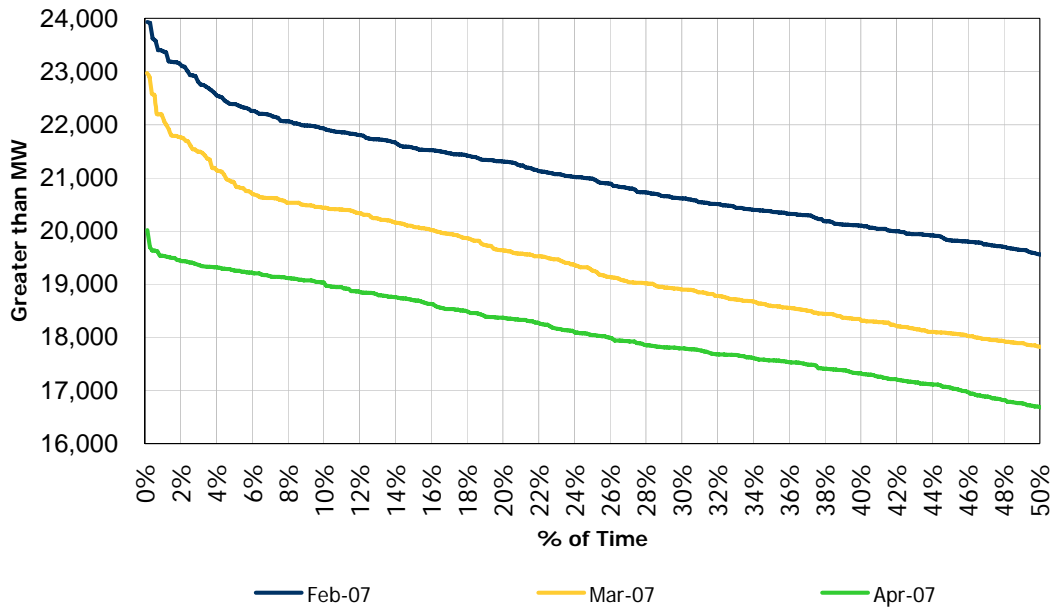
Week Ending	Week Number	Peak Day	Actual Peak (MW)	Weather Corrected Peak (MW)	Actual Peak Day Temperature (°C)
03-Sep-06	35	28-Aug-06	20,627	22,063	23.6
10-Sep-06	36	08-Sep-06	19,976	20,389	28.0
17-Sep-06	37	13-Sep-06	18,863	19,173	20.9
24-Sep-06	38	18-Sep-06	19,743	19,162	26.3
01-Oct-06	39	27-Sep-06	18,666	18,670	22.3
08-Oct-06	40	03-Oct-06	18,838	19,110	23.3
15-Oct-06	41	12-Oct-06	19,050	19,006	7.8
22-Oct-06	42	17-Oct-06	19,215	19,215	12.2
29-Oct-06	43	25-Oct-06	19,379	19,127	7.8
05-Nov-06	44	02-Nov-06	20,449	20,039	4.4
12-Nov-06	45	07-Nov-06	20,130	20,466	10.8
19-Nov-06	46	13-Nov-06	20,896	21,222	5.4
26-Nov-06	47	20-Nov-06	21,267	21,598	1.5
03-Dec-06	48	01-Dec-06	20,880	21,928	3.6
10-Dec-06	49	07-Dec-06	22,941	22,852	-5.5
17-Dec-06	50	11-Dec-06	21,845	23,455	4.9
24-Dec-06	51	19-Dec-06	21,588	22,765	4.4
31-Dec-06	52	29-Dec-06	19,917	20,662	-2.6
07-Jan-07	1	02-Jan-07	20,544	22,186	5.6
14-Jan-07	2	10-Jan-07	22,295	22,978	-3.0
21-Jan-07	3	16-Jan-07	23,261	23,605	-8.6
28-Jan-07	4	25-Jan-07	23,537	23,195	-13.1
04-Feb-07	5	29-Jan-07	22,996	22,798	-6.3
11-Feb-07	6	05-Feb-07	23,913	23,114	-10.5
18-Feb-07	7	13-Feb-07	23,935	22,864	-14.0
25-Feb-07	8	19-Feb-07	22,715	22,632	-5.3
04-Mar-07	9	01-Mar-07	21,909	22,010	-0.8
11-Mar-07	10	06-Mar-07	22,969	21,771	-12.5
18-Mar-07	11	16-Mar-07	20,437	20,363	-2.4
25-Mar-07	12	19-Mar-07	20,678	20,687	1.1
01-Apr-07	13	26-Mar-07	19,014	19,517	19.2
08-Apr-07	14	04-Apr-07	19,635	19,089	6.7
15-Apr-07	15	11-Apr-07	20,016	19,383	4.1
22-Apr-07	16	16-Apr-07	19,534	19,500	5.2
29-Apr-07	17	26-Apr-07	18,369	18,690	9.7

## 2.4 Load Duration Curves

Figure 2.6 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 months of February, March and April. All curves are a product of the weather experienced in those months.

The curves of the lines relate back to the data in Table 2.1. The transition from winter to spring leads to successively lower curves.

Figure 2.6: Load Duration Curves – February, March, April



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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\\_2006sep.pdf](http://www.ieso.ca/imoweb/pubs/marketReports/Methodology_RTAA_2006sep.pdf)).

The form and structure of the model has not been changed since the last Outlook. The most recent demand, weather and economic data was incorporated into the model and the models were re-estimated based on this updated information.

This outlook is the first to include the impacts of conservation in the demand forecast. Demand is presented both before and after the impact of conservation.

The forecast of demand requires inputs and this section covers each class of drivers.

### 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. The Outlook incorporates the changes to Daylight Savings Time (DST) starting in March 2007, where DST will begin three weeks earlier (March 11<sup>th</sup>) and end one week later (November 4<sup>th</sup>).

### 3.2 Economic Drivers for Forecast

To produce an energy and peak demand forecast, an economic forecast of various drivers is required. The IESO uses a consensus of four publicly available provincial forecasts to generate the economic drivers used in the forecast. Table 3.1 summarizes the key economic drivers for the energy and peak demand forecast. The Ontario growth index is a weighting of the economic drivers as they relate to demand.

The impacts of the high dollar, restructuring in the automotive sector and the outlook for the U.S. economy remain a concern going forward. With the mixed performance across the various sectors of the economy it requires greater understanding of the factors driving each of the individual sectors. The IESO continues to look for ways to improve or enhance the capability of the models in this regard.

**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	5,098	2.0	31.9	-23.3	1.025	1.42
1996	5,161	1.2	39.5	23.9	1.036	1.05
1997	5,277	2.3	50.0	26.5	1.054	1.69
1998	5,440	3.1	50.1	0.2	1.076	2.18
1999	5,621	3.3	62.9	25.6	1.102	2.34
2000	5,801	3.2	67.4	7.1	1.128	2.39
2001	5,924	2.1	70.3	4.2	1.149	1.88
2002	6,014	1.5	79.6	13.3	1.168	1.65
2003	6,203	3.1	80.9	1.7	1.197	2.49
2004	6,310	1.7	79.9	-1.3	1.219	1.78
2005	6,390	1.3	73.2	-8.4	1.237	1.49
2006	6,485	1.5	67.8	-7.4	1.256	1.53
2007 (f)	6,545	0.9	61.7	-8.9	1.270	1.15
2008 (f)	6,612	1.0	59.4	-3.8	1.285	1.16

### 3.3 Weather Drivers for Forecast

Since forecasting long-term weather is not possible, weather scenarios are generated based on historical data. The analytical studies that the IESO produces serve a variety of purposes and needs. As such, a variety of inputs may be required. Therefore the IESO produces demand forecasts based on Weekly, Monthly and Seasonal normal weather. Additionally, a demand forecast is also generated based on Extreme weather.

In general, the weekly normalized weather gives the lowest peak demands, monthly normalized gives higher peak demands and seasonally normalized the highest. Each of these scenarios will therefore have a different Load Forecast Uncertainty (LFU). As the calculation of weather normalization moves from weekly to monthly and then to seasonal, there are higher peak demands but progressively lower uncertainty around those peaks.

The weather scenarios are generated using the following steps:

- For each day over the past 31 years a "weather factor" is calculated based on the weather conditions of that day (temperature, wind speed, cloud cover and humidity). This weather factor represents the MW impact on demand if those weather conditions were observed in the forecast horizon.
- The daily weather factors are sorted from highest to lowest within their normalization periodicity – they are sorted within the week, month or season.
- Normal weather is based on the median value of the sorted weather factors across the 31 years of history. For example (using monthly normalization), the median value of the maximum weather factor from each January from 1976 to 2006 would be the first day in the normal January. The median value of the second highest weather factor from each January from 1976 to 2006 would be the second day in the normal January. This is repeated until all days in the week, month or season are generated. Once the normal months are created they are mapped to the calendar based on the weekly average distribution of weather. The

weekly peak eliciting weather is always mapped to Wednesday to ensure that peaks do not occur on weekends or holidays.

- Extreme weather is generated in a similar manner except that we use the maximum, rather than the median value from the sorted data. The weekly, monthly and seasonal normalizations will have points in their extreme weather set in common.

Load Forecast Uncertainty (LFU) - a measure of demand fluctuations due to weather variability - is a critical part of the analysis. In conjunction with the normal weather forecast, LFU is valuable in determining a distribution of potential outcomes under various weather conditions. The resource adequacy assessments use the normal weather forecast in combination with LFU to consider a full range of peak demands that can occur under various weather conditions with varying probability of occurrence.

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

Table 3.2 has information about the Monthly 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 in the demand models – the data in the table below is for Toronto. The weather scenarios were updated for data through the end of October 2006.

**Table 3.2: Monthly Normal and Extreme Weather**

Week Ending	Monthly Normal Peak Date	Monthly Normal Temperature (°C)	Normal Wind Speed (km/hr)	Extreme Peak Date	Extreme Temperature (°C)	Extreme Wind Speed (km/hr)
01-Jul-07	09-Jun-04	31.3	27	17-Jun-94	32.6	13
08-Jul-07	21-Jul-78	29.2	13	16-Jul-99	33.8	25
15-Jul-07	08-Jul-94	29.6	20	03-Jul-02	34.7	21
22-Jul-07	06-Jul-93	30.2	29	14-Jul-95	36.7	17
29-Jul-07	07-Jul-81	30.9	13	01-Jul-02	35.1	15
05-Aug-07	08-Aug-96	27.0	9	08-Aug-01	37.2	25
12-Aug-07	06-Aug-83	30.8	9	01-Aug-06	36.4	33
19-Aug-07	15-Aug-78	28.9	15	02-Aug-06	33.1	20
26-Aug-07	03-Aug-06	23.3	6	02-Aug-88	30.8	15
02-Sep-07	02-Aug-00	27.5	22	14-Aug-88	33.5	24
09-Sep-07	08-Sep-91	26.1	11	03-Sep-73	32.8	9
16-Sep-07	11-Sep-78	29.6	19	09-Sep-02	33.5	15
23-Sep-07	21-Sep-80	26.8	19	16-Sep-91	31.2	30
30-Sep-07	27-Sep-94	19.5	16	22-Sep-70	26.7	21
07-Oct-07	30-Sep-92	9.5	17	01-Oct-02	28.8	34
14-Oct-07	07-Oct-81	9.5	40	12-Oct-88	4.6	24
21-Oct-07	17-Oct-03	9.8	19	20-Oct-74	2.2	27
28-Oct-07	29-Oct-83	5.6	25	26-Oct-79	2.5	27
04-Nov-07	30-Oct-92	4.0	10	07-Nov-93	2.6	26
11-Nov-07	11-Nov-79	3.8	16	12-Nov-95	0.5	34
18-Nov-07	20-Nov-93	1.0	36	13-Nov-86	-4.2	12
25-Nov-07	22-Nov-97	-2.0	11	21-Nov-87	-8.0	23
02-Dec-07	30-Nov-86	-2.0	14	03-Dec-89	-9.2	35
09-Dec-07	16-Dec-02	-7.1	26	14-Dec-89	-10.1	15
16-Dec-07	25-Dec-84	-8.4	28	26-Dec-89	-13.5	40
23-Dec-07	13-Dec-86	-6.0	20	27-Dec-93	-9.5	23
30-Dec-07	28-Dec-99	-4.3	25	26-Dec-93	-17.0	33
06-Jan-08	26-Jan-00	-10.2	41	06-Jan-94	-14.0	31
13-Jan-08	10-Jan-79	-8.8	28	26-Jan-94	-17.7	22
20-Jan-08	21-Jan-91	-13.5	21	15-Jan-94	-21.4	20
27-Jan-08	09-Jan-78	-13.0	37	10-Jan-82	-15.8	41

(Table 3.2 continued)

Week Ending	Monthly Normal Peak Date	Monthly Normal Temperature (°C)	Normal Wind Speed (km/hr)	Extreme Peak Date	Extreme Temperature (°C)	Extreme Wind Speed (km/hr)
03-Feb-08	11-Jan-79	-8.7	18	16-Jan-94	-13.8	15
10-Feb-08	15-Feb-91	-13.5	37	05-Feb-95	-17.6	41
17-Feb-08	29-Feb-92	-8.7	21	06-Feb-95	-15.4	19
24-Feb-08	26-Feb-86	-8.0	0	13-Feb-79	-17.0	16
02-Mar-08	04-Feb-89	-7.5	4	11-Feb-79	-17.2	2
09-Mar-08	08-Mar-95	-5.5	24	03-Mar-03	-14.3	6
16-Mar-08	12-Mar-01	-2.4	33	12-Mar-84	-11.3	7
23-Mar-08	24-Mar-90	-1.5	12	20-Mar-86	-11.1	29
30-Mar-08	01-Apr-93	1.1	14	25-Mar-02	-3.5	15
06-Apr-08	01-Apr-85	2.8	39	06-Apr-82	-7.4	38
13-Apr-08	15-Apr-88	5.0	26	07-Apr-03	-2.0	36
20-Apr-08	20-Apr-78	3.4	27	17-Apr-02	28.2	22
27-Apr-08	27-Apr-88	7.1	28	27-Apr-90	29.4	20
04-May-08	27-Apr-98	8.6	25	06-May-00	30.1	29
11-May-08	11-May-90	11.4	35	09-May-79	29.7	22
18-May-08	21-May-06	8.7	42	19-May-96	28.8	39
25-May-08	26-May-89	24.8	30	23-May-75	27.8	7
01-Jun-08	30-May-94	27.2	23	30-May-06	32.8	14
08-Jun-08	26-Jun-90	27.9	26	13-Jun-05	29.8	13
15-Jun-08	22-Jun-06	30.6	27	16-Jun-94	32.5	11
22-Jun-08	09-Jun-84	29.3	19	18-Jun-94	35.2	10
29-Jun-08	09-Jun-04	31.3	27	17-Jun-94	32.6	13
06-Jul-08	21-Jul-78	29.2	13	16-Jul-99	33.8	25
13-Jul-08	08-Jul-94	29.6	20	03-Jul-02	34.7	21
20-Jul-08	06-Jul-93	30.2	29	14-Jul-95	36.7	17
27-Jul-08	07-Jul-81	30.9	13	01-Jul-02	35.1	15
03-Aug-08	13-Jul-98	29.8	14	04-Jul-02	31.8	26
10-Aug-08	06-Aug-83	30.8	9	01-Aug-06	36.4	33
17-Aug-08	15-Aug-78	28.9	15	02-Aug-06	33.1	20
24-Aug-08	02-Aug-00	27.5	22	14-Aug-88	33.5	24
31-Aug-08	05-Aug-96	28.0	12	05-Aug-88	31.4	21
07-Sep-08	08-Sep-91	26.1	11	03-Sep-73	32.8	9
14-Sep-08	11-Sep-78	29.6	19	09-Sep-02	33.5	15
21-Sep-08	21-Sep-80	26.8	19	16-Sep-91	31.2	30
28-Sep-08	27-Sep-94	19.5	16	22-Sep-70	26.7	21
05-Oct-08	30-Sep-92	9.5	17	01-Oct-02	28.8	34
12-Oct-08	07-Oct-81	9.5	40	12-Oct-88	4.6	24
19-Oct-08	17-Oct-03	9.8	19	20-Oct-74	2.2	27
26-Oct-08	29-Oct-83	5.6	25	26-Oct-79	2.5	27
02-Nov-08	30-Oct-92	4.0	10	07-Nov-93	2.6	26
09-Nov-08	11-Nov-79	3.8	16	12-Nov-95	0.5	34
16-Nov-08	20-Nov-93	1.0	36	13-Nov-86	-4.2	12
23-Nov-08	22-Nov-97	-2.0	11	21-Nov-87	-8.0	23
30-Nov-08	30-Nov-86	-2.0	14	03-Dec-89	-9.2	35
07-Dec-08	08-Dec-02	-1.4	34	08-Dec-76	-11.1	10
14-Dec-08	16-Dec-02	-7.1	26	14-Dec-89	-10.1	15
21-Dec-08	25-Dec-84	-8.4	28	26-Dec-89	-13.5	40
28-Dec-08	13-Dec-86	-6.0	20	27-Dec-93	-9.5	23
04-Jan-09	28-Dec-99	-4.3	25	26-Dec-93	-17.0	33

### 3.4 Conservation and Demand Response

For the purposes of the Outlook we separate conservation and demand response as they are treated differently. Demand response is treated like a resource that can be dispatched as necessary. Demand response includes loads in the Dispatchable Loads, Hour Ahead Dispatchable Load and OPA Demand Response programs. The Transitional Demand Response program expired in April 2007. Conservation represents a direct reduction in demand.

Demand response is treated as a resource in the two resource scenarios – Firm Resource and Planned. The Firm Resource scenario includes the total capacity of programs currently in place. That total capacity is discounted – based on historical and contract data - to reflect their reliability



available capacity. The Planned Resource scenario includes all existing programs and those slated to become active during the forecast horizon. The total capacity of these programs is once again discounted to reflect the anticipated available capacity at the time of the weekly peak.

The impacts of conservation are included in this report through the two resources scenarios. The Firm Resource scenario includes conservation programs and initiatives currently in place. The Planned Resource scenario includes the impact of targeted conservation programs and initiatives.

- End of Section -

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## 4.0 Demand Forecast

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

Figure 4.1 shows the weekly history and forecast of energy demand. The forecast includes bands that “bracket” the low and high energy forecasts. This range represents the load forecast uncertainty due to the variation in weather. The Normal forecast is the Firm Resources scenario forecast.

**Figure 4.1: Weekly Energy Demand – History and Forecast**

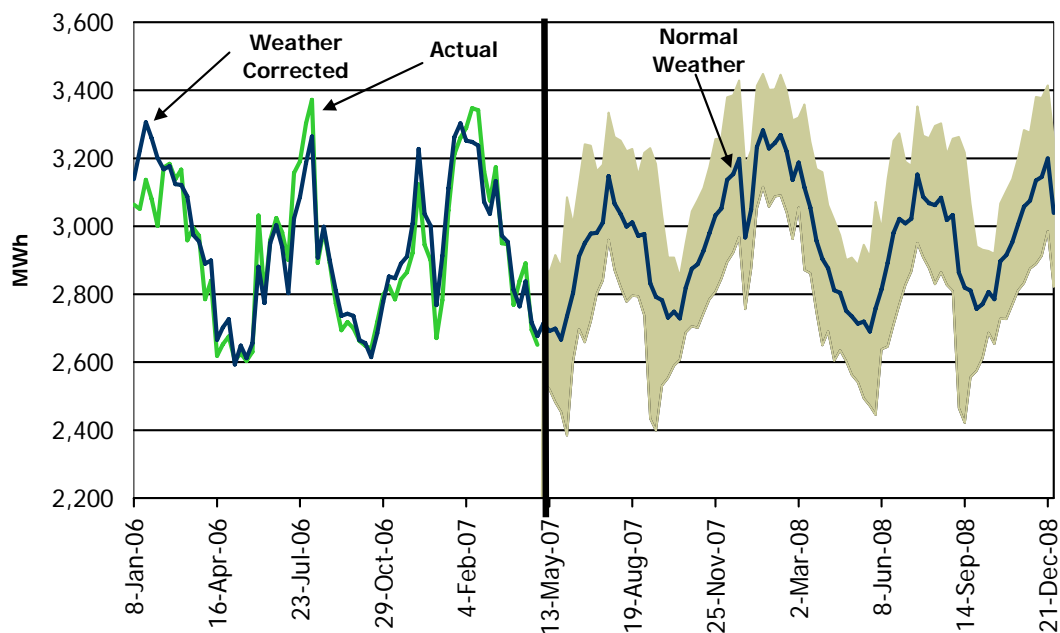


Figure 4.2 shows the range of weekly peak demands. The middle of the range represents the Monthly Normal weather peak demand for the Firm Resources scenario. Generally it is the top half of the range that is the focus of the analysis in the resource and transmission assessments. The resource adequacy 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 – History and Forecast

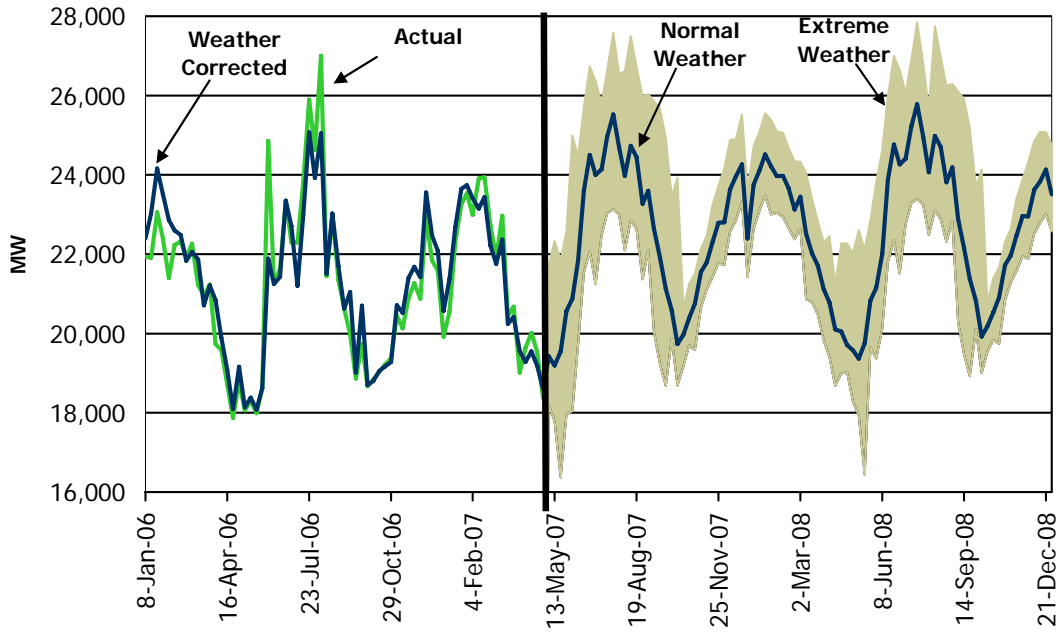
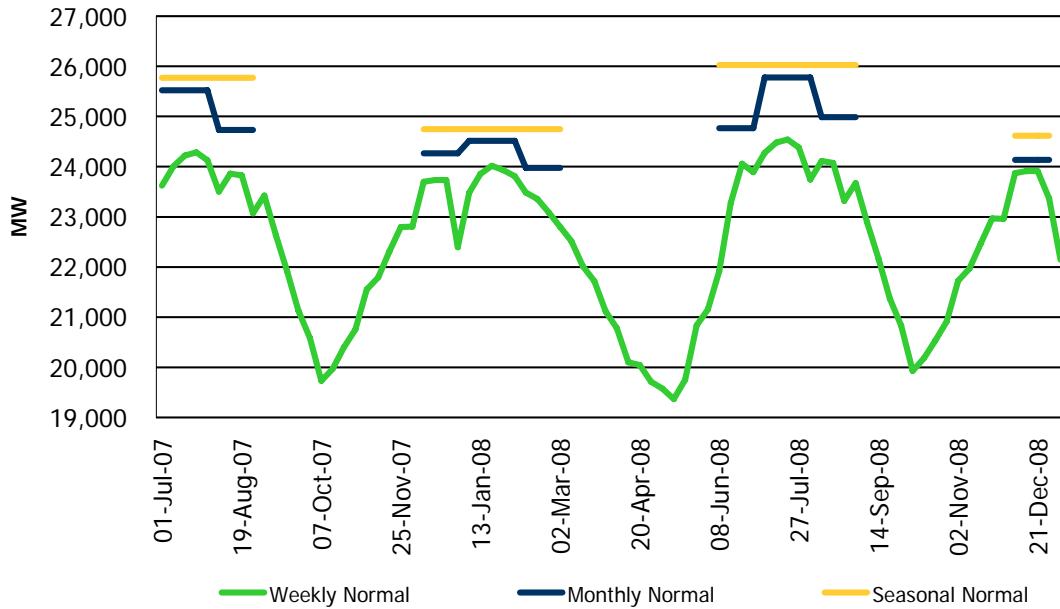


Figure 4.3 shows the forecasted peak demands under the three weather normalizations.

Figure 4.3: Weekly Peak Demand Forecast – Different Weather Normalizations



The Weekly Normal peak demands are the lowest, the Monthly Normal peak demands are higher and the Seasonal Normal peaks are slightly higher still.

Table 4.1 contains the weekly forecast of energy and peak demand. The table includes the Monthly Normal weather peak day temperature for Toronto, Monthly Normal peak demands and Monthly Normal energy demand for both the Firm Resource and Planned Resource scenarios.

Demand values in the table are prior to any demand measures as they are treated as a resource in the reliability assessment. Demand measures include loads in the Dispatchable Loads, Hour Ahead Dispatchable Load and OPA Demand Response programs and contracted loads. The impact of targeted conservation is included in the Planned Resource scenario.

**Table 4.1: Forecasted Ontario Weekly Demand**

Week Ending	Normal Peak Day Temperature (°C)	Firm Resource Scenario			Planned Resource Scenario		
		Monthly Normal Peak Demand (MW)	Extreme Peak Demand (MW)	Normal Energy (GWh)	Monthly Normal Peak Demand (MW)	Extreme Peak Demand (MW)	Normal Energy (GWh)
01-Jul-07	31.3	24,003	26,375	2,979	24,003	26,375	2,979
08-Jul-07	29.2	24,139	25,794	2,981	24,139	25,794	2,981
15-Jul-07	29.6	24,970	26,651	3,011	24,969	26,651	3,011
22-Jul-07	30.2	25,525	27,585	3,147	25,525	27,585	3,147
29-Jul-07	30.9	24,699	26,550	3,066	24,699	26,550	3,066
05-Aug-07	27.0	23,976	26,611	3,036	23,976	26,611	3,036
12-Aug-07	30.8	24,735	27,497	2,999	24,735	27,497	2,999
19-Aug-07	28.9	24,453	26,728	3,012	24,453	26,728	3,012
26-Aug-07	23.3	23,269	25,971	2,971	23,269	25,971	2,971
02-Sep-07	27.5	23,599	26,033	2,977	23,599	26,033	2,977
09-Sep-07	26.1	22,636	25,860	2,832	22,636	25,860	2,832
16-Sep-07	29.6	21,906	25,660	2,791	21,906	25,660	2,791
23-Sep-07	26.8	21,125	24,922	2,782	21,125	24,922	2,782
30-Sep-07	19.5	20,582	23,455	2,731	20,582	23,455	2,731
07-Oct-07	9.5	19,732	23,917	2,749	19,732	23,917	2,749
14-Oct-07	9.5	19,969	20,643	2,728	19,969	20,643	2,728
21-Oct-07	9.8	20,394	21,253	2,818	20,394	21,253	2,818
28-Oct-07	5.6	20,753	21,513	2,875	20,753	21,513	2,875
04-Nov-07	4.0	21,553	22,145	2,889	21,553	22,145	2,889
11-Nov-07	3.8	21,797	22,465	2,927	21,797	22,465	2,927
18-Nov-07	1.0	22,315	23,259	2,979	22,315	23,259	2,979
25-Nov-07	-2.0	22,793	23,716	3,032	22,793	23,716	3,032
02-Dec-07	-2.0	22,803	24,173	3,052	22,803	24,173	3,052
09-Dec-07	-7.1	23,630	24,887	3,137	23,630	24,887	3,137
16-Dec-07	-8.4	23,960	24,901	3,154	23,960	24,901	3,154
23-Dec-07	-6.0	24,265	25,524	3,198	24,265	25,524	3,198
30-Dec-07	-4.3	22,393	23,615	2,967	22,393	23,615	2,967
06-Jan-08	-10.2	23,753	24,722	3,049	23,409	24,377	3,005
13-Jan-08	-8.8	24,107	25,090	3,233	23,698	24,681	3,174
20-Jan-08	-13.5	24,516	25,548	3,282	24,100	25,132	3,221
27-Jan-08	-13.0	24,214	25,382	3,229	23,766	24,935	3,169
03-Feb-08	-8.7	23,972	25,093	3,245	23,643	24,763	3,189
10-Feb-08	-13.5	23,976	25,061	3,268	23,590	24,675	3,211
17-Feb-08	-8.7	23,673	24,690	3,219	23,253	24,253	3,161
24-Feb-08	-8.0	23,127	24,341	3,137	22,796	24,010	3,090
02-Mar-08	-7.5	23,451	24,333	3,187	23,037	23,919	3,133
09-Mar-08	-5.5	22,514	24,046	3,114	22,173	23,650	3,064
16-Mar-08	-2.4	21,718	23,386	3,055	21,357	23,013	3,007
23-Mar-08	-1.5	21,418	22,836	2,957	21,053	22,440	2,910
30-Mar-08	1.1	20,817	22,294	2,904	20,496	22,037	2,863
06-Apr-08	2.8	20,480	22,455	2,876	20,229	22,131	2,840
13-Apr-08	5.0	20,101	21,256	2,811	19,846	20,996	2,779
20-Apr-08	3.4	20,048	22,271	2,804	19,857	22,115	2,775
27-Apr-08	7.1	19,710	22,273	2,751	19,539	22,107	2,720

(Table 4.1 continued)

Week Ending	Normal Peak Day Temperature (°C)	Firm Resource Scenario			Planned Resource Scenario		
		Monthly Normal Peak Demand (MW)	Extreme Peak Demand (MW)	Normal Energy (GWh)	Monthly Normal Peak Demand (MW)	Extreme Peak Demand (MW)	Normal Energy (GWh)
04-May-08	8.6	19,576	22,026	2,735	19,343	21,872	2,706
11-May-08	11.4	19,365	22,606	2,713	19,173	22,452	2,686
18-May-08	8.7	19,751	22,123	2,720	19,601	21,952	2,693
25-May-08	24.8	20,834	22,853	2,690	20,687	22,706	2,664
01-Jun-08	27.2	21,152	23,813	2,758	20,971	23,655	2,732
08-Jun-08	27.9	22,015	24,631	2,815	21,829	24,445	2,787
15-Jun-08	30.6	23,874	25,981	2,892	23,681	25,788	2,865
22-Jun-08	29.3	24,766	26,996	2,981	24,519	26,749	2,950
29-Jun-08	31.3	24,269	26,643	3,021	24,080	26,454	2,994
06-Jul-08	29.2	24,409	26,064	3,008	24,200	25,855	2,980
13-Jul-08	29.6	25,227	26,908	3,022	24,977	26,659	2,994
20-Jul-08	30.2	25,779	27,840	3,152	25,566	27,627	3,123
27-Jul-08	30.9	24,954	26,804	3,087	24,721	26,571	3,059
03-Aug-08	29.8	24,065	25,669	3,067	23,836	25,440	3,040
10-Aug-08	30.8	24,985	27,748	3,062	24,781	27,505	3,035
17-Aug-08	28.9	24,704	26,978	3,084	24,501	26,776	3,058
24-Aug-08	27.5	23,811	26,245	3,019	23,599	26,033	2,992
31-Aug-08	28.0	24,185	26,296	3,033	23,978	26,089	3,007
07-Sep-08	26.1	22,889	26,113	2,864	22,722	25,946	2,838
14-Sep-08	29.6	22,159	25,913	2,819	21,973	25,717	2,792
21-Sep-08	26.8	21,374	25,175	2,811	21,174	24,987	2,784
28-Sep-08	19.5	20,829	23,707	2,757	20,652	23,537	2,730
05-Oct-08	9.5	19,929	24,130	2,771	19,737	23,978	2,740
12-Oct-08	9.5	20,184	20,781	2,806	19,968	20,587	2,777
19-Oct-08	9.8	20,533	21,392	2,786	20,328	21,187	2,756
26-Oct-08	5.6	20,910	21,670	2,897	20,703	21,463	2,868
02-Nov-08	4.0	21,726	22,312	2,915	21,508	22,078	2,884
09-Nov-08	3.8	21,969	22,637	2,953	21,732	22,393	2,921
16-Nov-08	1.0	22,465	23,409	3,005	22,179	23,143	2,969
23-Nov-08	-2.0	22,965	23,884	3,058	22,741	23,653	3,021
30-Nov-08	-2.0	22,956	24,326	3,075	22,669	24,032	3,035
07-Dec-08	-1.4	23,627	24,861	3,134	23,307	24,541	3,091
14-Dec-08	-7.1	23,832	25,088	3,145	23,467	24,723	3,093
21-Dec-08	-8.4	24,136	25,077	3,199	23,789	24,730	3,152
28-Dec-08	-6.0	23,510	24,769	3,039	23,170	24,429	2,995

#### 4.1 Load Duration Curves – Summer 2007

This section looks at the load duration curves for the summer of 2007. Load duration curves are useful as they tie together the peak and energy demands, and give a sense of the distribution of hourly demands.

The load duration curves for the summer of 2007 cover the period from June 1, 2007 to September 30, 2007. Hourly demand profiles for the summer are generated based on Monthly and Seasonal Normal weather. In addition, certain select scenarios are generated based on historical weather data. Three scenarios are generated based on the weather from 1999, 2002 and 2005. This section compares those scenarios with the actuals from the past summer (2006).

Figure 4.4 shows the highest 5% of hourly demands for the summer of 2006 and the forecast for 2007 based on Monthly Normal weather and the weather from 2002 and 2005. Note that the summer of 2006 set a new all-time peak but the load quickly falls away, indicative of a more mild summer.

Figure 4.4: Load Duration Curve - Summer 2007

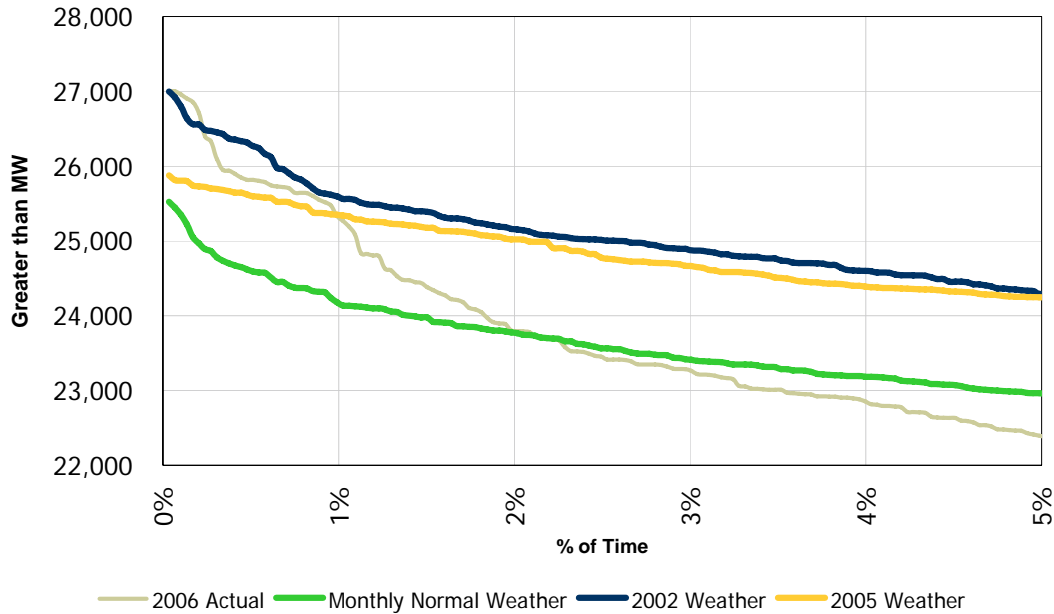


Table 4.2 shows the summary statistics for the summer of 2007 under the various weather scenarios shown in Figure 4.4 as well as under the Seasonal normal weather scenario. The table has the maximum, minimum and average demand for the winter. As well, it shows the demand level at the 90<sup>th</sup> 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 warmest weather of any week has a 2 in 7 chance of occurring on a weekend and therefore having a lower demand impact.

Table 4.2: Summary Statistics - Summer 2007

Summer 2007 (June 1st to September 30th)	Monthly Normal	Seasonal Normal	2006 Actual	1999 Weather	2002 Weather	2005 Weather
Maximum Hour (MW)	25,525	25,773	27,005	26,968	26,997	25,878
Average Hour (MW)	17,445	17,439	17,495	17,877	18,091	18,286
Minimum Hour (MW)	10,610	10,674	11,796	10,626	10,774	10,788
Standard Deviation (MW)	3,325	3,349	2,904	3,544	3,682	3,640
90th Percentile (MW)	22,029	22,164	21,252	22,882	23,257	23,334
Percent above 23,000 MW	4.8%	5.0%	3.5%	9.1%	11.6%	12.2%
# of Hours Above 23,000 MW	141	146	102	266	340	357

#### 4.2 Load Duration Curves - Winter 2007-08

For the purpose of the load duration curves we define winter as the period from November 1<sup>st</sup>, 2007 to March 31<sup>st</sup>, 2008. In this analysis demand values are generated using the Monthly Normal weather, Seasonal Normal weather and three historical weather scenarios. The historical weather scenarios are based on the summer weather from 1976-77, 1989-90 and 1993-94.

Figure 4.5 shows the highest 5% of hourly demand for the winter of 2005-06 along with the forecast for the winter 2007-08 based on the Monthly Normal, 1976-77, 1989-90 and 1993-94 weather.

Figure 4.5: Load Duration Curve - Winter 2007-08

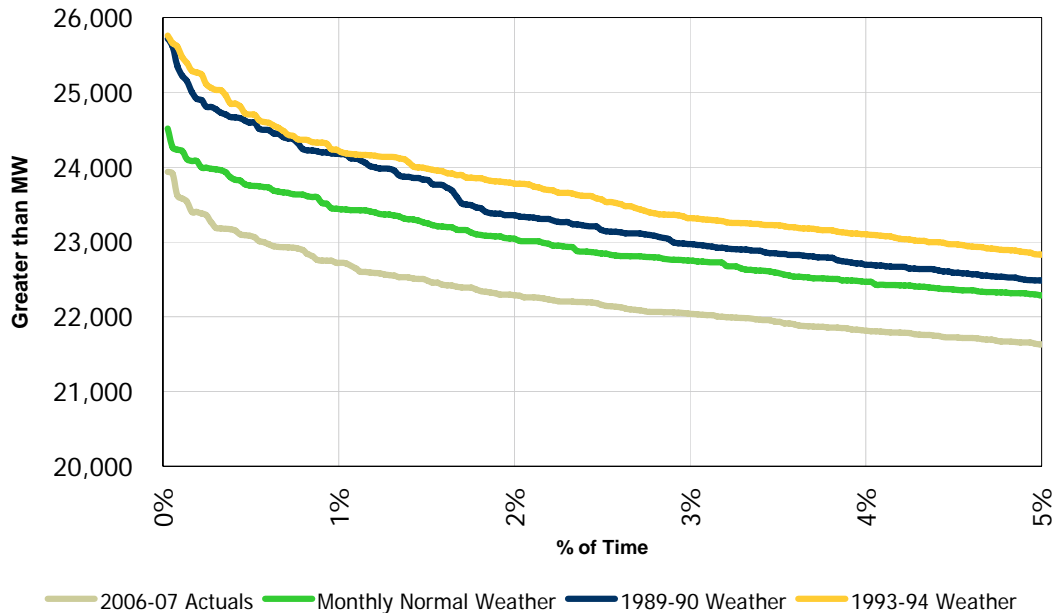


Table 4.3 shows the summary statistics for the winter of 2007-08 under the various weather scenarios as well as the summary statistics for the actuals for winter 2005-06. The table has the maximum, minimum and average demand for the summer. As well, it shows the demand level at the 90<sup>th</sup> percentile and the percent and number of hours above 23,000 MW.

Table 4.3: Summary Statistics - Winter 2007-08

Winter 2007-08 (November 1st to March 31st)	Monthly Normal Weather	Seasonal Normal Weather	2006-07 Actuals	1989-90 Weather	1976-77 Weather	1993-94 Weather
Maximum Hour (MW)	24,516	24,745	23,935	25,719	25,034	25,760
Average Hour (MW)	18,497	18,556	17,950	18,600	18,874	18,805
Minimum Hour (MW)	12,783	12,926	12,246	12,536	13,160	13,142
Standard Deviation (MW)	2,475	2,502	2,344	2,555	2,534	2,579
90th Percentile (MW)	21,589	21,674	20,959	21,777	22,080	22,133
Percent above 23,000 MW	2.2%	2.6%	0.6%	2.9%	4.2%	4.4%
# of Hours Above 23,000 MW	80	95	22	106	153	161



### 4.3 Comparison of Current and Previous Forecast

This section compares the current forecast with that released March 9, 2007.

The biggest change is due to the inclusion of actuals and the impact on the relationship between demand and economic factors. As well, this Outlook includes a demand forecast under the Firm and Planned Resource scenario. Only the Firm Resource scenario is directly comparable to the previous forecast.

Table 4.4 shows the difference between the current demand forecast for the Firm Resource scenario and previous forecast for the common seasons of the forecasts.

**Table 4.4: Current Firm Resource Scenario versus Previous Forecast**

Season	Energy Demand	Monthly Normal Peak Demand	Extreme Weather Peak Demand
	(GWh)	(MW)	(MW)
Summer 2007	13,471	25,525	27,585
Difference (Current - Previous)	-9	9	10
Fall 2007	12,785	22,803	25,860
Difference (Current - Previous)	-38	-12	10
Winter 2007-08	14,320	24,516	25,548
Difference (Current - Previous)	-58	-50	-28
Spring 2008	13,280	22,514	24,046
Difference (Current - Previous)	127	-16	-26
Summer 2008	13,669	25,779	27,840
Difference (Current - Previous)	-8	15	17

- End of Section -

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## Appendix A Energy Demand Forecast Details

**Table A1: Weekly Zonal Energy Forecast, Monthly Normal Weather, Firm Resource Scenario**

Week Ending	Weekly Normal Energy (GWh) - Firm Resources Scenario										
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System
01-Jul-07	116	202	183	152	221	1,057	112	8	587	338	2,976
08-Jul-07	112	202	184	153	217	1,053	113	9	587	351	2,981
15-Jul-07	115	202	184	153	220	1,072	115	8	590	351	3,011
22-Jul-07	116	205	193	163	233	1,126	120	7	615	369	3,147
29-Jul-07	117	206	191	162	232	1,075	117	7	597	362	3,066
05-Aug-07	117	206	187	157	228	1,072	113	7	598	353	3,036
12-Aug-07	118	212	184	154	226	1,037	117	7	583	361	2,999
19-Aug-07	118	216	184	153	228	1,041	115	8	591	357	3,012
26-Aug-07	118	220	180	149	220	1,020	117	7	580	360	2,971
02-Sep-07	118	226	180	149	221	1,028	113	8	590	345	2,977
09-Sep-07	111	222	171	137	207	974	110	8	555	339	2,832
16-Sep-07	114	220	166	132	206	957	104	8	559	326	2,791
23-Sep-07	113	218	163	127	207	953	104	9	559	329	2,782
30-Sep-07	114	217	164	127	212	927	100	8	549	312	2,731
07-Oct-07	115	226	168	133	212	925	96	9	559	306	2,749
14-Oct-07	117	229	170	137	208	912	94	9	550	300	2,728
21-Oct-07	121	232	176	146	214	941	98	9	572	309	2,818
28-Oct-07	121	239	183	154	220	953	99	10	584	311	2,875
04-Nov-07	121	242	187	159	219	960	98	10	584	309	2,889
11-Nov-07	125	245	189	154	228	967	100	10	591	317	2,927
18-Nov-07	125	245	195	161	228	988	102	11	602	323	2,979
25-Nov-07	125	250	201	166	233	1,006	102	11	611	326	3,032
02-Dec-07	127	254	204	169	234	1,009	104	12	612	329	3,052
09-Dec-07	127	256	213	177	241	1,040	106	12	628	336	3,137
16-Dec-07	128	259	216	179	243	1,043	107	12	630	337	3,154
23-Dec-07	131	265	221	184	250	1,052	108	12	636	339	3,198
30-Dec-07	112	247	211	181	249	963	93	13	586	312	2,967
06-Jan-08	126	258	213	185	239	989	100	11	606	321	3,049
13-Jan-08	134	266	228	194	258	1,050	108	12	641	342	3,233
20-Jan-08	133	265	236	200	264	1,069	108	13	653	341	3,282
27-Jan-08	134	267	228	194	256	1,050	106	12	644	337	3,229
03-Feb-08	136	264	228	194	256	1,057	108	13	649	342	3,245
10-Feb-08	134	263	231	198	254	1,068	109	13	655	344	3,268
17-Feb-08	130	260	226	193	252	1,053	107	12	647	339	3,219
24-Feb-08	130	256	215	186	242	1,028	105	12	630	333	3,137
02-Mar-08	132	258	220	188	247	1,047	107	12	638	338	3,187
09-Mar-08	128	252	212	182	237	1,025	106	12	625	335	3,114
16-Mar-08	121	252	209	177	243	1,003	102	12	611	325	3,055
23-Mar-08	121	248	199	168	232	970	98	11	593	316	2,957
30-Mar-08	119	241	191	163	226	956	99	11	584	315	2,904

(Table A1 continued)

Week Ending	Weekly Normal Energy (GWh) - Firm Resources Scenario										
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System
06-Apr-08	117	240	185	159	217	950	99	11	581	316	2,876
13-Apr-08	115	235	180	158	209	927	97	11	570	311	2,811
20-Apr-08	113	233	179	159	207	933	97	10	566	308	2,804
27-Apr-08	115	224	174	156	202	914	96	9	558	304	2,751
04-May-08	114	215	173	156	202	913	94	9	558	301	2,735
11-May-08	114	214	171	154	201	905	93	9	553	301	2,713
18-May-08	112	214	172	152	201	918	94	8	552	298	2,720
25-May-08	112	214	170	149	201	904	94	8	538	300	2,690
01-Jun-08	112	211	174	152	205	939	95	8	558	306	2,758
08-Jun-08	115	209	173	148	208	961	102	7	561	330	2,815
15-Jun-08	117	206	179	153	214	996	104	8	578	336	2,892
22-Jun-08	117	205	182	156	217	1,046	110	8	589	350	2,981
29-Jun-08	116	204	187	162	224	1,070	112	9	596	342	3,021
06-Jul-08	111	203	186	162	225	1,047	115	9	591	359	3,008
13-Jul-08	115	204	187	161	227	1,069	112	8	593	345	3,022
20-Jul-08	115	206	194	170	235	1,117	120	7	615	372	3,152
27-Jul-08	115	206	189	167	226	1,091	116	7	605	364	3,087
03-Aug-08	116	207	188	166	225	1,085	113	7	604	354	3,067
10-Aug-08	116	213	187	163	227	1,072	116	8	600	361	3,062
17-Aug-08	117	217	188	164	232	1,065	120	8	601	372	3,084
24-Aug-08	118	221	184	160	229	1,033	115	8	591	358	3,019
31-Aug-08	117	225	184	159	227	1,049	114	8	599	351	3,033
07-Sep-08	110	222	172	146	209	984	109	8	563	340	2,864
14-Sep-08	113	222	167	140	208	964	104	9	566	327	2,819
21-Sep-08	112	220	164	135	209	961	104	9	566	330	2,811
28-Sep-08	113	219	165	134	214	934	99	9	556	313	2,757
05-Oct-08	114	227	168	140	215	931	95	9	565	307	2,771
12-Oct-08	116	228	173	145	214	946	96	9	571	308	2,806
19-Oct-08	119	235	175	151	214	920	94	10	565	303	2,786
26-Oct-08	120	240	184	161	222	959	98	10	591	312	2,897
02-Nov-08	121	243	187	165	222	967	97	10	592	311	2,915
09-Nov-08	124	246	190	162	231	974	99	11	599	318	2,953
16-Nov-08	123	247	195	167	231	995	101	11	610	324	3,005
23-Nov-08	124	251	202	173	235	1,013	101	12	619	327	3,058
30-Nov-08	126	255	204	176	236	1,015	102	12	619	329	3,075
07-Dec-08	134	260	208	180	237	1,033	105	12	628	336	3,134
14-Dec-08	131	261	213	183	243	1,035	104	12	630	333	3,145
21-Dec-08	131	266	219	188	249	1,052	105	13	639	337	3,199
28-Dec-08	119	247	215	189	252	987	94	13	604	318	3,039
04-Jan-09	124	253	212	190	241	980	96	12	604	315	3,027

**Table A2: Weekly Zonal Energy Forecast, Monthly Normal Weather, Planned Resource Scenario**

Week Ending	Weekly Normal Energy (GWh) - Planned Resource Scenario										
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System
01-Jul-07	116	202	183	152	221	1,057	112	8	587	338	2,976
08-Jul-07	112	202	184	153	217	1,053	113	9	587	351	2,981
15-Jul-07	115	202	184	153	220	1,072	115	8	590	351	3,011
22-Jul-07	116	205	193	163	233	1,126	120	7	615	369	3,147
29-Jul-07	117	206	191	162	232	1,075	117	7	597	362	3,066
05-Aug-07	117	206	187	157	228	1,072	113	7	598	353	3,036
12-Aug-07	118	212	184	154	226	1,037	117	7	583	361	2,999
19-Aug-07	118	216	184	153	228	1,041	115	8	591	357	3,012
26-Aug-07	118	220	180	149	220	1,020	117	7	580	360	2,971
02-Sep-07	118	226	180	149	221	1,028	113	8	590	345	2,977
09-Sep-07	111	222	171	137	207	974	110	8	555	339	2,832
16-Sep-07	114	220	166	132	206	957	104	8	559	326	2,791
23-Sep-07	113	218	163	127	207	953	104	9	559	329	2,782
30-Sep-07	114	217	164	127	212	927	100	8	549	312	2,731
07-Oct-07	115	226	168	133	212	925	96	9	559	306	2,749
14-Oct-07	117	229	170	137	208	912	94	9	550	300	2,728
21-Oct-07	121	232	176	146	214	941	98	9	572	309	2,818
28-Oct-07	121	239	183	154	220	953	99	10	584	311	2,875
04-Nov-07	121	242	187	159	219	960	98	10	584	309	2,889
11-Nov-07	125	245	189	154	228	967	100	10	591	317	2,927
18-Nov-07	125	245	195	161	228	988	102	11	602	323	2,979
25-Nov-07	125	250	201	166	233	1,006	102	11	611	326	3,032
02-Dec-07	127	254	204	169	234	1,009	104	12	612	329	3,052
09-Dec-07	127	256	213	177	241	1,040	106	12	628	336	3,137
16-Dec-07	128	259	216	179	243	1,043	107	12	630	337	3,154
23-Dec-07	131	265	221	184	250	1,052	108	12	636	339	3,198
30-Dec-07	112	247	211	181	249	963	93	13	586	312	2,967
06-Jan-08	126	258	213	185	239	989	100	11	606	321	3,049
13-Jan-08	134	266	228	194	258	1,050	108	12	641	342	3,233
20-Jan-08	133	265	236	200	264	1,069	108	13	653	341	3,282
27-Jan-08	134	267	228	194	256	1,050	106	12	644	337	3,229
03-Feb-08	136	264	228	194	256	1,057	108	13	649	342	3,245
10-Feb-08	134	263	231	198	254	1,068	109	13	655	344	3,268
17-Feb-08	130	260	226	193	252	1,053	107	12	647	339	3,219
24-Feb-08	130	256	215	186	242	1,028	105	12	630	333	3,137
02-Mar-08	132	258	220	188	247	1,047	107	12	638	338	3,187
09-Mar-08	128	252	212	182	237	1,025	106	12	625	335	3,114
16-Mar-08	121	252	209	177	243	1,003	102	12	611	325	3,055
23-Mar-08	121	248	199	168	232	970	98	11	593	316	2,957
30-Mar-08	119	241	191	163	226	956	99	11	584	315	2,904

(Table A2 continued)

Week Ending	Weekly Normal Energy (GWh) - Planned Resource Scenario										
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System
06-Apr-08	115	235	180	158	209	927	97	11	570	311	2,811
13-Apr-08	113	233	179	159	207	933	97	10	566	308	2,804
20-Apr-08	115	224	174	156	202	914	96	9	558	304	2,751
27-Apr-08	114	215	173	156	202	913	94	9	558	301	2,735
04-May-08	114	214	171	154	201	905	93	9	553	301	2,713
11-May-08	112	214	172	152	201	918	94	8	552	298	2,720
18-May-08	112	214	170	149	201	904	94	8	538	300	2,690
25-May-08	112	211	174	152	205	939	95	8	558	306	2,758
01-Jun-08	115	209	173	148	208	961	102	7	561	330	2,815
08-Jun-08	117	206	179	153	214	996	104	8	578	336	2,892
15-Jun-08	117	205	182	156	217	1,046	110	8	589	350	2,981
22-Jun-08	116	204	187	162	224	1,070	112	9	596	342	3,021
29-Jun-08	111	203	186	162	225	1,047	115	9	591	359	3,008
06-Jul-08	115	204	187	161	227	1,069	112	8	593	345	3,022
13-Jul-08	115	206	194	170	235	1,117	120	7	615	372	3,152
20-Jul-08	115	206	189	167	226	1,091	116	7	605	364	3,087
27-Jul-08	116	207	188	166	225	1,085	113	7	604	354	3,067
03-Aug-08	116	213	187	163	227	1,072	116	8	600	361	3,062
10-Aug-08	117	217	188	164	232	1,065	120	8	601	372	3,084
17-Aug-08	118	221	184	160	229	1,033	115	8	591	358	3,019
24-Aug-08	117	225	184	159	227	1,049	114	8	599	351	3,033
31-Aug-08	110	222	172	146	209	984	109	8	563	340	2,864
07-Sep-08	113	222	167	140	208	964	104	9	566	327	2,819
14-Sep-08	112	220	164	135	209	961	104	9	566	330	2,811
21-Sep-08	113	219	165	134	214	934	99	9	556	313	2,757
28-Sep-08	114	227	168	140	215	931	95	9	565	307	2,771
05-Oct-08	116	228	173	145	214	946	96	9	571	308	2,806
12-Oct-08	119	235	175	151	214	920	94	10	565	303	2,786
19-Oct-08	120	240	184	161	222	959	98	10	591	312	2,897
26-Oct-08	121	243	187	165	222	967	97	10	592	311	2,915
02-Nov-08	124	246	190	162	231	974	99	11	599	318	2,953
09-Nov-08	123	247	195	167	231	995	101	11	610	324	3,005
16-Nov-08	124	251	202	173	235	1,013	101	12	619	327	3,058
23-Nov-08	126	255	204	176	236	1,015	102	12	619	329	3,075
30-Nov-08	134	260	208	180	237	1,033	105	12	628	336	3,134
07-Dec-08	131	261	213	183	243	1,035	104	12	630	333	3,145
14-Dec-08	131	266	219	188	249	1,052	105	13	639	337	3,199
21-Dec-08	119	247	215	189	252	987	94	13	604	318	3,039
28-Dec-08	124	253	212	190	241	980	96	12	604	315	3,027

- End of Section -

## Appendix B Peak Demand Forecast Details

**Table B1: Weekly Zonal Coincident Peak Demand Forecast, Monthly Normal Weather, Firm Resources Scenario**

Week Ending	Hourly Coincident Peak Demand (MW) - Firm Resource Scenario											
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System	Load Forecast Uncertainty
01-Jul-07	725	1,271	1,396	1,262	1,677	9,127	917	60	4,746	2,831	24,012	1,380
08-Jul-07	695	1,291	1,410	1,263	1,702	8,939	945	71	4,821	3,002	24,139	825
15-Jul-07	734	1,310	1,480	1,362	1,802	9,552	897	58	4,922	2,854	24,970	970
22-Jul-07	734	1,330	1,518	1,429	1,875	9,540	982	55	4,968	3,094	25,525	1,192
29-Jul-07	747	1,307	1,454	1,349	1,745	9,245	959	52	4,803	3,039	24,699	857
05-Aug-07	730	1,326	1,412	1,300	1,740	8,890	896	52	4,760	2,868	23,976	939
12-Aug-07	762	1,369	1,472	1,358	1,816	9,168	937	55	4,844	2,952	24,735	945
19-Aug-07	748	1,413	1,465	1,342	1,847	8,978	925	55	4,739	2,940	24,453	914
26-Aug-07	749	1,420	1,365	1,223	1,705	8,342	921	55	4,575	2,913	23,269	955
02-Sep-07	739	1,454	1,384	1,240	1,724	8,658	894	58	4,633	2,815	23,599	748
09-Sep-07	712	1,421	1,283	1,112	1,535	8,380	880	56	4,475	2,782	22,636	1,306
16-Sep-07	704	1,408	1,188	1,007	1,469	8,095	860	56	4,356	2,761	21,906	1,340
23-Sep-07	688	1,333	1,091	891	1,364	7,895	840	55	4,279	2,689	21,125	1,217
30-Sep-07	733	1,393	1,163	942	1,553	7,426	783	50	4,024	2,515	20,582	360
07-Oct-07	685	1,417	1,246	1,020	1,638	6,798	644	63	4,099	2,121	19,732	526
14-Oct-07	694	1,462	1,278	1,063	1,597	6,839	673	65	4,135	2,164	19,969	408
21-Oct-07	752	1,472	1,333	1,111	1,634	6,962	682	66	4,188	2,194	20,394	345
28-Oct-07	730	1,535	1,396	1,178	1,694	7,017	690	70	4,243	2,201	20,753	587
04-Nov-07	757	1,581	1,459	1,221	1,707	7,367	712	72	4,420	2,256	21,553	424
11-Nov-07	769	1,577	1,470	1,199	1,753	7,429	723	74	4,484	2,317	21,797	459
18-Nov-07	791	1,581	1,542	1,300	1,800	7,534	748	79	4,568	2,373	22,315	387
25-Nov-07	790	1,672	1,567	1,304	1,844	7,792	749	80	4,593	2,402	22,793	518
02-Dec-07	796	1,669	1,593	1,356	1,852	7,625	785	83	4,609	2,436	22,803	534
09-Dec-07	811	1,690	1,702	1,465	1,937	7,938	779	91	4,781	2,436	23,630	528
16-Dec-07	846	1,698	1,722	1,479	1,961	7,995	818	92	4,822	2,527	23,960	553
23-Dec-07	816	1,750	1,783	1,543	2,027	8,085	805	92	4,865	2,499	24,265	465
30-Dec-07	742	1,657	1,638	1,418	1,934	7,432	698	88	4,498	2,289	22,393	527
06-Jan-08	804	1,683	1,802	1,597	1,950	7,793	783	81	4,795	2,465	23,753	526
13-Jan-08	833	1,736	1,799	1,547	2,021	7,957	803	90	4,810	2,508	24,107	483
20-Jan-08	818	1,717	1,845	1,589	2,066	8,172	796	94	4,925	2,494	24,516	489
27-Jan-08	842	1,761	1,800	1,563	2,016	7,980	815	92	4,829	2,515	24,214	564
03-Feb-08	834	1,733	1,757	1,503	2,013	7,966	787	90	4,806	2,484	23,972	582
10-Feb-08	809	1,701	1,758	1,522	1,968	7,991	807	91	4,820	2,509	23,976	526
17-Feb-08	816	1,676	1,743	1,515	1,998	7,900	766	88	4,752	2,418	23,673	497
24-Feb-08	787	1,616	1,653	1,452	1,933	7,793	759	83	4,673	2,379	23,126	375
02-Mar-08	842	1,648	1,678	1,476	1,924	7,896	767	83	4,700	2,437	23,451	322
09-Mar-08	776	1,584	1,577	1,404	1,808	7,613	748	80	4,547	2,377	22,514	619
16-Mar-08	740	1,603	1,512	1,327	1,884	7,262	701	80	4,366	2,243	21,718	591
23-Mar-08	729	1,573	1,457	1,272	1,797	7,264	685	78	4,338	2,225	21,418	584
30-Mar-08	710	1,532	1,414	1,232	1,806	6,994	680	72	4,179	2,197	20,817	614

(Table B1 continued)

Week Ending	Hourly Coincident Peak Demand (MW) - Firm Resource Scenario											
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System	Load Forecast Uncertainty
06-Apr-08	702	1,515	1,354	1,174	1,686	6,953	685	74	4,137	2,199	20,480	680
13-Apr-08	692	1,481	1,300	1,112	1,633	6,823	671	71	4,115	2,203	20,101	696
20-Apr-08	690	1,495	1,305	1,149	1,594	6,796	661	69	4,116	2,172	20,048	516
27-Apr-08	751	1,397	1,262	1,127	1,467	6,829	659	63	3,987	2,169	19,710	338
04-May-08	690	1,374	1,302	1,183	1,548	6,651	647	65	4,058	2,058	19,576	638
11-May-08	688	1,380	1,267	1,163	1,539	6,577	644	61	4,008	2,039	19,365	704
18-May-08	699	1,350	1,208	1,128	1,442	7,072	654	59	3,997	2,144	19,751	900
25-May-08	694	1,363	1,257	1,144	1,492	7,685	711	47	4,066	2,376	20,834	1,041
01-Jun-08	687	1,348	1,277	1,158	1,506	7,833	727	48	4,159	2,408	21,152	1,148
08-Jun-08	753	1,385	1,321	1,197	1,579	8,108	758	49	4,342	2,523	22,015	946
15-Jun-08	738	1,344	1,406	1,291	1,682	8,974	835	58	4,763	2,782	23,874	1,039
22-Jun-08	739	1,335	1,458	1,361	1,738	9,261	929	62	4,864	3,019	24,766	1,211
29-Jun-08	717	1,276	1,412	1,305	1,693	9,228	916	62	4,812	2,848	24,269	1,380
06-Jul-08	689	1,295	1,427	1,316	1,721	9,051	940	75	4,884	3,013	24,409	825
13-Jul-08	725	1,327	1,493	1,403	1,822	9,606	916	60	4,968	2,906	25,227	970
20-Jul-08	727	1,337	1,534	1,473	1,892	9,638	980	58	5,034	3,106	25,779	1,192
27-Jul-08	740	1,321	1,469	1,392	1,761	9,341	957	54	4,865	3,054	24,954	857
03-Aug-08	736	1,347	1,434	1,357	1,712	9,091	847	55	4,763	2,725	24,065	793
10-Aug-08	749	1,362	1,480	1,396	1,818	9,288	945	56	4,910	2,980	24,985	945
17-Aug-08	740	1,424	1,479	1,389	1,863	9,054	932	57	4,792	2,974	24,704	914
24-Aug-08	742	1,429	1,411	1,310	1,764	8,687	895	58	4,668	2,848	23,811	748
31-Aug-08	739	1,454	1,431	1,308	1,775	8,906	906	59	4,741	2,866	24,185	676
07-Sep-08	704	1,422	1,300	1,160	1,549	8,474	879	58	4,540	2,801	22,889	1,306
14-Sep-08	697	1,420	1,205	1,054	1,483	8,186	859	58	4,419	2,779	22,159	1,340
21-Sep-08	681	1,344	1,106	935	1,377	7,987	839	57	4,341	2,707	21,374	1,220
28-Sep-08	724	1,405	1,177	986	1,568	7,518	782	52	4,086	2,531	20,829	365
05-Oct-08	714	1,409	1,226	1,017	1,600	6,890	699	62	4,059	2,252	19,929	499
12-Oct-08	716	1,431	1,282	1,072	1,668	6,956	669	64	4,142	2,184	20,184	355
19-Oct-08	739	1,490	1,337	1,143	1,656	6,990	674	69	4,236	2,200	20,533	345
26-Oct-08	718	1,540	1,404	1,213	1,719	7,057	682	72	4,296	2,209	20,910	587
02-Nov-08	746	1,587	1,467	1,257	1,732	7,411	706	74	4,479	2,266	21,726	424
09-Nov-08	757	1,584	1,481	1,238	1,775	7,472	717	77	4,542	2,327	21,969	459
16-Nov-08	779	1,581	1,549	1,332	1,823	7,571	741	82	4,624	2,381	22,465	387
23-Nov-08	755	1,635	1,620	1,398	1,894	7,734	753	82	4,681	2,413	22,965	518
30-Nov-08	784	1,675	1,601	1,390	1,875	7,659	777	86	4,664	2,445	22,956	534
07-Dec-08	843	1,705	1,674	1,482	1,884	7,878	797	90	4,784	2,491	23,627	436
14-Dec-08	826	1,718	1,720	1,514	1,959	7,963	771	94	4,832	2,436	23,832	528
21-Dec-08	856	1,768	1,737	1,519	1,991	8,000	802	94	4,862	2,509	24,136	553
28-Dec-08	757	1,639	1,754	1,556	2,082	7,767	734	98	4,729	2,394	23,510	465
04-Jan-09	773	1,730	1,649	1,504	1,901	7,181	707	90	4,468	2,256	22,259	501



**Table B2: Weekly Zonal Coincident Peak Demand Forecast, Monthly Normal Weather, Planned Resources Scenario**

Week Ending	Hourly Coincident Peak Demand (MW) - Planned Resource Scenario											Load Forecast Uncertainty
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System	
01-Jul-07	725	1,271	1,396	1,262	1,677	9,127	917	60	4,746	2,831	24,012	1,380
08-Jul-07	695	1,291	1,410	1,263	1,702	8,939	945	71	4,821	3,002	24,139	825
15-Jul-07	734	1,310	1,480	1,362	1,802	9,552	897	58	4,922	2,854	24,970	970
22-Jul-07	734	1,330	1,518	1,429	1,875	9,540	982	55	4,968	3,094	25,525	1,192
29-Jul-07	747	1,307	1,454	1,349	1,745	9,245	959	52	4,803	3,039	24,699	857
05-Aug-07	730	1,326	1,412	1,300	1,740	8,890	896	52	4,760	2,868	23,976	939
12-Aug-07	762	1,369	1,472	1,358	1,816	9,168	937	55	4,844	2,952	24,735	945
19-Aug-07	748	1,413	1,465	1,342	1,847	8,978	925	55	4,739	2,940	24,453	914
26-Aug-07	749	1,420	1,365	1,223	1,705	8,342	921	55	4,575	2,913	23,269	955
02-Sep-07	739	1,454	1,384	1,240	1,724	8,658	894	58	4,633	2,815	23,599	748
09-Sep-07	712	1,421	1,283	1,112	1,535	8,380	880	56	4,475	2,782	22,636	1,306
16-Sep-07	704	1,408	1,188	1,007	1,469	8,095	860	56	4,356	2,761	21,906	1,340
23-Sep-07	688	1,333	1,091	891	1,364	7,895	840	55	4,279	2,689	21,125	1,217
30-Sep-07	733	1,393	1,163	942	1,553	7,426	783	50	4,024	2,515	20,582	360
07-Oct-07	685	1,417	1,246	1,020	1,638	6,798	644	63	4,099	2,121	19,732	526
14-Oct-07	694	1,462	1,278	1,063	1,597	6,839	673	65	4,135	2,164	19,969	408
21-Oct-07	752	1,472	1,333	1,111	1,634	6,962	682	66	4,188	2,194	20,394	345
28-Oct-07	730	1,535	1,396	1,178	1,694	7,017	690	70	4,243	2,201	20,753	587
04-Nov-07	757	1,581	1,459	1,221	1,707	7,367	712	72	4,420	2,256	21,553	424
11-Nov-07	769	1,577	1,470	1,199	1,753	7,429	723	74	4,484	2,317	21,797	459
18-Nov-07	791	1,581	1,542	1,300	1,800	7,534	748	79	4,568	2,373	22,315	387
25-Nov-07	790	1,672	1,567	1,304	1,844	7,792	749	80	4,593	2,402	22,793	518
02-Dec-07	796	1,669	1,593	1,356	1,852	7,625	785	83	4,609	2,436	22,803	534
09-Dec-07	811	1,690	1,702	1,465	1,937	7,938	779	91	4,781	2,436	23,630	528
16-Dec-07	846	1,698	1,722	1,479	1,961	7,995	818	92	4,822	2,527	23,960	553
23-Dec-07	816	1,750	1,783	1,543	2,027	8,085	805	92	4,865	2,499	24,265	465
30-Dec-07	742	1,657	1,638	1,418	1,934	7,432	698	88	4,498	2,289	22,393	527
06-Jan-08	797	1,648	1,783	1,573	1,930	7,663	772	81	4,729	2,433	23,409	518
13-Jan-08	825	1,697	1,777	1,518	1,995	7,802	791	90	4,733	2,471	23,698	475
20-Jan-08	810	1,679	1,821	1,559	2,038	8,013	783	94	4,848	2,455	24,100	480
27-Jan-08	833	1,715	1,775	1,531	1,988	7,810	801	92	4,745	2,474	23,766	553
03-Feb-08	827	1,705	1,739	1,479	1,990	7,837	776	90	4,744	2,454	23,643	574
10-Feb-08	801	1,664	1,737	1,495	1,942	7,846	795	91	4,744	2,475	23,590	517
17-Feb-08	808	1,631	1,720	1,486	1,972	7,742	753	88	4,673	2,380	23,253	488
24-Feb-08	781	1,580	1,635	1,428	1,914	7,673	749	83	4,604	2,349	22,796	370
02-Mar-08	834	1,602	1,655	1,446	1,899	7,742	754	83	4,622	2,399	23,037	317
09-Mar-08	769	1,552	1,557	1,379	1,788	7,484	738	80	4,480	2,345	22,173	609
16-Mar-08	733	1,568	1,491	1,300	1,863	7,124	690	80	4,300	2,208	21,357	581
23-Mar-08	721	1,537	1,436	1,245	1,776	7,125	674	78	4,272	2,191	21,053	574
30-Mar-08	703	1,500	1,395	1,208	1,788	6,872	670	72	4,119	2,167	20,496	604

(Table B2 continued)

Week Ending	Hourly Coincident Peak Demand (MW) - Planned Resource Scenario											
	Northwest	Northeast	East	Essa	Ottawa	Toronto	Niagara	Bruce	Southwest	West	Total System	Load Forecast Uncertainty
06-Apr-08	697	1,489	1,341	1,157	1,673	6,863	677	74	4,081	2,177	20,229	671
13-Apr-08	686	1,456	1,286	1,094	1,620	6,729	663	71	4,060	2,180	19,846	687
20-Apr-08	686	1,479	1,295	1,135	1,583	6,723	655	69	4,079	2,155	19,857	511
27-Apr-08	746	1,386	1,254	1,116	1,455	6,760	654	63	3,951	2,154	19,539	335
04-May-08	685	1,353	1,289	1,166	1,535	6,563	640	65	4,012	2,036	19,343	631
11-May-08	741	1,348	1,291	1,108	1,376	6,596	635	61	3,886	2,136	19,177	697
18-May-08	695	1,342	1,200	1,119	1,431	7,009	649	59	3,967	2,131	19,601	894
25-May-08	690	1,351	1,250	1,135	1,481	7,626	707	47	4,037	2,364	20,687	1,034
01-Jun-08	683	1,338	1,269	1,148	1,492	7,756	721	48	4,124	2,393	20,971	1,138
08-Jun-08	749	1,375	1,313	1,187	1,564	8,030	753	49	4,301	2,509	21,829	938
15-Jun-08	734	1,335	1,397	1,280	1,666	8,892	829	58	4,725	2,765	23,681	1,030
22-Jun-08	735	1,325	1,446	1,345	1,719	9,157	922	62	4,817	2,992	24,519	1,199
29-Jun-08	713	1,268	1,403	1,294	1,678	9,147	910	62	4,776	2,830	24,080	1,370
06-Jul-08	685	1,282	1,417	1,303	1,705	8,964	933	75	4,843	2,993	24,200	818
13-Jul-08	720	1,316	1,481	1,388	1,803	9,500	908	60	4,921	2,880	24,977	960
20-Jul-08	723	1,328	1,523	1,460	1,875	9,547	974	58	4,994	3,085	25,566	1,182
27-Jul-08	736	1,311	1,458	1,378	1,743	9,245	950	54	4,815	3,031	24,721	849
03-Aug-08	731	1,334	1,424	1,343	1,694	8,996	840	55	4,717	2,704	23,836	785
10-Aug-08	744	1,353	1,471	1,384	1,801	9,200	939	56	4,869	2,963	24,781	938
17-Aug-08	736	1,416	1,470	1,376	1,846	8,967	926	57	4,753	2,954	24,501	907
24-Aug-08	738	1,413	1,401	1,297	1,749	8,604	889	58	4,621	2,829	23,599	742
31-Aug-08	735	1,444	1,421	1,296	1,759	8,821	900	59	4,698	2,846	23,978	670
07-Sep-08	700	1,415	1,292	1,150	1,535	8,402	874	58	4,507	2,787	22,722	1,297
14-Sep-08	693	1,408	1,196	1,043	1,468	8,110	854	58	4,380	2,763	21,973	1,328
21-Sep-08	677	1,335	1,096	923	1,361	7,903	833	57	4,302	2,687	21,174	1,208
28-Sep-08	720	1,395	1,169	976	1,554	7,447	777	52	4,046	2,516	20,652	362
05-Oct-08	710	1,393	1,216	1,005	1,588	6,819	694	62	4,014	2,236	19,737	494
12-Oct-08	711	1,412	1,271	1,057	1,656	6,873	663	64	4,096	2,165	19,968	351
19-Oct-08	734	1,472	1,326	1,129	1,644	6,913	668	69	4,191	2,182	20,328	342
26-Oct-08	713	1,523	1,392	1,199	1,706	6,975	676	72	4,257	2,190	20,703	581
02-Nov-08	741	1,567	1,456	1,243	1,719	7,328	699	74	4,434	2,247	21,508	420
09-Nov-08	752	1,559	1,470	1,223	1,760	7,388	710	77	4,485	2,308	21,732	454
16-Nov-08	774	1,549	1,534	1,314	1,808	7,469	733	82	4,558	2,358	22,179	382
23-Nov-08	774	1,662	1,562	1,327	1,848	7,758	733	82	4,603	2,390	22,740	512
30-Nov-08	778	1,646	1,586	1,371	1,856	7,551	768	86	4,606	2,421	22,669	527
07-Dec-08	836	1,671	1,657	1,461	1,866	7,762	787	90	4,713	2,463	23,307	430
14-Dec-08	819	1,683	1,701	1,488	1,935	7,825	759	94	4,760	2,403	23,467	520
21-Dec-08	849	1,736	1,718	1,494	1,968	7,868	791	94	4,792	2,478	23,789	545
28-Dec-08	750	1,607	1,736	1,532	2,060	7,638	724	98	4,663	2,363	23,170	458
04-Jan-09	745	1,734	1,653	1,497	1,932	7,031	694	90	4,374	2,213	21,963	495

- End of Section -

## Appendix C Analytical Factors

**Table C1: Factors Affecting Energy Demand**

Factors Affecting Daily Energy Demand				
Variable Class	Variable	Change in Variable	Impact On Daily Energy Demand (MWh)	
Weather	<b>Daily Avg Temperature</b> > 16° C 10°C > and < 16° C < 10°C	1°C Increase	8,100 MWh Increase	
		1°C Increase	1,410 MWh Increase	
		1°C Decrease	2,660 MWh Increase	
	<b>Daily Humidity - Dewpoint</b> > 16° C 10°C > and < 16° C < 10°C	1°C Increase	2,940 MWh Increase	
		1°C Increase	510 MWh Increase	
		1°C Decrease	970 MWh Increase	
	<b>Wind</b>  Summer Winter	1 km/hr Decrease	470 MWh Increase	
		1 km/hr Increase	20 MWh Increase	
	<b>Cloud</b>  Summer Winter	Decrease of 1 on Scale	1,290 MWh Decrease	
		Increase of 1 on Scale	1,340 MWh Increase	
Economic	<b>Employment</b>	Increase of 1,000 jobs	5 MWh Increase	
	<b>Housing Stock</b>	Increase of 1,000 houses	5 MWh Increase	
Calendar	<b>Holidays</b>	New Year's Day	65,000 MWh Decrease	
		Good Friday	45,000 MWh Decrease	
		Victoria Day	55,000 MWh Decrease	
		Canada Day	38,000 MWh Decrease	
		August Civic Holiday	39,000 MWh Decrease	
		Labour Day	54,000 MWh Decrease	
		Thanksgiving Day	55,000 MWh Decrease	
		Remembrance Day	9,000 MWh Decrease	
		Christmas	84,000 MWh Decrease	
		Boxing Day	78,000 MWh Decrease	
		<b>Day of Week</b>	New Year's Eve	8,000 MWh Decrease
			Monday vs Sunday	46,000 MWh Increase
	Tuesday vs Sunday		48,000 MWh Increase	
	Wednesday vs Sunday	49,000 MWh Increase		
	Thursday vs Sunday	48,000 MWh Increase		
Friday vs Sunday	45,000 MWh Increase			
Saturday vs Sunday	10,000 MWh Increase			

Table C2: Factors Affecting Peak Demand

Factors Affecting Daily Peak Demand				
Variable Class	Variable	Change in Variable	Impact On Daily Peak Demand (MW)	
Weather	<b>Temperature</b>			
	> 16° C	1°C Increase	450 MW Increase	
	10°C > and < 16° C	1°C Increase	100 MW Increase	
	< 10°C	1°C Decrease	110 MW Increase	
	<b>Humidity - Dewpoint</b>			
	> 16° C	1°C Increase	160 MW Increase	
	10°C > and < 16° C	1°C Increase	40 MW Increase	
	< 10°C	1°C Decrease	40 MW Increase	
	<b>Wind</b>			
	Summer	1 km/hr Decrease	15 MW Increase	
Winter	1 km/hr Increase	10 MW Increase		
Cloud				
	Summer	Decrease of 1 on Scale	110 MW Increase	
Winter	Increase of 1 on Scale	70 MW Increase		
Economic	<b>Employment</b>	Increase of 1,000 jobs	0.3 MW Increase	
	<b>Housing Stock</b>	Increase of 1,000 houses	0.5 MW Increase	
Calendar	<b>Holidays</b>	New Year's Day	2,800 MW Decrease	
		Good Friday	2,000 MW Decrease	
		Victoria Day	2,500 MW Decrease	
		Canada Day	1,700 MW Decrease	
		August Civic Holiday	1,600 MW Decrease	
		Labour Day	2,100 MW Decrease	
		Thanksgiving Day	2,500 MW Decrease	
		Remembrance Day	400 MW Decrease	
		Christmas	4,400 MW Decrease	
		Boxing Day	3,600 MW Decrease	
		New Year's Eve	600 MW Decrease	
		<b>Day of Week</b>	Monday vs Sunday	2,100 MW Increase
			Tuesday vs Sunday	2,000 MW Increase
	Wednesday vs Sunday		2,000 MW Increase	
	Thursday vs Sunday	2,000 MW Increase		
	Friday vs Sunday	1,700 MW Increase		
Saturday vs Sunday	100 MW Increase			

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