18-MONTH OUTLOOK:

An Assessment of the Reliability of the Ontario Electricity System

From October 2008 to March 2010

ieso
Power to Ontario. On Demand.

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Executive Summary

Ontario's reliability outlook for electricity remains positive for the next 18 months when more than 5,000 megawatts (MW) of new and refurbished supply is scheduled to come into service with much of the new supply either well under construction or in commissioning stages. As a result, sufficient supply is forecast within Ontario to meet electricity demands under normal weather conditions over the next year and a half. The Ontario transmission system is also expected to be adequate to reliably supply electricity demands over the next 18 months.

In addition to the expected new supply, Ontario's import capability is also planned to be increased by up to 750 MW with the first stage of the new interconnection between Ontario and Québec, scheduled for completion by spring 2009. Additional transmission reinforcements in Québec are scheduled to be in service in 2010 which may allow transactions for up to 1,250 MW.

Reliability within the Greater Toronto Area (GTA) for summer 2009 is expected to be adequate as new facilities are incorporated.

However, in the York Region, the transformer station capacity in the Newmarket and Aurora area has been exceeded due to load growth. A new transformer station is planned to be in service around the middle of 2009 and procurement of additional local generation is being sought by the Ontario Power Authority. Until then, the immediate needs will be partially mitigated by operating existing equipment up to full capacity and by reducing demand by cutting supply to specific consumers who have been contracted to reduce consumption when needed.

The forecast of energy demand is very similar to the previous forecast. Generally, increasing conservation efforts and a slowing economy continue to influence the overall demand profile. Energy demand is forecast to decrease by 1.3% for 2008 and a further 1.1% in 2009. Peak demands are expected to decline throughout the forecast as the conservation impacts gain momentum. Significant savings expected in 2010 result in a much lower winter 2009-10 peak demand forecast. The following table summarizes the planned scenario's peak demands for the upcoming seasons under the Normal and Extreme weather scenarios.

Season	Normal Weather Peak (MW)	Extreme Weather Peak (MW)
Winter 2008-09	23,708	24,748
Summer 2009	24,987	27,275
Winter 2009-10	22,757	23,999

The IESO regularly assesses the adequacy and reliability of Ontario's power system. This 18-Month Outlook provides the IESO's assessment of the reliability of the power system from October 2008 to March 2010. It reflects the most up-to-date forecast information as well as experience gained from past operations.

The 18-Month Outlook is intended for operational planning purposes, and for scheduling generator outage plans. To avoid unacceptably low reserves, it is important to the overall operational planning process that participants adjust their maintenance activities to periods where available resources exceed requirements.

- End of Section

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Table of Contents

List of Tables

List of Figures

1.0 Introduction

This Outlook covers the 18-month period from October 2008 to March 2010. It supersedes the report titled "An Assessment of the Reliability of the Ontario Electricity System from July 2008 to December 2009", dated June 27, 2008.

The purpose of the 18-Month Outlook is:

- To advise market participants of the resource and transmission reliability of the Ontario electricity system;
- To assess potentially adverse conditions that might be avoided through adjustment or coordination of maintenance plans for generation and transmission equipment; and
- To report on initiatives that are being put in place to improve reliability within the 18-month timeframe of this Outlook.

The contents of this Outlook focus on the assessment of resource and transmission adequacy. Other supporting information and forecasts are contained separately in the following documents that are updated as required:

- "Ontario Demand Forecast from June 2008 to December 2009" (IESO_REP_0481) (found on the IESO web site at http://www.ieso.ca/imoweb/pubs/marketReports/18Month_ODF_2008sep.pdf
    - Contains a detailed description of the peak and energy demand forecasts used in this Outlook.
- "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_2008jun.pdf
    - Contains information regarding the methodology used to perform the demand forecasts, resource adequacy assessments and transmission reliability assessments in this Outlook.
- "Ontario Transmission System" (IESO_REP_0265) (found on the IESO web site at http://www.ieso.ca/imoweb/pubs/marketReports/OntTxSystem_2008sep.pdf
    - Provides specific details on the transmission system, including the major internal transmission interfaces and interconnections with neighbouring jurisdictions.

Readers are invited to provide comments on this Outlook report or to give suggestions as to the content of future reports. To do so, please contact us at:

- Toll Free: 1-888-448-7777
- Tel: 905-403-6900
- Fax: 905-403-6921
- E-mail: customer.relations@ieso.ca.

This Outlook presents an assessment of resource and transmission adequacy based on the stated assumptions, using the described methodology. Readers may envision other possible scenarios, recognizing the uncertainties associated with various input assumptions, and are encouraged to use their own judgment in considering possible future scenarios. The resource adequacy assessment tables contained in the document can be downloaded from the IESO web site in MS Excel format.

In addition to the comprehensive Outlook, the IESO periodically issues Interim Updates to the 18-Month Outlook between full Outlooks. These updates include a spreadsheet which reflects changes to Total Resources, Total Reductions in Resources, and Reserve Above Requirement values for the Planned Scenario. The updates also include a summary of actual demand and forecast demand data. Similar to the full Outlooks, the Interim Updates are posted on the IESO web site. These updates provide Outlook information on a more frequent basis to allow market participants to better adjust their operational plans and outage schedules.

The reader should be aware that Security and Adequacy Assessments are published on the IESO web site on a weekly and daily basis that progressively supersede information presented in this report.

- End of Section -

2.0 Updates to This Outlook

2.1 Changes to Demand Forecast

The demand forecast has been updated to include the actual demand, weather and economic experience through to the end of June 2008. The economic outlook has been updated based on the most recent data.

Overall, the updated Planned Demand Scenario forecast is very similar to the previous forecast. The underlying factors of conservation and a slow economy continue to shape the demand profile.

2.2 Updates to Resources

Since the previous Outlook report was published, GenSet Resource Management Inc added a generator (1 MW) to their fleet and 33 MW of the Melancthon II Wind Project became operational. The Martindale Frequency Changer was derated by 8 MW to reflect the retirement of Sandy Falls and Lower Sturgeon 25 Hz generation for conversion to 60 Hz. Therefore, the net installed capacity registered to participate in the IESO administered wholesale market has, thus, increased by 26 MW.

There have been updates to the generator outages submitted by market participants. For this Outlook, generation outage plans submitted to the IESO's Integrated Outage Management System (IOMS) as of September 3, 2008 were used.

2.3 Updates to Transmission Outlook

The list of transmission projects, planned transmission outages and actual experience with forced transmission outages have been updated from the previous 18-Month Outlook. For this Outlook, transmission outage plans submitted to the IOMS as of July 16, 2008 were used.

This Outlook also presents discussions on the major transmission enhancements that are forecast to be in service or are under construction within the outlook period, and the effects of generation and transmission project delays on the system's ability to supply the forecast peak demand.

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3.0 Historical Review

This section provides a review of past power system operation, including the most recent months of operation, to identify noteworthy observations, emerging problems and variations from forecast.

3.1 Weather and Demand Historical Review

With one of the wettest summers in years, the weather and demand relationship exhibited some unusual behavior. June was normal in terms of temperature and humidity and July was slightly lower than normal. However, the large amount of rainfall acted to dampen demand further. The weather for August was milder than normal and lacked any significant peak weather as the temperature never got above 30°C.

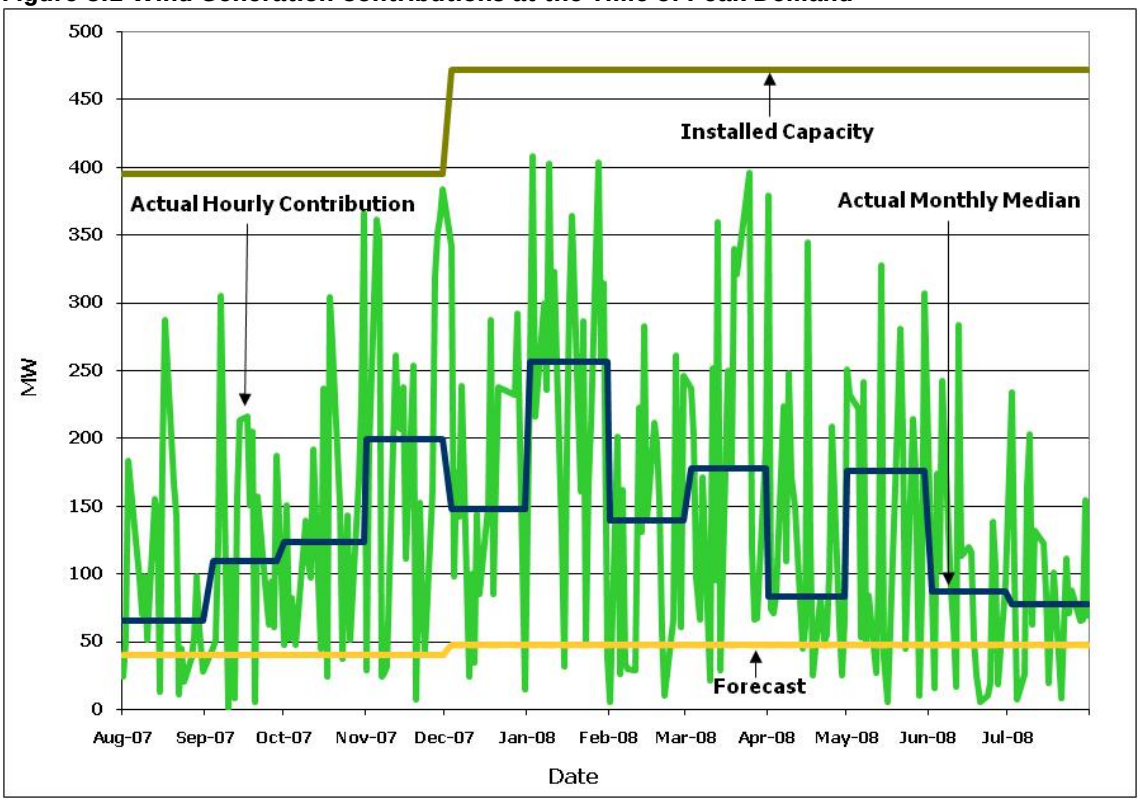
The weather contributed to lower overall energy demand for the summer of 2008 as energy was 2.8% lower than the summer of 2007. Weather-corrected demand was down 1.8% from the previous summer due to the combined impacts of the economy and conservation efforts. The summer peaks were the lowest since 2004. Wholesale customers' consumption for the summer was up 2.0% over 2007, the first year over year increase since the spring of 2005. However, their consumption was still 9.0% lower than it was in the summer of 2005.

3.2 Hourly Resource Contributions at Time of Weekday Peak

The figures from 3.1 to 3.3 show the contributions made by self scheduling and intermittent generators, wind generators, hydro generators, import and net interchange at the time of weekday peak for the period from August 1, 2007 to July 31, 2008. Holiday data was not considered in the analysis since hydro peaking generation and interchange data during this timeframe is not typical of periods of time when Ontario is challenged from a supply demand perspective.

Figure 3.1 indicates the amount of wind generation contributions to the wholesale market at the time of peak demand, excluding holidays, compared to the forecast contributions. Currently, IESO forecasts available wind generation as 10 percent of installed capacity, and assumes a constant contribution over a yearly basis. The forecast methodology does not account for seasonal variances in wind patterns, and thus, results in large deviations of actual monthly median contribution from forecast during winter months as compared to summer months.

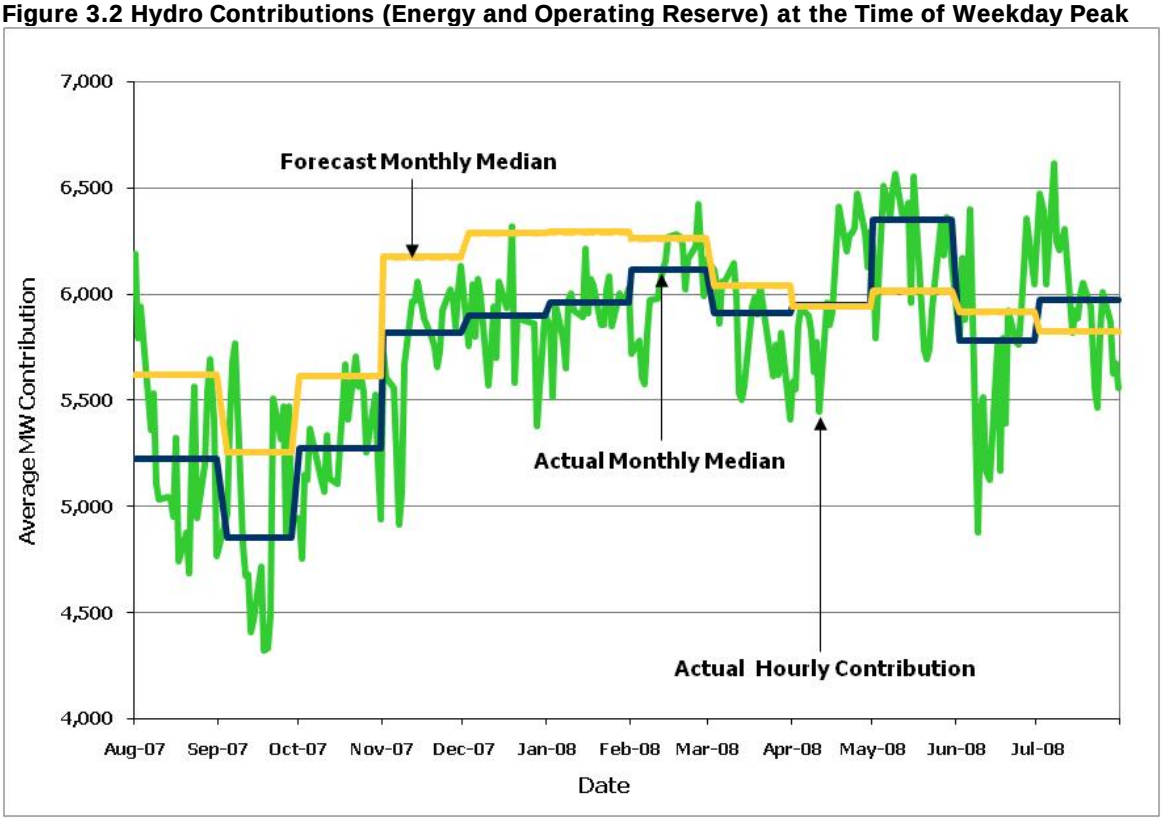
Figure 3.1 Wind Generation Contributions at the Time of Peak Demand



The IESO is continuing to develop monthly assumptions for wind capacity contribution and will incorporate these once stakeholder review has been completed in the near future.

Figure 3.2 indicates the actual hydro contributions to energy and operating reserve markets at the time of non holiday weekday peak from August 1, 2007 to July 31, 2008, compared to forecast contributions.

Figure 3.2 Hydro Contributions (Energy and Operating Reserve) at the Time of Weekday Peak

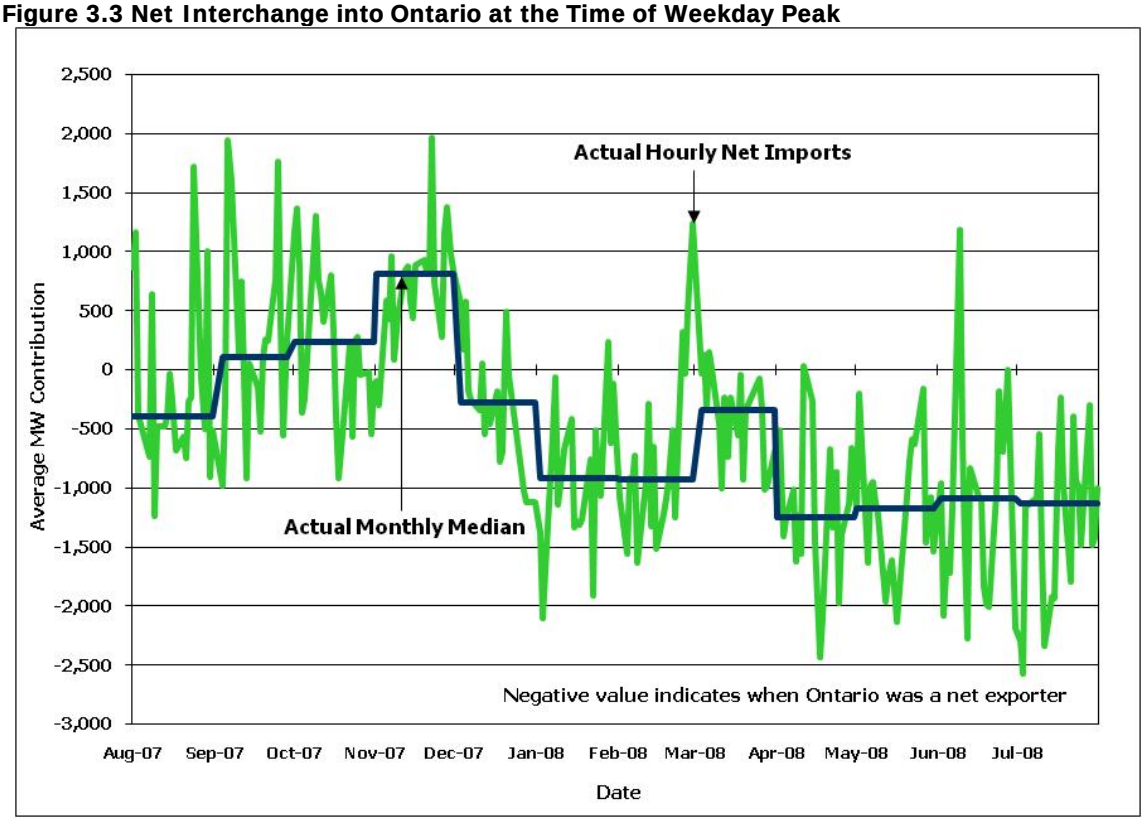


This summer showed significantly higher than forecast hydroelectric production as a result of heavy snowfall during the winter months as well as high precipitation throughout the summer which caused elevated water levels on several watersheds. In May and July, total hydro production was up 8.77% and 9.96% respectively over average production of these months for the previous four years. These elevated water levels created a higher than median supply of hydroelectric generation.

Though on average hydroelectric production was higher than normal, for a one week period in June production appears to drop. In this particular instance, the reduction seen above can be explained by a forced outage on a transmission circuit in the northeast which resulted in the bottling of approximately 800 MW of generation.

Figure 3.3 shows the amount of net imports into Ontario at the time of non-holiday weekday peak. Net Interchange is the difference between total imports into Ontario and total exports out of Ontario. Throughout the summer, Ontario was consistently a net exporter, averaging more than 1,000 MW in both on peak and off peak hours. This is attributed to excess generation capacity as a result of a mild summer and increased hydro production due to unusually large amounts of precipitation.

Figure 3.3 Net Interchange into Ontario at the Time of Weekday Peak



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4.0 Demand Forecast

The forecast of demand has been updated to reflect the most recent economic, weather and demand information. The Ontario economy continues to be influenced by four main factors:

- High Canadian dollar – has eroded the competitive position of Ontario's manufacturing sector.
- Slow U.S. economy – has reduced the demand for Canadian goods.
- Low interest rates – continues to boost domestic retail sales, construction and business investment.
- High commodity prices – in particular metal prices remain high producing a healthy mining sector.

Though the economy is not in a recession, demand from the energy intensive industrial sectors continues to decline. Growth in the service sectors has not offset the decline in these other high-demand sectors. Going forward, the same factors are expected to persist, leading to relatively minimal growth. However, growing amounts of conservation will more than offset the underlying growth in demand and lead to an overall decline.

Demand for the first eight months of 2008 is tracking lower than in 2007. The economic impacts and conservation are the cause for the decline. Weather-corrected energy demand is down 1.4% on a year to date basis. Demand from directly connected industry dropped by 1.9% for the first eight months of 2008 compared to the same time period for 2007.

Demand Forecast Assumptions

The adequacy assessments contained in this Outlook take into consideration a range of peak demands that can occur under various weather conditions with varying probability of occurrence. The IESO focuses on two demand forecast scenarios:

- Normal weather; and
- Extreme weather.

The impact of varying weather is modeled probabilistically in the calculation of the required resources for each week of the study period.

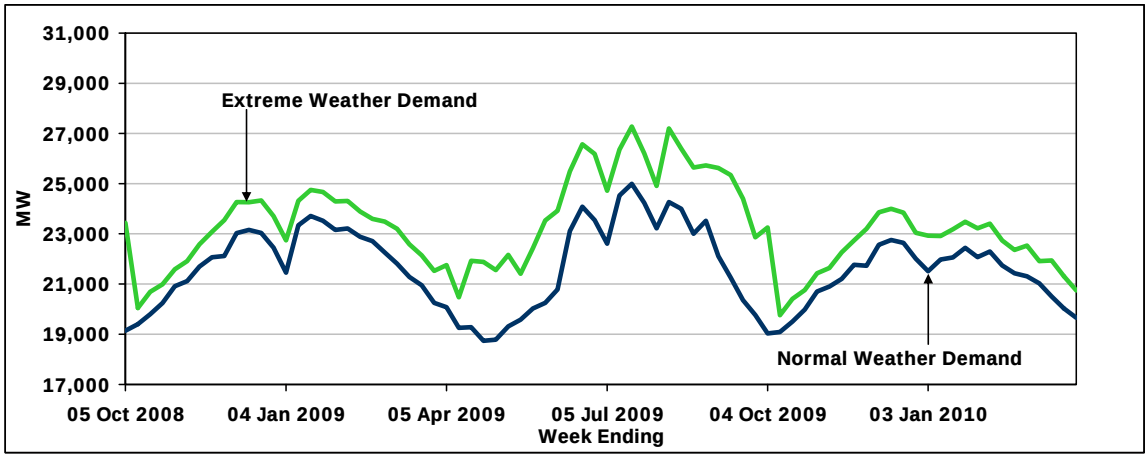
In addition to the weather scenarios, the demand forecast has two scenarios that differ in their treatment of conservation. The Planned Demand scenario includes the impacts of additional conservation programs and initiatives by the Ontario Power Authority (OPA) and electricity distributors. As well, this scenario includes the impact of planned additions to load-displacing generation. All these impacts are decremented from demand under the Firm scenario which only accounts for existing levels of conservation and existing load-displacing generation. Demand measures, such as dispatchable loads and price responsive demand, are treated as a resource and are further covered in the Resource Adequacy Sections 5.1 and 5.2. Table 4.1 shows the various conservation and demand management components and their treatment under the two scenarios.

Table 4.1 Conservation and Demand Management Scenarios

Conservation and Demand Management Components	Planned Scenario	Firm Scenario	Treatment
Conservation	Targeted levels included	Existing levels included	Decrement demand
OPA Demand Response 1	Targeted levels included	Existing levels included	Resource
OPA Demand Response 2	Targeted levels included	None	Resource
OPA Demand Response 3	Targeted levels included	None	Resource
OPA Contracted Demand Response	Existing levels included	Existing levels included	Resource
RESOP Generation	Projected levels included	Existing levels included	Decrement demand
CHP Generation	Projected levels included	Existing levels included	Decrement demand if non-MP

Economic and demographic growth will be the factors driving energy and peak demand up during the forecast, and conservation will act to slow that growth. Under the Planned Demand scenario, energy demand is expected to decrease by 1.3% in 2008 (150.0 TWh) and 1.1% in 2009 (148.0 TWh) as conservation initiatives further reduce electricity demand. Under this scenario, the Normal weather peak demand for the winter of 2008-09 is expected to be 23,708 MW, while the Extreme weather peak is projected at 24,438 MW. Under the Firm Demand Scenario, energy demand will decrease 0.9% in 2008 (150.9 TWh) and rebound to grow by 0.9% in 2009 (151.6 TWh). Figure 4.1 shows the Normal and Extreme (Planned Demand Scenario) weather demands assumed for each week in the study period.

Figure 4.1 Demand Forecast Range



For further discussion of how we identify peak demands and treat demand measures please refer to the Ontario Demand Forecast document, Section 3.0 *Forecasting Process and Assumptions*.

- End of Section -

5.0 Resource Adequacy Assessment

This section provides an assessment of the adequacy of resources to meet the forecast demand. From this assessment the generator owners receive guidance for planning outages. When planned outages would adversely affect the reliability of the grid, as indicated by reserves below required levels, the IESO has the authority to deny approval of outages based on their order of precedence.

In recognition of the uncertainty that exists regarding the future availability of resources, two resource scenarios are described in this section: the Firm Scenario and the Planned Scenario (See section 5.2 for a description of the scenarios).

As was reported in the previous Outlook, the supply picture is expected to change significantly over the next 18 months. More than 5,000 MW of new and refurbished supply is scheduled to come into service, including approximately 2,800 MW of gas-fired generation, 1,500 MW of refurbished nuclear generation, 100 MW of hydroelectric generation and about 600 MW of wind capacity. The refurbished nuclear generation will partially offset other nuclear units being taken out of service for refurbishment over the Outlook period. Most of the new supply projects have started their construction phase. In addition, the new interconnection with Québec will increase transfer capabilities in 2009.

The existing installed generating capacity within Ontario is summarized in Table 5.1. This capacity does not include generation that is commissioning.

Table 5.1 Existing Installed Generation Resources as of September 9, 2008

Fuel Type	Total Capacity (MW)	Number of Stations
Nuclear	11,426	5
Hydroelectric	7,730	68
Coal	6,434	4
Oil / Gas	5,499	23
Wind	504	5
Biomass / Landfill Gas	75	5
Total	31,668	110

5.1 Committed and Contracted Generation Resources

Table 5.2 summarizes the significant generation facilities that are scheduled to come into service, be upgraded or retired within the next 18 month study period. This includes generation projects in the IESO's Connection Assessment and Approval Process (CAA) that are under construction and projects contracted by the OPA. Details regarding the IESO's CAA process and the status of all projects in the CAA queue, including copies of available Preliminary Assessment and System Impact Assessment Reports, can be found on the IESO's web site at http://www.ieso.ca/imoweb/connassess/ca.asp. Generator owners or operators have provided the information regarding the status of their projects listed in Table 5.2.

The estimated effective date shown in Table 5.2 indicates the date on which additional capacity is assumed to be available to meet Ontario demand. For projects that are under contract, the estimated effective date is the best estimate of the date when the contract requires the additional capacity to be available. In the event that a project is delayed, such that the commercial in-service date is expected to be later than the contract date, the estimated effective date will be the best estimate of the commercial in-service date for the project.

Table 5.2 Committed and Contracted Generation Resources

Proponent/Project Name	Zone	Fuel Type	Estimated Effective Date	Project Status	Capacity Considered in Scenario (MW)	
					Firm (MW)	Planned (MW)
Kruger Energy Port Alma Wind Power Project	West	Wind	2008-Q3	Construction	101	101
Lac Seul Hydroelectric Project	Northwest	Water	2008-Q3	Construction	13	13
Countryside London Cogeneration Facility	West	Gas	2008-Q3	Construction	12	12
Umbata Falls Hydroelectric Project	Northwest	Water	2008-Q4	Construction	23	23
Greenfield Energy Centre	West	Gas	2008-Q4 *	Commissioning	1,005	1,005
Melancthon II Wind Project	Southwest	Wind	2008-Q4 *	Construction	99	99
Enbridge Ontario Wind Farm	Southwest	Wind	2008-Q4 *	Construction	182	182
Portlands Energy Centre Combined Cycle Operation	Toronto	Gas	2009-Q1	Construction		240
Goreway Station Project	Toronto	Gas	2009-Q1 *	Commissioning	860	860
St. Clair Energy Centre	West	Gas	2009-Q1	Construction		570
Return of Unit 7 at Beck 1 as a 60 Hz unit	Niagara	Water	2009-Q1	Construction	59	59
Nuclear Upgrade	N/A	Uranium	2009-Q2 *	Construction	27	27
Algoma Energy Cogeneration Facility	Northeast	Industrial Gas	2009-Q2	Construction		63
Wolfe Island Wind Project	East	Wind	2009-Q2	Approvals & Permits		198
Bruce Unit 2	Bruce	Uranium	2009-Q3	Construction		750
East Windsor Cogeneration Centre	West	Gas	2009-Q3	Construction		84
Retirement of Lower Wawaitin 25 Hz generation to convert to 60 Hz	Northeast	Water	2010-Q1	Connection Assessment	-11	-11
Bruce Unit 1	Bruce	Uranium	2010-Q1	Construction		750
Total					**2,369**	**5,024**

Notes to Table 5.2:

1. * The estimated Effective Date or the Capacity for the project or both may have changed from the last Outlook.
2. The total may not add up due to rounding.
3. Project status provides a general indication of the project progress. The standard milestones used are: Connection Assessment, Approvals & Permits, Construction, and Commissioning.
4. "Connection Assessment" indicates that the project is undergoing a system impact assessment with the IESO.
5. "Approvals & Permits" indicates that the project proponent is in the process of acquiring major approvals and permits required to start construction (e.g. environmental assessment, municipal approvals etc).
6. "Construction" means that the project is under construction,
7. "Commissioning" indicates that the project is undergoing commissioning tests with the IESO.

5.2 Summary of Scenario Assumptions

In assessing future resource adequacy, it is necessary to make a number of assumptions regarding the magnitude of resources expected to be available for operation. Two scenarios were considered in this Outlook: a Firm Scenario and a Planned Scenario. Both resource scenarios were established starting from the existing installed resources shown in Table 5.1.

For both the Planned Scenario and the Firm Scenario, all generating resources (excluding the units that are scheduled to retire), already in-service or once in-service are assumed to remain in-service for the duration of the study period, except for periods of time that the generator owner or operator has submitted planned outages for their generating units.

The generation capability assumptions are as follows:

- Hydroelectric capability, which includes energy and operating reserve is based on median historical values of hydroelectric hourly energy production and capacity contribution to operating reserve during weekday peak demand hours from May 2002 to February 2008.
- Capacity and energy contributions from thermal generators are based on market participant submissions, including planned outages, expected forced outage rates and seasonal deratings.
- Wind-powered generation capacity at the time of weekday peak is assumed to be 10% and total energy contribution is assumed to be 30%,

The Planned Scenario assumes quantities of demand measures and generation capacity based on existing resources plus significant resource changes that are scheduled to occur within the 18-month study period. These include:

A. Existing Installed Resources: total capacity of 31,668 MW (refer to Table 5.1)

B. All new generation facilities and capacity changes to the existing facilities (refer to Table 5.2)

C. Demand Forecast:

    - The demand forecast is reduced to account for the impacts of targeted conservation.
    - Demand measures of 542 MW which include dispatchable loads and loads contracted with the OPA (refer to column "Demand Measures" in Table A2 or A7 in Appendix A). Based on historical data, it is assumed that 55.5% of dispatchable demand is available at the time of the weekly peak.
    - Demand measures are forecast based on market participant information and actual market experience.

The Firm Scenario assumes quantities of demand measures and generation capacity based on the existing resources and a limited set of planned capacity changes or additions (refer to Table 5.2, column labeled "Firm" under heading "Capacity Considered in Scenario"). This scenario includes:

A. Existing Installed Resources: total capacity of 31,668 MW (refer to Table 5.1).

B. Capacity changes to existing facilities (refer to Table 5.2).

C. Additional generating resources that have started their commissioning activities with contributions beginning on the date that the facility is expected to be in-service.

D. Additional generating resources that are expected to become available in the first three months of the Outlook study period (regardless of commissioning status), with contributions beginning on the date that the facility is expected to be in-service.

E. Existing demand measures assumed at 299 MW for the entire period of the Outlook (refer to column "Demand Measures" in Table A1 or A6 in Appendix A). Demand values (Table A4 in Appendix A) exclude targeted conservation.

The resource and demand scenario assumptions are summarized in the Table 5.3

Table 5.3 Summary of Scenario Assumptions

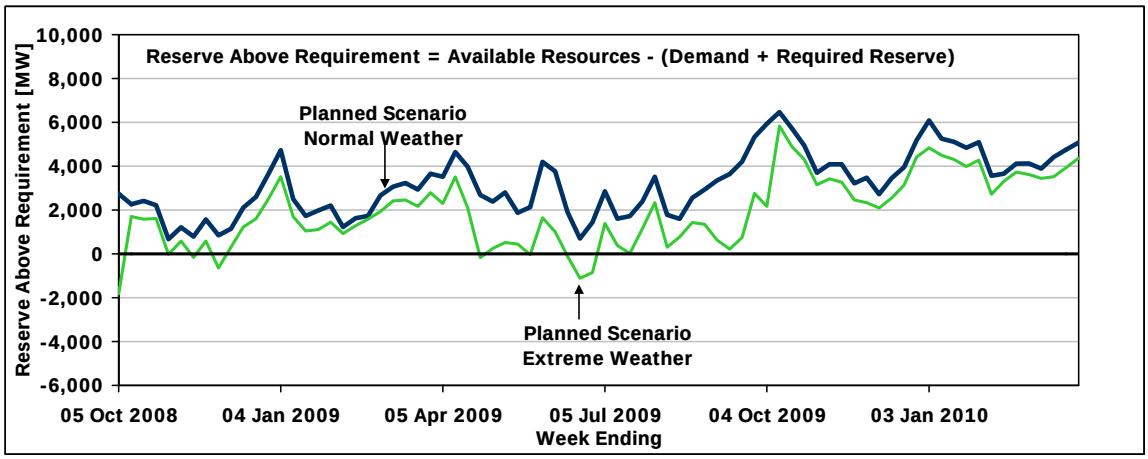
<table>
<tr><th>Firm Scenario</th><th>Planned Scenario</th></tr>
<tr><td colspan="2">Resource Assumptions</td></tr>
<tr><td>Existing Installed Resources (refer to Table 5.1)</td><td>Existing Installed Resources (refer to Table 5.1)</td></tr>
<tr><td>Capacity changes to existing facilities in Table 5.2</td><td rowspan="3">All projects listed in Table 5.2</td></tr>
<tr><td>Generating resources in Table 5.2 that have started their commissioning activities</td></tr>
<tr><td>Generating resources in Table 5.2 that are expected to become available in the first three months of the Outlook study period (regardless of commissioning status)</td></tr>
<tr><td colspan="2">Demand Assumptions</td></tr>
<tr><td rowspan="2">Existing conservation and demand measures</td><td>Existing and targeted conservation</td></tr>
<tr><td>Additional Demand measures that include dispatchable loads and loads contracted with the OPA</td></tr>
</table>

5.3 Planned Scenario with Normal and Extreme Weather

Weekly Adequacy Assessments for the Planned Scenario

Reserve Above Requirement levels, which represent the difference between Available Resources and Required Resources, are shown in Figure 5.1.

Figure 5.1 Reserve Above Requirement: Planned Scenario with Normal vs. Extreme Weather

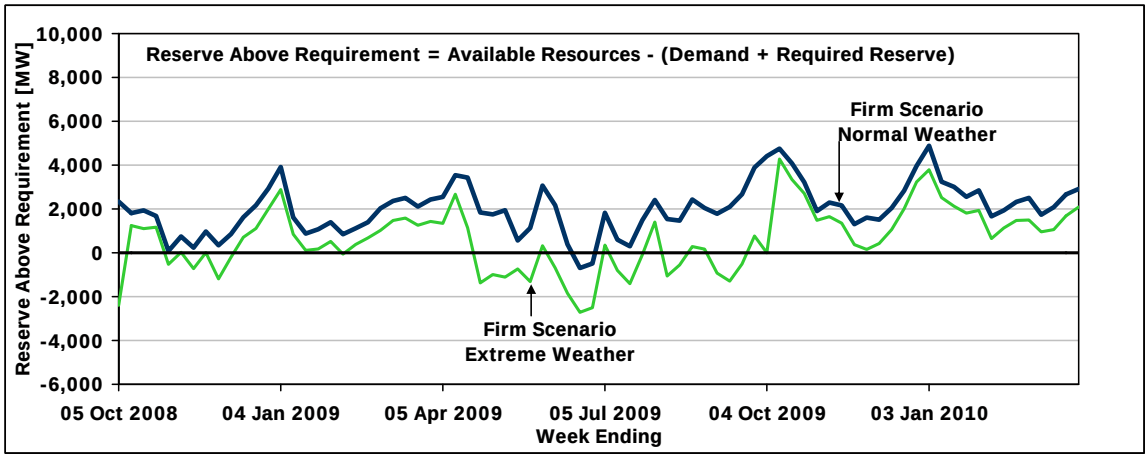


5.4 Firm Scenario with Normal and Extreme Weather

Weekly Adequacy Assessments for the Firm Scenario

Reserve Above Requirement levels, which represent the difference between Available Resources and Required Resources, are shown in Figure 5.2.

Figure 5.2 Reserve Above Requirement: Firm Scenario with Normal vs. Extreme Weather



5.5 Comparison of Resource Scenarios

Table 5.4 shows a snapshot of the forecast available resources, under the two scenarios, at the time of the summer and winter peak demands over the study period.

The monthly forecast of energy production capability, as provided by market participants, is included in Appendix A, Table A9.

Table 5.4 Summary of Available Resources

Notes	Description	Winter Peak 2009		Summer Peak 2009		Winter Peak 2010	
		Firm Scenario	Planned Scenario	Firm Scenario	Planned Scenario	Firm Scenario	Planned Scenario
1	Installed Resources (MW)	33,102	33,342	34,048	35,119	34,048	35,953
2	Imports (MW)	0	0	0	0	0	0
3	Total Resources (MW)	33,102	33,342	34,048	35,119	34,048	35,953
4	Total Reductions in Resources (MW)	5,376	5,603	4,652	5,585	4,563	6,304
5	Demand Measures (MW)	299	542	299	542	299	542
6	Available Resources (MW)	28,025	28,281	29,695	30,076	29,784	30,191

Notes to Table 5.4:

1. Installed Resources (MW): This is the total capacity of the generation resources in Ontario assumed to be installed at the time of the summer and winter peaks in the 18 month time span. Initially, this value includes all generators registered to participate in the IESO-administered markets at the beginning of the 18 month study period. Additional generation capacity that was assumed under the applicable resource scenario is progressively included, according to the estimated in-service dates.

2. Imports (MW): Represents the amount of external capacity considered to be delivered to Ontario.

3. Total Resources (MW): This is the sum of Installed Resources (line 1) and Imports (line 2).

4. Total Reductions in Resources (MW): These reductions represent the sum of generator deratings, generator planned outages, generation limitations due to transmission interface constraints, generation constraints due to transmission outages/limitations and allowance for generation capability levels below rated installed capacity.

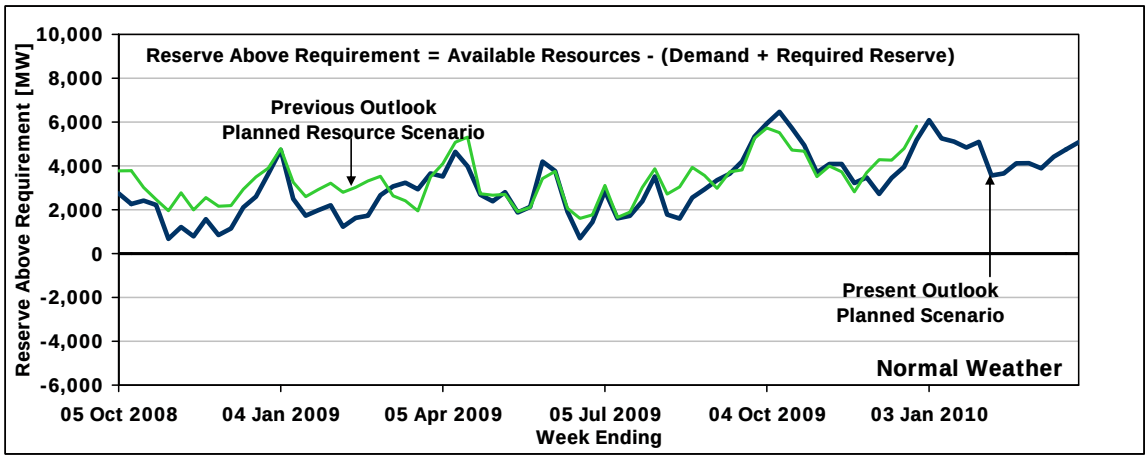
5. Demand Measures: This is the amount of demand assumed available to be reduced, under each resource scenario.

6. Available Resources (MW): This equals Total Resources (line 3) minus Total Reductions in Resources (line 4) plus Demand Measures (line 5).

Comparison of the Weekly Adequacy Assessments for the Planned Scenario

Figure 5.3 provides a comparison between the forecast Reserve Above Requirement values in the present Outlook and the forecast Reserve Above Requirement values in the previous Outlook published on June 27, 2008. The difference is mainly due to the changes to generator outages and the change in the demand forecast.

Figure 5.3 Reserve Above Requirement: Planned Scenario with Present Outlook vs. Previous Outlook



5.6 Resource Adequacy Risks

The forecast reserve levels for both the Firm and the Planned Scenarios should be assessed bearing in mind the risks discussed below.

5.6.1 Extreme Weather

The Firm and Planned Scenarios are based on the assumption of normal (average) weather. However, peak demands in both summer and winter typically occur during periods of extreme weather. Unfortunately, the occurrence and timing of extreme weather is impossible to accurately forecast far in advance. As a result, the impact of extreme weather is modeled probabilistically in the calculation of the required resources for each week of the study period. The impact of extreme weather was demonstrated in the first week of August 2006, when Ontario established an all-time record demand of 27,005 MW. Over 3,000 MW of this demand was due to the higher than average heat and humidity.

In order to illustrate the impact of extreme weather on forecast reserve levels during the Outlook period, both scenarios were re-calculated assuming extreme weather in each week instead of normal weather. The probability of this occurring in every week is very small; however the probability of an occurrence in any given week is greater (about 2.5 percent). When one looks at the entire summer or winter periods, the expectation of at least one period of extreme weather becomes very likely.

The magnitude of resource deficiencies, under extreme weather (as seen earlier in Figures 5.1 and 5.2), clearly illustrates circumstances could arise under which reliance on a combination of interconnected supply, rejection of planned generator maintenance or emergency actions may be

required. This emphasizes the continued need for a mix of resources that provides for a reliable supply, conservation programs and demand measures within Ontario.

5.6.2 New Facilities

For the 18 month period under study, the improving demand-supply situation, seen mainly in the Planned Scenario, is dependent on the additional generation, conservation programs and demand measures coming into service as forecast. Some of the risks the projects face are regulatory approvals, construction delays and untimely equipment deliveries by suppliers.

Since the last report, most of the projects have started their construction phases. While there will undoubtedly be adjustments to schedules between now and when each facility is declared commercially in service, having these projects under construction represents a reduction in risk for the future.

The OPA monitors and reports on the progress of the electricity supply contract projects on a quarterly basis at their web site found below:
http://www.powerauthority.on.ca/Page.asp?PageID=122&ContentID=6465&SiteNodeID=120

5.6.3 Generator Planned Outages

A number of large generating units perform their maintenance in the shoulder seasons and are scheduled to return to service from outage prior to summers 2008 and 2009. Meeting these schedules is critical to maintaining adequate reserve levels. Delays in returning generators to service from maintenance outages could lead to reliance on imports and/or cancellation of other planned generator outages.

With the transition from winter peaking to summer peaking over the last number of years Ontario has experienced several years where the dual peaking nature of the Ontario system (roughly equivalent peaks in winter and summer) meant that outages must be scheduled in shorter spring and fall periods. Inevitably this meant that some long duration outages had to be scheduled into the start of the peak seasons, creating the potential that any extensions of these outages would occur when the generation is most needed.

In the previous report, the IESO reported on a new opportunity for a limited amount of maintenance activities through the winter period. This opportunity continues to be available. Until recently, the IESO generally limited generators to scheduling their planned maintenance outages during the fall and spring "shoulder months" when demand tends to be lower. With more domestic resources becoming available, limited opportunities now exist for the IESO to accommodate planned generator outages in the winter months as well. These opportunities should provide generators with more flexibility to schedule their maintenance outages which should in turn provide greater assurances going forward that Ontario's generation fleet will be well prepared for the high demand summer months.

In the event that generator outages must be delayed due to reliability concerns, it will be necessary for outages to be rescheduled to a more suitable time period. However outage rescheduling could challenge the ability of generator owners/operators to accommodate larger number and magnitude of outages over shorter time periods and may increase forced outage occurrences. Operational experience so far indicates generator owners are usually able to adapt their outage plans.

5.6.4 Lower than Forecast Generator Availability

IESO resource adequacy assessments include a probabilistic allowance for random generator forced outages based on generator reliability information provided by market participants, or on industry-wide data for similar facilities. Along with weather-related demand impacts, the impact of generator forced outages is included in the determination of required resources.

5.6.5 Lower than Forecast Hydroelectric Resources

IESO resource adequacy assessments include hydroelectric generation outputs based on median historical values of hydroelectric production plus operating reserve during weekday peak demand hours and energy capability provided by market participants. The amount of available hydroelectric generation is greatly influenced both by water-flow conditions on the respective river systems and by the way in which water is utilized.

It is not possible to accurately forecast precipitation amounts far in advance. Drought conditions over some or all of the study period would lower the amount of generation available from hydroelectric resources. Low water conditions can result in significant challenges to maintaining reliability, as was experienced in the summer of 2005.

5.6.6 Wind Resource Risks

This Outlook assumes that 10% of the installed capacity of wind power generators is available at the time of the weekly peak. There is a risk that wind power output could be less than 10% at the time of the weekly peak if:

- the wind isn't blowing, or
- extreme cold weather or high wind speeds necessitate that wind generator output be curtailed to prevent equipment damage (these conditions are expected to be rare).

The geographic diversity of Ontario wind resources, as more sites are commissioned, should mitigate some of the risk associated with wind speed variability.

IESO is examining wind issues with stakeholders in the Wind Power Standing Committee (SE-29). The assumed capacity factor at the time of the peak is an issue this stakeholdering process is examining.

5.6.7 Capacity Limitations

There is a risk that any given generator may not be capable of producing the maximum capacity that the market participant has forecast to be available at the time of peak demand. There may be several reasons for these differences. Independent of the best efforts of generator owners to maintain generator capability, there are sometimes external factors which may impact the capability to produce.

Some outages and deratings, such as environmental limitations and high ambient temperature deratings, may be more likely to occur at roughly the same time as the extreme weather conditions that drive peaks in demand.

For example, there are risks that gas-fired generators may not be capable of producing the maximum capacity that the market participant has forecast to be available at the time of peak. The natural gas and electricity sectors are converging as natural gas becomes one of the more

common fuels in North America for electric power generation. The IESO is jointly working with the Ontario gas transportation industry to identify and address issues.

Recent changes, made by the Ontario Energy Board (OEB) to the IESO's licence, give the IESO the authority to manage the recent policy initiatives to curb coal-fired emissions over the Outlook period and beyond. This authority combined with existing IESO processes will maintain grid reliability while facilitating an orderly reduction in emissions.

5.6.8 Transmission Constrained Resource Utilization

Transmission constraints may occur more often than expected due to multiple unplanned outages and may also have greater impact than expected on the ability to deliver generation to load centres. This is particularly true for large transformers whose repair or replacement time can be much longer than for transmission lines. Although many transmission limitations are modeled in accordance with recognized reliability standards, limitations resulting from multiple forced transmission outages can have significant impacts on resource availability.

Constraints may also occur due to weather conditions that result in both high demands and higher than normal equipment limitations. For example periods of low wind combined with hot weather not only cause higher demands but also result in lower transmission capability. This can affect the utilization of internal generation and imports from neighbouring systems at critical times. Transmission constraints that result from loop flows can be particularly hard to predict because they result not only from the conditions within Ontario but from the dynamic patterns that are taking place within and between other areas. Depending on the direction of prevailing loop flows, this may improve or aggravate the ability to maintain reliability.

During high demand periods, the availability of high-voltage capacitors and the capability of generators to deliver their full reactive capability also become critically important for controlling voltage to permit the higher power transfers that are required. Outages or de-ratings to these reactive resources can restrict power transfer from generators and imports, and make it difficult to satisfy the peak demands.

In this Outlook the calculated values for transmission constrained generation presented in Appendices A3 and A8 corresponds to a generation dispatch that would maximize the possible reserve above requirements in Ontario. However, in real time operation, the actual amount of bottled generation will depend on many conditions prevailing at the time, including the local generation levels, overall generation dispatch and the direction and levels of flows into and out of Ontario.

5.7 Surplus Supply Scenarios

Previous reports have focused exclusively on peak demand periods. However, reliability risks can also occur when electricity demand is at its lowest such as during the overnight and weekend hours of temperate weather periods. Certain types of generation such as nuclear and some hydroelectric generators must maintain minimum output levels to ensure the generation is available in future high demand hours, or to respect environmental or other operational constraints. At the same time, wind generators can also be contributing, as they operate whenever they have the right conditions. Electricity supply from baseload generation including nuclear, hydroelectric and wind sources is expected to increase in the latter half of the Outlook period and may at times exceed demand. Through planning and coordination with market

participants, the IESO will be addressing the expected periods of surplus generation to mitigate any potential impacts to reliability. Surplus baseload supply situations have occurred infrequently to date, and have always been accompanied by very low energy prices. The low prices not only serve to discourage additional supply in those hours, but also to encourage any market based pricing consumers to shift whatever consumption they can out of higher priced hours into these very low priced periods.

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6.0 Transmission Reliability Assessment

This section provides an assessment of the reliability of the Ontario transmission system for the 18 month study period of this Outlook.

A main objective of the transmission reliability assessment is to identify all major transmission and load supply projects that are planned for completion during the next 18 months and to present their reliability benefits.

A second objective of the transmission reliability assessment is to forecast any reduction in transmission capacity brought about by specific transmission outages. For a major transmission interface or interconnection, the reduction in transmission capacity due to an outage condition can be expressed as a change in the base flow limit associated with the interface or interconnection.

A third objective of the transmission reliability assessment is to identify equipment outage events on the IESO controlled grid that could require contingency planning by market participants or by the IESO. As a result, planned transmission outages are reviewed in correlation with major planned resource outages and also the scheduled completion dates of new generation and transmission projects to identify transmission system reliability risks and to highlight those outages that should be rescheduled or changed.

6.1 Transmission Projects

The IESO requires transmitters to provide information on the transmission projects that are planned for completion within the 18 month period. The list of major transmission projects planned to be in service in the 18 month period is shown in Appendix B. Projects that are in service or whose completion has been deferred well beyond the period of this outlook are not shown. The list includes only the transmission projects that represent major modifications or are considered to provide significant improvement to system reliability. Minor transmission equipment replacements or refurbishments are excluded. For projects assessed or being assessed under the IESO's Connection Assessment and Approval process, the assigned identification number is included for cross referencing.

Additional information regarding the transmission projects that have been assessed by the IESO can be found at the IESO's Connection Assessments web page, at the following location: http://www.ieso.ca/imoweb/connAssess/ca.asp.

6.2 Load Supply Projects

The electricity demand growth experienced in Ontario in the last decade has resulted in some area loads reaching or exceeding the capability of the local transmission system. To address this problem and provide additional transmission capacity for future load growth, Ontario transmitters and distributors have initiated plans to build new or replace existing transformer stations and reinforce the transmission system where necessary. Nine projects relating to load supply improvements will be placed in service during the timeframe of this Outlook.

Connection assessments performed by the IESO concluded that these proposed projects will provide relief to existing transformer stations, some of which are presently overloaded, and will

improve the supply to various load areas. In some of these assessments the IESO found that the local transmission system may be reaching its maximum capability and identified the need for installation of local voltage support equipment. As a result, Hydro One initiated the installation of low voltage capacitor banks at a number of transformer stations in the system.

Transmission assessments performed by transmitters in collaboration with distributors also identified transmission reinforcements required to ensure load supply reliability. These needed reinforcements were confirmed by the IESO during related connection assessments. Several of these transmission reinforcements are currently under construction or are to start construction soon, and are planned for service during period of this Outlook. The proposed Essa to Stayner 230 kV transmission line and Venessa junction to Norfolk 115 kV transmission line are examples of new transmission reinforcements planned for in service in the second half of 2009, that will improve load supply reliability well beyond the timeframe of this Outlook.

6.3 Transmission Outages

The assessment of transmission outages for this Outlook has been limited to those outages with a scheduled duration of greater than five days or to those outages associated with a project where there is a significant collection of outages that combine to create a scheduled duration of greater than five days. As time approaches actual equipment outage schedule, additional outage requirements and changes as well as outages with a scheduled duration of five days or less could impose further transmission capacity restrictions. Prior to approving and releasing an outage, the IESO will reassess the outage for potential system impacts, taking into account all current and forecasted conditions.

The IESO's assessment of the impact of the transmission outage plans is shown in Appendix C, Tables C1 to C10. In these tables, each element is assessed individually by indicating the possible impacts and the reduction in transmission interface and interconnection limits. Where multiple outages are scheduled during the same period, the combined effect of all outages on the reduction in transmission interface and interconnection limits is presented. Where multiple outages are scheduled during the same period and reliability is affected, the IESO will request the transmitter to reschedule some of the outages. The methodology used to assess the transmission outage plans is described in the IESO document titled "Methodology to Perform Long Term Assessments" (IESO_REP_0266).

The planned transmission outages are reviewed in correlation with major planned resource outages and scheduled completion dates of new generation and transmission projects. This allows the IESO to identify transmission system reliability concerns and to highlight those outages that should be adjusted. A change to an outage may include rescheduling the outage, reducing the scheduled duration or reducing recall time.

This assessment will also identify any resources that have potential or are forecast to be constrained due to transmission outage conditions. Transmitters and generators are expected to have a mutual interest in developing an ongoing arrangement to coordinate their outage planning activities. Transmission outages that may affect generation access to the IESO controlled grid should be coordinated with the generator operators involved, especially at times when deficiency in reserve is forecast. Under the Market Rules, where the scheduling of planned outages by different market participants conflicts such that both or all outages cannot be approved by the IESO, the IESO will inform the affected market participants and request that they resolve the conflict. If the conflict remains unresolved, the IESO will determine which of the

planned outages can be approved according to the priority of each planned outage as determined by the Market Rules detailed in Chapter 5, Sections 6.4.13 to 6.4.18. For this Outlook, transmission outage plans submitted to the IESO's Integrated Outage Management System (IOMS) as of July 16, 2008 were used.

There is a substantial number of planned outages identified during the period of this Outlook that are required to accommodate equipment maintenance or future changes. Their specific impact on reliability is identified in subsequent sections of this report.

6.4 Transmission System Adequacy

Generally, IESO Outlooks identify the areas of the IESO controlled grid where the projected extreme weather loading is expected to approach or exceed the capability of the transmission facilities for the conditions forecast in the planning period. Where the loading was projected to exceed the capability of the transmission facilities, there is also an increased risk of load interruptions.

IESO continues to work with Hydro One and other Ontario transmitters, to identify the highest priority transmission needs, and to ensure that those projects whose in service dates are at risk are given as much priority as is practical, especially those addressing reliability needs for peak demand periods of this Outlook. IESO has also been working closely with the OPA to specify the transmission enhancements location, timing and minimum requirements to satisfy reliability standards.

The Ontario transmission system with the planned system enhancements and known transmission outages is expected to be adequate to supply the demand under the extreme and normal weather conditions forecast for the 18 month period of this Outlook.

6.4.1 Toronto and Surrounding Area

The Greater Toronto Area (GTA) electricity supply is mainly provided by the Trafalgar, Claireville, Parkway and Cherrywood 500/230 kV autotransformers, Pickering generation station (GS) and other local resources as depicted in Figure 6.1. The availability of these facilities is critical to ensure reliable electricity supply for Toronto and surrounding area.

Figure 6.1 Greater Toronto Area Electricity System

The reliable supply of demand in the GTA under extreme weather conditions forecasted for the Outlook period requires a minimum number of autotransformers at Trafalgar, Claireville, Parkway and Cherrywood and Pickering units in service at rated capabilities. For summer 2009, all autotransformers and Pickering units are expected to be in service. In addition, for summer 2009, Goreway Station and the combined cycle operation of Portlands Energy Centre are expected to be available.

Following the 2007 outages and deratings associated with the GTA autotransformers, Hydro One implemented an extensive autotransformer remediation program. One spare autotransformer is currently available and a second spare autotransformer will be available before the end of 2008.

Under summer 2009 extreme weather conditions with all transmission facilities and resources in the GTA in service, the projected loadings on the Trafalgar, Claireville, Parkway and Cherrywood autotransformers are expected to be within their continuous capability prior to any contingency. The presence of the Goreway Station will reduce the loadings of all GTA autotransformers and thereby, increase their spare capability. This relief will be mostly evident at Claireville with a reduction in transformer station loading equivalent to about half of the Goreway Station output.

Loadings on the autotransformers are not expected to exceed their long term emergency capability following the forced outages of any one autotransformer and two Pickering units. Loadings are also expected to be within their long term emergency capability following the forced outages of any two autotransformers except at Claireville. Subsequent autotransformer outages or deratings under any of these outage conditions could result in loadings of remaining GTA autotransformers exceeding their long term emergency limits.

The Claireville and Trafalgar autotransformers have the lowest spare capacities. Following the forced outage of a second Claireville autotransformer the loadings on the remaining two Claireville autotransformers would be above applicable limits and mitigating measures would be required. At Trafalgar with one autotransformer out of service the capability of the remaining one is sufficient to reliably supply loads if all local transmission facilities are in service.

The Cherrywood autotransformer loadings are strongly influenced by Pickering generation. In general, the spare capacity at Cherrywood is sufficient if four or more Pickering units are available.

The Parkway autotransformers are adequate to supply the extreme weather forecast within the timeframe of this Outlook. Under certain outage conditions their spare capability may be useful to provide temporary relief of the Claireville and/or Cherrywood autotransformers.

Under summer normal weather conditions, the projected loadings on the GTA autotransformers should not exceed their long term emergency capability following the forced outages of any two autotransformers and two Pickering units.

The supply reliability to central Toronto is expected to improve during the period of this Outlook as well. The completion of the Portlands Energy Centre will assist in reducing loadings on the Cherrywood autotransformers and in eliminating possible overloads of the Leaside autotransformers. The reduction in Leaside autotransformers loading is expected to be equivalent to Portlands Energy Centre output, while the reduction in Cherrywood autotransformers loading is expected to be equivalent to about half of Portlands Energy Centre output.

To manage increasing fault levels at Claireville Transmission Station (TS) resulting from the connection of Goreway Station, the 230 kV bus at Claireville must be operated split. The reconfiguration work at Claireville will allow the 230 kV bus to be operated open and in achieving an evenly distributed loading of the autotransformers on each half of the split. In addition, the reconfiguration work will improve the supply reliability to transformer stations connected to the 230 kV transmission circuits leaving Claireville TS.

The GTA West transmission corridor between Trafalgar and Richview which supplies Brampton, Mississauga and parts of Caledon and Halton Hills may become loaded above capability during summer 2009 under extreme weather conditions. The new Hurontario SS and the expansion of

the 230 kV lines from Cardiff TS are planned for service before summer 2010 and will relieve the loading of this corridor and alleviate this problem.

In the York Region, the transformer station capacity in the Newmarket and Aurora area has been exceeded due to load growth. A new transformer station is planned to be in service by mid 2009 and procurement of new generation resources is being sought by the OPA. Until then, the potential overload will be partially mitigated by temporary load transfers, by temporarily increasing the equipment operating ratings and via incentives for demand response programs in the area.

A large number of transmission outages are planned for Claireville TS to perform the station enhancement work described above, for the fall of 2008 and spring and fall of 2009. These outages coincident with other outages scheduled in the Southwest zone will reduce the limit on the Flow East to Toronto (FETT) transmission interface by up to 1,000 MW.

6.4.2 Bruce and Southwest Zones

Planned refurbishments at the Bruce generation station and proposed wind farm developments in southwestern Ontario will result in increased generation capacity from that region. A number of enhancements are planned to avoid potential constrained generation of these resources. In the near term, transmission reinforcements that will increase the transfer capability out of Bruce include the up-rating of the Hanover to Orangeville 230 kV circuits and the installation of additional high voltage shunt capacitors at Buchanan, Middleport and Nanticoke. These projects are of a high priority and are staged for completion before October 2009. Up to seven Bruce units are expected to be available before all the shunt capacitors are in service. Therefore, as shown for the combined Bruce and West zones in Tables A3 and A8, some additional constrained generation may occur in the third quarter of 2009 under conditions where all resources at and near Bruce are available at their rated capabilities.

Beyond the Outlook period, in addition to the near-term reinforcements described above, interim measures are being planned for the time when Bruce is operated with eight units before the proposed 500 kV double-circuit line between Bruce and Milton is available. The interim measures would include the installation of additional voltage control facilities at Nanticoke and when necessary, maximizing the available reactive power from Nanticoke units. These measures together with the new shunt capacitors and the deployment of the existing Bruce special protection system will further reduce potential constrained generation. In the longer-term, the proposed 500 kV line from Bruce to Milton would provide the required transmission capability to deliver the full benefits of the Bruce refurbishment project and the development of new renewable resources in southwestern Ontario.

The proposed 500 kV line from Bruce to Milton received the OEB approval for leave to construct on September 15, 2008. Hydro One has already prepared the construction outage plan and related equipment outages will start in the second quarter of 2009. These outages may impact the availability of existing transmission facilities and reduce some transmission interface limits.

The new manufacturing development and load growth in the Woodstock area will result in low voltage conditions on the local 115 kV transmission system during summer extreme weather conditions. Hydro One has installed a second capacitor bank at Woodstock TS to provide voltage support. Beyond the Outlook period, Hydro One is planning to add a new transformer station and a second supply point by extending the 230 kV transmission lines from Ingersoll to

Woodstock area and installing a new 230/115 kV transformer station. These plans will provide an increased level of supply reliability, and support further load growth in the area.

Hydro One is currently undertaking major upgrade work at Burlington transformer station for completion by mid 2011 which will resolve limitations identified in previous Outlooks. This work which includes a 230/115 kV autotransformer upgrade, the replacement of all the 115 kV breakers and the replacement of other limiting components will alleviate concerns related to the ability of the station to supply the Burlington 115 kV area loads. Hydro One has also recently identified deratings associated with some of their load supply transformer stations which have resulted in load transfers to the Burlington and Detweiler 115 kV areas which is further aggravating the load supply reliability to the Burlington 115 kV and Detweiler 115 kV areas. Hydro One, the affected distributors and the IESO are actively working on mitigating both the short-term issues and implementing a long term solution to the problems.

Certain transmission outages on the IESO-controlled grid may also cause additional constrained operation of resources in southwestern Ontario due to a reduction in the transfer capability out of Bruce on the Flow Away from Bruce Complex (FABC) transmission interface. Multiple outages associated with equipment in the Bruce, Southwest and West zones are scheduled during this Outlook period and will result in a reduction in the FABC limit of up to 950 MW. These reductions contribute to the bottled generation amounts shown for the Bruce and West zones in Tables A3 and A8, and to the negative Reserve Above Requirement levels under the Extreme Weather, Planned Scenario (Table A7).

6.4.3 Niagara Zone and the New York Interconnection

The status of the Niagara Reinforcement project has not changed since the last Outlook. The completion date for transmission reinforcement from Niagara region into the Hamilton-Burlington area continues to be delayed. The limitations affect the use of both the available Ontario generation and imports into the province, particularly during hot weather and high demand periods.

Once in service, the reinforcement project will increase the transfer capability of the transmission interface connecting the grid in the Niagara zone to the grid in the Hamilton area by about 800 MW. This enhancement will permit increased imports from New York of at least 350 MW, and up to 800 MW depending on the load and generation dispatch in Ontario.

A forced outage associated with one of the Ontario to New York interconnection circuits at Niagara that is expected to last into the second quarter of 2009, results in a reduction of the summer import and export capability of 440 MW and 680 MW respectively, and a reduction of the winter import and export capability of 510 MW and 560 MW respectively. The resource adequacy assessment results show that under the Extreme Weather, Planned Scenario the Reserve Above Requirement levels (Table A7) are negative for some periods before the interconnection circuit is expected to return to service. If high imports levels are required to supply demand during these periods, the import capability of the remaining interconnections may approach their limits. The IESO is monitoring this situation closely and will take the necessary mitigating control actions should this constraint become limiting although at this time the outage is not expected to negatively impact the reliability of the grid.

6.4.4 East Zone and Ottawa Zone

The new interconnection between Hawthorne transformer station (TS) in Ontario and Outaouais station in Québec is scheduled for service by spring 2009. The new interconnection is designed for an ultimate capacity of 1,250 MW but for the period of this Outlook the import and export capability will be limited to up to 750 MW and 1,000 MW respectively. After the completion of transmission reinforcement work in Québec, the interconnection is expected to be able to operate up to its nominal capacity. The interconnection will be accompanied by the installation of a new Special Protection System (SPS) at Hawthorne TS and modifications to the existing SPS at St. Lawrence TS. The SPSs will allow simultaneous imports from Québec and New York to be maximized. The existing functionality of the St. Lawrence SPS will be maintained.

The current Reliability Must Run (RMR) contract between the IESO and Ontario Power Generation for Lennox GS covers the period October 2007 to September 2008. Recent studies performed by the IESO indicate a continued need for four Lennox units for local area reliability at least for the first part of this Outlook period.

Lennox GS is presently needed to maintain local area reliability in the Ottawa zone and the area of Ontario that is located east of the FETT transmission interface. As part of the interconnection work at Hawthorne, the addition of voltage support facilities may reduce reliance on Lennox for local Ottawa zone need. Similarly, supply improvements from new generation additions and conservation in and around Toronto through 2010 are expected to reduce the need for Lennox to control flows on the FETT interface. Although the reliance on Lennox for local area reliability is expected to decrease starting with the second half of 2009, the IESO has recommended the RMR contract be extended for another year, to September 2009. Allowing for this RMR to overlap the planned in-service date of the new facilities will ensure against potential delays and confirm the reliable operation of these new facilities. The current firm resource and demand forecast (the Firm Scenario) provides insufficient justification for extending the Lennox RMR contract beyond September 2009. The IESO will continue to monitor any material changes in the load forecast and resource availability, and if necessary, reassess the need for another RMR contract.

However, Lennox GS is also required for provincial resource adequacy, and must be retained or replaced. This resource adequacy requirement cannot be achieved through an RMR under the current Market Rules. The Integrated Power System Plan filed by the OPA with the OEB in August, 2007 assumes that Lennox remains in service and is categorized as a planned gas resource starting in 2011.

6.4.5 West Zone and the Michigan Interconnection

Extensive refurbishment work continues to be completed at the Lambton TS 230 kV switchyard to reliably connect the new Greenfield Energy Centre and St. Clair Energy Centre generating resources. The modifications are required to manage the expected increase in short circuit levels when these generating resources are in service while Lambton generating units continue to operate. To complete the work, a large volume of equipment outages must proceed as scheduled.

The multiple outages related to the Lambton refurbishment work scheduled in the Outlook period, along with other outages in the West zone, will result in reductions in the Buchanan Longwood Input (BLIP) and the Negative BLIP (NBLIP) limits. These outages will reduce the BLIP/NBLIP limits by up to 750 MW and by 500 MW respectively. The NBLIP reduction

associated with one planned outage contributes to the bottled generation amounts shown for the Bruce and West zones in Tables A3 and A8.

With the availability of Greenfield starting in the fourth quarter of 2008 and St. Clair in the first quarter of the 2009, transmission constraints in this zone may restrict resources in southwestern Ontario and imports from Michigan. This is evident in the bottled generation amounts shown for the Bruce and West zones in Tables A3 and A8. The frequency and magnitude of congestion could be aggravated further by transmission outages and weather conditions.

Phase angle regulators (PARs) are installed on the Ontario-Michigan interconnection at Lambton TS, representing two of the four interconnections with Michigan, but are not currently available to regulate flows on the interconnection except in emergencies. These PARs are expected to become operational by the end of 2008. The operation of the these PARs along with the PAR on the Ontario-Michigan interconnection near Windsor will control flows to a limited extent, and assist in the management of system congestion.

The capability to control flows on the Ontario-Michigan interconnection between Scott TS and Bunce Creek is unavailable. The PAR installed at Bunce Creek in Michigan has failed and is scheduled for replacement in 2010.

6.4.6 Northeast and Northwest Zones

The transmission corridor east of Mississagi TS has been experiencing increased congestion due to the addition of the 200 MW Prince Park (wind) generation station and the alleviation of constrained Brookfield resources following the completion of the Great Lakes Power (GLP) 230 kV transmission reinforcement project between Wawa TS and Third Line TS. It is expected that congestion will increase even further when the recently contracted Algoma Energy cogeneration project is complete in mid 2009.

For the near–term, the IESO has recommended that the existing Mississagi TS and Algoma TS generation rejection schemes be enhanced as soon as possible to alleviate constrained generation west of Mississagi and reduce congestion over the transmission corridors. Hydro One is planning to implement the required modifications by the fourth quarter of 2009.

In the latter half of 2008 and the first quarter of 2009, extensive line work on 230 kV transmission circuits continues in the Kenora and Marathon areas. This series of outages can reduce the Ontario-Manitoba interconnection transfer capacity by up to 250 MW, the Ontario-Minnesota interconnection transfer capability by up to 140 MW and the East-West transmission interface capability by up to 120 MW. As shown in Tables A3 and A8 for these outage timeframes, the reduction of the East-West Transfer East (EWTE) capacity contributes to the increased bottled generation amounts in the Northwest zone.

An outage of one of the two 500 kV circuits between Sudbury and the Southern Georgian Bay region planned for early November 2008 will reduce the capacity of Flow South (FS) transmission interface by 600 MW. This capacity reduction causes the bottled generation amounts shown in Tables A3 and A8 for the Northeast zone. However, given that this outage is planned during a lower demand period, the impact on Ontario's supply adequacy is minimized.

6.4.7 Ontario 25 Hz System

The gradual retirement of the Niagara 25 Hz system is well underway. As mentioned in previous Outlooks, the IESO advised the 25 Hz customers in 2005 that the 25 Hz supply would be

retired in April 2009, and in January 2007 National Grid, a transmission entity in the United States, informed the IESO that it had retired the US portion of the Niagara 25 Hz system. These activities pave the way for the deregistration of the remaining 25 Hz transmission and generating resources at the Sir Adam Beck 1 generation station. The IESO has approved the deregistration requests for some transmission facilities in 2008 and for the 60/25 Hz frequency changer and the remaining 25 Hz generation units at Beck No.1 effective April 30, 2009.

In northeastern Ontario, the 25 Hz system will also be retired. Most of the associated facilities have been deregistered. It is expected that the remaining facilities will deregistered by the end or just beyond this Outlook period. There is no longer any 25 Hz load in this area.

- End of Section -

7.0 Conclusions

The following conclusions are based on the results of the assessment carried out for this Outlook.

Resource Adequacy

- Under the Normal Weather Planned Scenario, forecast reserves within Ontario are sufficient to meet requirements for all weeks in the study period. Opportunities will exist for additional planned generator maintenance and exports in most of the weeks of the Outlook period. It is expected that generator owners will consider any future outages only when reserve levels are larger than the generator capacity being considered for outage.
- Under the Firm-Normal Weather Scenario, the reserves are forecast to be below requirements for only 2 of 78 weeks of the Outlook timeframe. Compared to previous Outlooks, this is a much improved situation.
- Extreme weather during the peak periods may result in reliance on imports to supplement Ontario generation and potential for the IESO to reject planned outages and use emergency operating procedures. However, Ontario's reliance on imports for reliability and potential rejection of planned outages are less likely compared to previous Outlooks.
- Results of the resource adequacy assessment are summarized in the matrix below. The different shadings present the supply/demand situation under each resource-weather scenario combination.

	Normal Weather Scenario	Extreme Weather Scenario
Planned Scenario	- the reserves are higher than required for all weeks - opportunities for additional outages/exports exist in most of the weeks	- some planned outages are at risk - imports required during some peak periods - some risk of requiring emergency operating procedures
Firm Scenario	- there are two weeks when reserves are lower than required (planned outages at risk or imports potentially required) - opportunities for additional outages/exports exist in many other weeks	- many planned outages are at risk - imports required during some peak periods - higher risk of requiring emergency operating procedures

- For the Normal Weather Planned Scenario to exhibit positive supply margins in all weeks covered by this Outlook, all of the planned resource additions must meet their stated in service targets and the conservation targets set by the OPA must be achieved.
- Even if that does occur, Ontario may need to rely on imports from neighbouring jurisdictions to maintain reliability if extreme weather occurs or if equipment performance is below normal.

- A number of large generating units are scheduled to return to service from outage prior to the summer of 2009. Meeting these planned outage schedules is critical to maintaining adequate reserve levels over the peak season.
- Reserves are higher during the winter under the Normal Weather Planned Scenario allowing opportunities for additional generator outages in these periods. Air conditioning load growth, combined with minimal growth in heating load has led to the transition from winter peaking to summer peaking over the last ten years. This gap continues to grow. The development of new capabilities and resources to meet the higher summer peaks increases the capability to accommodate planned generator maintenance over the winter months.
- High generator unavailability, whether caused by higher forced outage rates or delays in returning generators to service, could lead to greater reliance on imports. Under these circumstances, opportunities for planned outages, especially during the peak summer period, would be limited.
- Lennox GS is presently needed to maintain local area reliability in the Ottawa zone and the area of Ontario that is located east of the Flow East To Toronto (FETT) interface. The IESO has recommended the Reliability Must Run (RMR) contract be extended for another year, to September 2009. As part of the Ontario- Québec interconnection work at Hawthorne, the addition of voltage support facilities may reduce reliance on Lennox for local Ottawa zone need. Similarly, supply improvements from new generation and conservation in and around Toronto through 2010 are expected to reduce the need for Lennox to control flows on the FETT interface.
- However, Lennox GS is also critical to provincial resource adequacy, and must be retained or replaced. This resource adequacy requirement cannot be achieved through an RMR contract under the current Market Rules. The Integrated Power System Plan filed by the OPA with the OEB in August 2007 assumes that Lennox remains in service and is categorized as a planned gas resource starting in 2011.
- Over the 18 month period under study, the Northeast Power Coordinating Council resource adequacy criterion is expected to be met. As permitted by the criterion, the IESO forecast considers periodic reliance on interconnection benefits and potential use of other operating actions including outage rescheduling and emergency operating procedures.

Transmission Adequacy

- The Ontario transmission system with the planned system enhancements and transmission outages is expected to be adequate to supply the demand under the extreme and normal weather conditions forecast for the 18 month period of this Outlook.
- In the Greater Toronto Area (GTA) with all 500/230 kV autotransformers, six Pickering units and all other local transmission elements and resources in service, the projected summer 2009 extreme weather loadings on the autotransformers are not expected to exceed their long term emergency capabilities following the forced outages of one autotransformer at Trafalgar, Claireville, Parkway or Cherrywood and up to two Pickering units. Loadings are also expected to be within applicable capabilities following the subsequent forced outage of one additional autotransformer at Trafalgar, Parkway or Cherrywood.
- The supply reliability to the GTA under summer extreme weather will be improved with the availability of Goreway Station.

- The supply to central Toronto will be improved during the period of this Outlook with the scheduled combined cycle operation of Portlands Energy Centre.
- A forced outage associated with one of the Ontario to New York interconnection circuits at Niagara that is expected to last into the second quarter of 2009, results in a reduction of the import and export capability of up to 680 MW. The IESO is monitoring this situation closely and will take the necessary mitigating control actions should this constraint become limiting although at this time the outage is not expected to negatively impact the reliability of the grid.
- The transfer capability of FABC will be increased by various transmission reinforcements that are expected to be completed by the third quarter of 2009. If seven Bruce units are operational before the reinforcements are completed, some additional constrained generation could occur under conditions where all resources at and near Bruce are operating at their rated capabilities. Beyond the Outlook period, further measures are being planned to increase the FABC transfer capability as additional Bruce area resources come into service.
- Nine new and upgraded load supply transformer stations will be placed in service during the timeframe of this Outlook to help relieve loadings of existing transformer stations and provide additional transformer capacity for future load growth. Additional transmission reinforcements required to also ensure load supply reliability are currently under construction or beginning construction, and are planned for service during or just beyond this Outlook period.
- The new Ontario-Québec interconnection is scheduled for service by Spring 2009.
- The multiple transmission outages scheduled in this Outlook period in the Bruce, Southwest and West zones will result in reductions of the FABC, BLIP and NBLIP limits for periods of time. The resulting FABC and NBLIP reductions contribute to the amount of bottled generation expected to occur in the Bruce and West zones. Outages in the Northeast and Northwest zones will cause a reduction of the EWTE and FS limits that contribute to the amount of bottled generation expected to occur in these zones.
- With the availability of Greenfield Energy Centre starting in the last quarter of 2008 and St. Clair Energy Centre in the first quarter of the 2009, transmission constraints may limit the ability to utilize resources in southwestern Ontario and imports from Michigan. The frequency and magnitude of congestion could be further increased by transmission outages and weather conditions.
- Hydro One will enhance the existing Mississagi TS and Algoma TS generation rejection schemes by the later part of 2009 to alleviate constrained generation west of Mississagi and reduce congestion over the transmission corridors east of Mississagi.
- The deregistration of facilities and subsequent retirement of the Niagara and Northeast 25 Hz systems is expected to be completed respectively by mid 2009 and 2010.

- End of Section -

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Appendix A Resource Adequacy Assessment Details

Table A1 Assessment of Resource Adequacy: Normal Weather, Firm Scenario

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Oct-08	31,817	7,798	299	24,318	21,983	25.6	4,960	13.6	2,625	2,335
12-Oct-08	31,817	8,240	299	23,876	22,070	21.7	4,257	12.5	2,451	1,806
19-Oct-08	31,817	7,597	299	24,519	22,591	22.5	4,501	12.9	2,573	1,928
26-Oct-08	31,817	7,218	299	24,898	23,225	21.6	4,426	13.5	2,753	1,673
02-Nov-08	31,817	8,077	299	24,039	23,962	13.6	2,879	13.2	2,802	77
09-Nov-08	31,817	7,279	299	24,837	24,094	16.0	3,420	12.5	2,677	743
16-Nov-08	31,817	7,225	299	24,891	24,660	13.3	2,914	12.2	2,683	231
23-Nov-08	31,817	5,963	299	26,153	25,185	16.9	3,771	12.5	2,803	968
30-Nov-08	31,817	6,595	299	25,521	25,178	14.0	3,124	12.4	2,781	343
07-Dec-08	32,822	6,069	299	27,052	26,199	15.9	3,714	12.3	2,861	853
14-Dec-08	32,822	5,068	299	28,053	26,436	19.3	4,545	12.5	2,928	1,617
21-Dec-08	32,822	4,589	299	28,532	26,367	22.4	5,212	13.1	3,047	2,165
28-Dec-08	32,822	4,362	299	28,759	25,834	26.4	6,000	13.5	3,075	2,925
04-Jan-09	33,102	4,795	299	28,606	24,695	31.4	6,838	13.5	2,927	3,911
11-Jan-09	33,102	5,031	299	28,370	26,762	18.7	4,477	12.0	2,869	1,608
18-Jan-09	33,102	5,376	299	28,025	27,156	15.5	3,751	11.9	2,882	869
25-Jan-09	33,102	5,421	299	27,980	26,907	16.3	3,918	11.8	2,845	1,073
01-Feb-09	33,102	5,460	299	27,941	26,548	17.8	4,228	12.0	2,835	1,393
08-Feb-09	33,102	5,949	299	27,452	26,606	15.2	3,627	11.7	2,781	846
15-Feb-09	33,102	5,987	299	27,414	26,292	16.8	3,945	12.0	2,823	1,122
22-Feb-09	33,102	5,965	299	27,436	26,041	17.8	4,138	11.8	2,743	1,395
01-Mar-09	33,102	5,655	299	27,746	25,716	21.7	4,942	12.8	2,912	2,030
08-Mar-09	33,962	6,344	299	27,917	25,556	24.9	5,573	14.4	3,212	2,361
15-Mar-09	33,962	6,936	299	27,325	24,825	25.2	5,495	13.7	2,995	2,500
22-Mar-09	33,962	7,801	299	26,460	24,358	23.4	5,010	13.6	2,908	2,102
29-Mar-09	33,962	8,402	299	25,859	23,429	24.3	5,054	12.6	2,624	2,430
05-Apr-09	34,048	8,229	299	26,118	23,572	26.5	5,474	14.2	2,928	2,546
12-Apr-09	34,048	8,268	299	26,079	22,534	31.7	6,282	13.8	2,737	3,545
19-Apr-09	34,048	8,461	299	25,886	22,462	30.8	6,096	13.5	2,672	3,424
26-Apr-09	34,048	10,395	299	23,952	22,110	24.4	4,695	14.8	2,853	1,842
03-May-09	34,048	10,350	299	23,997	22,247	24.3	4,689	15.2	2,939	1,750
10-May-09	34,048	9,699	299	24,648	22,714	23.9	4,746	14.1	2,812	1,934
17-May-09	34,048	10,350	299	23,997	23,435	18.9	3,806	16.1	3,244	562
24-May-09	34,048	9,589	299	24,758	23,628	20.4	4,201	14.9	3,071	1,130
31-May-09	34,048	6,955	299	27,392	24,324	31.4	6,540	16.7	3,472	3,068
07-Jun-09	34,048	7,589	299	26,758	24,589	25.1	5,375	15.0	3,206	2,169
14-Jun-09	34,048	6,928	299	27,419	27,034	15.7	3,727	14.1	3,342	385
21-Jun-09	34,048	6,721	299	27,626	28,319	12.0	2,952	14.8	3,645	-693
28-Jun-09	34,048	6,932	299	27,415	27,910	13.4	3,233	15.4	3,728	-495

Note: The reader should be aware that Security and Adequacy Assessments are published on the IESO web site on a weekly and daily basis that progressively supersedes information presented in this report.

(Table A1 continued)

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Jul-09	34,048	5,996	299	28,351	26,527	22.0	5,103	14.1	3,279	1,824
12-Jul-09	34,048	5,125	299	29,222	28,620	16.2	4,070	13.8	3,468	602
19-Jul-09	34,048	4,652	299	29,695	29,396	15.7	4,038	14.6	3,739	299
26-Jul-09	34,048	4,756	299	29,591	28,101	19.0	4,734	13.1	3,244	1,490
02-Aug-09	34,048	4,863	299	29,484	27,076	23.5	5,612	13.4	3,204	2,408
09-Aug-09	34,048	4,440	299	29,907	28,368	20.1	5,008	13.9	3,469	1,539
16-Aug-09	34,048	4,988	299	29,359	27,896	19.4	4,774	13.5	3,311	1,463
23-Aug-09	34,048	5,034	299	29,313	26,879	24.1	5,700	13.8	3,266	2,434
30-Aug-09	34,048	5,038	299	29,309	27,265	21.5	5,186	13.0	3,142	2,044
06-Sep-09	34,048	6,114	299	28,233	26,452	24.2	5,500	16.4	3,719	1,781
13-Sep-09	34,048	6,803	299	27,544	25,447	26.0	5,685	16.4	3,588	2,097
20-Sep-09	34,048	7,198	299	27,149	24,478	29.5	6,188	16.8	3,517	2,671
27-Sep-09	34,048	7,490	299	26,857	22,972	31.6	6,450	12.6	2,565	3,885
04-Oct-09	34,048	7,755	299	26,592	22,187	36.5	7,110	13.9	2,705	4,405
11-Oct-09	34,048	7,217	299	27,130	22,381	38.1	7,480	13.9	2,731	4,749
18-Oct-09	34,048	7,551	299	26,796	22,714	33.8	6,764	13.4	2,682	4,082
25-Oct-09	34,048	8,025	299	26,322	23,110	28.7	5,862	13.0	2,650	3,212
01-Nov-09	34,048	8,615	299	25,732	23,826	21.2	4,499	12.2	2,593	1,906
08-Nov-09	34,048	8,079	299	26,268	23,975	22.2	4,774	11.5	2,481	2,293
15-Nov-09	34,048	7,598	299	26,749	24,592	22.0	4,815	12.1	2,658	2,157
22-Nov-09	34,048	8,001	299	26,346	25,040	17.5	3,924	11.7	2,618	1,306
29-Nov-09	34,048	7,597	299	26,750	25,143	19.1	4,296	12.0	2,689	1,607
06-Dec-09	34,048	6,658	299	27,689	26,182	18.7	4,358	12.2	2,851	1,507
13-Dec-09	34,048	5,995	299	28,352	26,311	20.9	4,902	12.2	2,861	2,041
20-Dec-09	34,048	5,328	299	29,019	26,195	24.4	5,691	12.3	2,867	2,824
27-Dec-09	34,048	4,778	299	29,569	25,604	30.3	6,872	12.8	2,907	3,965
03-Jan-10	34,048	4,289	299	30,058	25,175	35.8	7,930	13.8	3,047	4,883
10-Jan-10	34,048	4,604	299	29,743	26,499	25.8	6,092	12.0	2,848	3,244
17-Jan-10	34,048	4,553	299	29,794	26,793	24.6	5,876	12.0	2,875	3,001
24-Jan-10	34,048	4,563	299	29,784	27,233	22.5	5,470	12.0	2,919	2,551
31-Jan-10	34,048	4,521	299	29,826	26,983	23.8	5,729	12.0	2,886	2,843
07-Feb-10	34,048	5,977	299	28,370	26,703	18.6	4,448	11.6	2,781	1,667
14-Feb-10	34,048	6,017	299	28,330	26,397	20.2	4,756	12.0	2,823	1,933
21-Feb-10	34,048	6,017	299	28,330	26,012	21.5	5,005	11.5	2,687	2,318
28-Feb-10	34,048	6,185	299	28,162	25,660	23.0	5,261	12.1	2,759	2,502
07-Mar-10	34,037	6,950	299	27,386	25,647	19.4	4,446	11.8	2,707	1,739
14-Mar-10	34,037	6,915	299	27,421	25,346	23.2	5,156	13.8	3,081	2,075
21-Mar-10	34,037	7,047	299	27,289	24,624	25.5	5,539	13.2	2,874	2,665
28-Mar-10	34,037	7,180	299	27,156	24,247	26.9	5,764	13.4	2,855	2,909

Table A2 Assessment of Resource Adequacy: Normal Weather, Planned Scenario

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Oct-08	31,817	7,808	542	24,550	21,808	28.3	5,408	13.9	2,666	2,742
12-Oct-08	31,817	8,240	542	24,118	21,851	24.3	4,713	12.6	2,446	2,267
19-Oct-08	31,817	7,597	542	24,761	22,344	25.1	4,971	12.9	2,554	2,417
26-Oct-08	31,817	7,193	542	25,165	22,944	24.3	4,925	13.4	2,704	2,221
02-Nov-08	31,817	8,074	542	24,284	23,614	16.2	3,376	12.9	2,706	670
09-Nov-08	31,817	7,298	542	25,060	23,850	18.7	3,940	12.9	2,730	1,210
16-Nov-08	31,817	7,235	542	25,123	24,337	15.8	3,427	12.2	2,641	786
23-Nov-08	31,817	5,945	542	26,413	24,842	19.7	4,351	12.6	2,780	1,571
30-Nov-08	31,817	6,710	542	25,648	24,806	16.0	3,528	12.1	2,686	842
07-Dec-08	32,822	6,355	542	27,008	25,865	17.3	3,980	12.3	2,837	1,143
14-Dec-08	32,822	5,176	542	28,187	26,083	21.7	5,032	12.7	2,928	2,104
21-Dec-08	32,822	4,691	542	28,672	26,075	24.5	5,640	13.2	3,043	2,597
28-Dec-08	32,822	4,213	542	29,150	25,524	29.9	6,701	13.7	3,075	3,626
04-Jan-09	33,342	4,787	542	29,097	24,369	35.6	7,640	13.6	2,912	4,728
11-Jan-09	33,342	5,210	542	28,674	26,179	22.8	5,329	12.1	2,834	2,495
18-Jan-09	33,342	5,603	542	28,281	26,554	19.3	4,573	12.0	2,846	1,727
25-Jan-09	33,342	5,592	542	28,292	26,319	20.3	4,775	11.9	2,802	1,973
01-Feb-09	33,342	5,716	542	28,168	25,965	21.6	5,009	12.1	2,806	2,203
08-Feb-09	33,342	6,184	542	27,700	26,472	19.4	4,491	14.1	3,263	1,228
15-Feb-09	33,342	6,318	542	27,566	25,935	20.5	4,686	13.4	3,055	1,631
22-Feb-09	33,342	6,317	542	27,567	25,839	21.4	4,853	13.8	3,125	1,728
01-Mar-09	33,342	5,944	542	27,940	25,277	25.5	5,680	13.6	3,017	2,663
08-Mar-09	34,772	7,168	542	28,146	25,080	29.0	6,335	15.0	3,269	3,066
15-Mar-09	34,772	7,766	542	27,548	24,316	29.5	6,271	14.3	3,039	3,232
22-Mar-09	34,772	8,609	542	26,705	23,771	27.5	5,759	13.5	2,825	2,934
29-Mar-09	34,772	8,713	542	26,601	22,948	31.4	6,356	13.4	2,703	3,653
05-Apr-09	34,858	8,955	542	26,445	22,928	31.7	6,366	14.2	2,849	3,517
12-Apr-09	34,858	8,932	542	26,468	21,822	37.5	7,213	13.3	2,567	4,646
19-Apr-09	34,858	9,047	542	26,353	22,378	36.7	7,072	16.1	3,097	3,975
26-Apr-09	34,858	10,935	542	24,465	21,780	30.6	5,729	16.3	3,044	2,685
03-May-09	34,858	10,915	542	24,485	22,096	30.3	5,698	17.6	3,309	2,389
10-May-09	34,858	9,865	542	25,535	22,737	32.2	6,224	17.7	3,426	2,798
17-May-09	34,858	10,754	542	24,646	22,773	25.9	5,067	16.3	3,194	1,873
24-May-09	34,858	9,806	542	25,594	23,461	27.8	5,572	17.2	3,439	2,133
31-May-09	34,858	7,280	542	28,120	23,930	38.9	7,874	18.2	3,684	4,190
07-Jun-09	35,119	8,026	542	27,635	23,876	32.9	6,845	14.8	3,086	3,759
14-Jun-09	35,119	7,384	542	28,277	26,366	22.4	5,169	14.1	3,258	1,911
21-Jun-09	35,119	7,367	542	28,294	27,595	17.5	4,214	14.6	3,515	699
28-Jun-09	35,119	7,615	542	28,046	26,610	19.1	4,506	13.0	3,070	1,436

Note: The reader should be aware that Security and Adequacy Assessments are published on the IESO web site on a weekly and daily basis that progressively supersedes information presented in this report.

(Table A2 continued)

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Jul-09	35,119	7,006	542	28,655	25,799	26.8	6,048	14.1	3,192	2,856
12-Jul-09	35,119	6,029	542	29,632	28,029	20.8	5,101	14.3	3,498	1,603
19-Jul-09	35,119	5,585	542	30,076	28,360	20.4	5,089	13.5	3,373	1,716
26-Jul-09	35,119	5,705	542	29,956	27,568	23.6	5,720	13.8	3,332	2,388
02-Aug-09	35,119	5,759	542	29,902	26,384	28.8	6,681	13.6	3,163	3,518
09-Aug-09	35,119	5,513	542	30,148	28,366	24.2	5,882	16.9	4,100	1,782
16-Aug-09	35,119	6,040	542	29,621	28,022	23.4	5,625	16.8	4,026	1,599
23-Aug-09	35,119	6,136	542	29,525	26,970	28.3	6,519	17.2	3,964	2,555
30-Aug-09	35,119	6,211	542	29,450	26,512	25.2	5,931	12.7	2,993	2,938
06-Sep-09	35,869	8,053	542	28,358	25,009	28.3	6,251	13.1	2,902	3,349
13-Sep-09	35,869	8,763	542	27,648	24,013	30.1	6,394	13.0	2,759	3,635
20-Sep-09	35,869	9,089	542	27,322	23,116	34.2	6,966	13.6	2,760	4,206
27-Sep-09	35,869	8,504	542	27,907	22,576	41.2	8,146	14.3	2,815	5,331
04-Oct-09	35,953	8,594	542	27,901	21,968	46.6	8,866	15.4	2,933	5,933
11-Oct-09	35,953	8,039	542	28,456	21,987	49.1	9,371	15.2	2,902	6,469
18-Oct-09	35,953	8,409	542	28,086	22,367	44.0	8,581	14.7	2,862	5,719
25-Oct-09	35,953	8,815	542	27,680	22,735	38.6	7,704	13.8	2,759	4,945
01-Nov-09	35,953	9,390	542	27,105	23,404	31.0	6,406	13.1	2,705	3,701
08-Nov-09	35,953	8,802	542	27,693	23,607	32.5	6,792	13.0	2,706	4,086
15-Nov-09	35,953	8,373	542	28,122	24,036	32.7	6,923	13.4	2,837	4,086
22-Nov-09	35,953	8,756	542	27,739	24,527	27.5	5,978	12.7	2,766	3,212
29-Nov-09	35,953	8,483	542	28,012	24,545	28.9	6,287	13.0	2,820	3,467
06-Dec-09	35,953	8,274	542	28,221	25,501	25.1	5,659	13.0	2,939	2,720
13-Dec-09	35,953	7,501	542	28,994	25,540	27.4	6,237	12.2	2,783	3,454
20-Dec-09	35,953	6,942	542	29,553	25,596	30.5	6,909	13.0	2,952	3,957
27-Dec-09	35,953	6,252	542	30,243	25,059	37.4	8,236	13.9	3,052	5,184
03-Jan-10	35,953	5,809	542	30,686	24,597	42.6	9,172	14.3	3,083	6,089
10-Jan-10	35,953	6,299	542	30,196	24,943	37.4	8,213	13.5	2,960	5,253
17-Jan-10	35,953	6,347	542	30,148	25,035	36.7	8,095	13.5	2,982	5,113
24-Jan-10	35,953	6,304	542	30,191	25,358	34.5	7,751	13.0	2,918	4,833
31-Jan-10	35,953	6,372	542	30,123	25,028	36.5	8,051	13.4	2,956	5,095
07-Feb-10	35,953	7,804	542	28,691	25,132	28.7	6,395	12.7	2,836	3,559
14-Feb-10	35,953	7,870	542	28,625	24,967	31.7	6,885	14.8	3,227	3,658
21-Feb-10	35,953	7,917	542	28,578	24,461	33.4	7,150	14.2	3,033	4,117
28-Feb-10	35,953	8,004	542	28,491	24,367	33.7	7,181	14.4	3,057	4,124
07-Mar-10	36,692	9,420	542	27,814	23,925	32.3	6,788	13.8	2,899	3,889
14-Mar-10	36,692	9,435	542	27,799	23,384	35.6	7,297	14.1	2,882	4,415
21-Mar-10	36,692	9,581	542	27,653	22,904	38.1	7,627	14.4	2,878	4,749
28-Mar-10	36,692	9,712	542	27,522	22,450	40.0	7,863	14.2	2,791	5,072

Table A3 Zonal Bottled Generation for Normal Weather, Scenario

Week Ending Day	Firm Resource Scenario			Planned Resource Scenario		
	Bruce & West MW	Northeast MW	Northwest MW	Bruce & West MW	Northeast MW	Northwest MW
05-Oct-08	110	0	0	121	0	0
12-Oct-08	0	0	0	0	0	0
19-Oct-08	0	0	0	0	0	0
26-Oct-08	0	0	142	0	0	118
02-Nov-08	0	296	69	0	310	52
09-Nov-08	73	401	90	82	419	81
16-Nov-08	81	0	66	86	0	71
23-Nov-08	326	0	119	337	0	89
30-Nov-08	228	0	64	254	0	153
07-Dec-08	743	0	45	916	0	158
14-Dec-08	826	0	186	901	0	219
21-Dec-08	912	0	166	941	0	239
28-Dec-08	1,108	0	276	1,027	0	208
04-Jan-09	1,178	0	279	1,215	0	220
11-Jan-09	1,008	0	191	1,104	0	259
18-Jan-09	1,334	0	209	1,505	0	251
25-Jan-09	1,332	0	257	1,449	0	296
01-Feb-09	1,359	0	269	1,523	0	345
08-Feb-09	1,369	0	292	1,516	0	366
15-Feb-09	1,411	0	288	1,620	0	396
22-Feb-09	1,420	0	258	1,607	0	407
01-Mar-09	999	0	314	1,148	0	439
08-Mar-09	1,042	0	291	1,740	0	401
15-Mar-09	334	0	318	1,049	0	419
22-Mar-09	6	0	260	721	0	339
29-Mar-09	0	0	282	237	0	341
05-Apr-09	17	0	0	728	0	0
12-Apr-09	55	0	0	705	0	0
19-Apr-09	136	0	0	707	0	0
26-Apr-09	100	0	0	624	0	0
03-May-09	65	0	0	615	0	0
10-May-09	0	0	0	151	0	0
17-May-09	720	0	0	1,088	21	0
24-May-09	0	0	0	202	0	0
31-May-09	0	0	0	310	0	0
07-Jun-09	0	0	0	231	0	0
14-Jun-09	0	0	7	193	0	63
21-Jun-09	144	0	204	516	0	272
28-Jun-09	315	18	227	725	56	256

Note: The bottled generation values indicated in the table are capacity values calculated at the hour of weekly peak. In real time operation, the actual amount of bottled generation will depend on many conditions prevailing at the time, including the local generation levels, overall generation dispatch and the direction and levels of flows into and out of Ontario.

Zonal information is found on page 6 of the Ontario Transmission System document.

(Table A3 continued)

Week Ending Day	Firm Resource Scenario			Planned Resource Scenario		
	Bruce & West MW	Northeast MW	Northwest MW	Bruce & West MW	Northeast MW	Northwest MW
05-Jul-09	643	10	258	1,397	49	268
12-Jul-09	330	0	240	1,019	0	248
19-Jul-09	264	0	236	967	0	258
26-Jul-09	382	0	221	1,077	12	257
02-Aug-09	476	0	234	1,144	0	256
09-Aug-09	304	0	192	1,088	0	276
16-Aug-09	346	0	204	1,107	0	289
23-Aug-09	392	0	204	1,186	0	305
30-Aug-09	398	0	202	1,292	0	274
06-Sep-09	205	0	194	1,886	0	255
13-Sep-09	245	0	204	1,959	0	252
20-Sep-09	622	0	223	2,308	0	230
27-Sep-09	0	0	187	762	0	241
04-Oct-09	67	0	227	708	0	231
11-Oct-09	78	0	276	712	0	271
18-Oct-09	58	0	255	705	0	273
25-Oct-09	0	0	271	595	0	273
01-Nov-09	0	0	246	577	0	250
08-Nov-09	0	0	269	542	0	262
15-Nov-09	0	0	263	562	0	288
22-Nov-09	0	0	271	528	0	309
29-Nov-09	0	0	242	565	0	376
06-Dec-09	0	0	182	1,271	0	340
13-Dec-09	0	0	219	1,238	0	298
20-Dec-09	364	0	219	1,716	0	292
27-Dec-09	446	0	312	1,743	0	302
03-Jan-10	446	0	280	1,776	0	282
10-Jan-10	336	0	232	1,750	0	324
17-Jan-10	298	0	219	1,798	0	325
24-Jan-10	298	0	229	1,771	0	308
31-Jan-10	282	0	203	1,807	0	340
07-Feb-10	318	0	244	1,815	0	386
14-Feb-10	362	0	83	1,875	16	219
21-Feb-10	372	0	72	1,903	28	225
28-Feb-10	0	0	108	1,432	66	240
07-Mar-10	0	0	101	2,171	0	219
14-Mar-10	0	0	86	2,195	0	230
21-Mar-10	8	0	110	2,221	0	249
28-Mar-10	25	0	126	2,264	0	238

Table A4 Demand Forecast Range for Firm Scenario

Week Ending Day	Ontario Demand Normal Weather MW	Ontario Demand Extreme Weather MW	Week Ending Day	Ontario Demand Normal Weather MW	Ontario Demand Extreme Weather MW
05-Oct-08	19,358	23,697	05-Jul-09	23,248	25,362
12-Oct-08	19,619	20,260	12-Jul-09	25,152	26,978
19-Oct-08	20,018	20,916	19-Jul-09	25,657	27,945
26-Oct-08	20,472	21,220	26-Jul-09	24,857	26,824
02-Nov-08	21,160	21,831	02-Aug-09	23,872	25,560
09-Nov-08	21,417	22,199	09-Aug-09	24,899	27,830
16-Nov-08	21,977	22,881	16-Aug-09	24,585	26,987
23-Nov-08	22,382	23,371	23-Aug-09	23,613	26,248
30-Nov-08	22,397	23,856	30-Aug-09	24,123	26,336
07-Dec-08	23,338	24,580	06-Sep-09	22,733	26,265
14-Dec-08	23,508	24,614	13-Sep-09	21,859	25,939
21-Dec-08	23,320	24,617	20-Sep-09	20,961	25,059
28-Dec-08	22,759	24,013	27-Sep-09	20,407	23,493
04-Jan-09	21,768	23,072	04-Oct-09	19,482	23,871
11-Jan-09	23,893	24,866	11-Oct-09	19,650	20,269
18-Jan-09	24,274	25,314	18-Oct-09	20,032	20,929
25-Jan-09	24,062	25,211	25-Oct-09	20,460	21,213
01-Feb-09	23,713	24,840	01-Nov-09	21,233	21,904
08-Feb-09	23,825	24,929	08-Nov-09	21,494	22,272
15-Feb-09	23,469	24,493	15-Nov-09	21,934	22,916
22-Feb-09	23,298	24,191	22-Nov-09	22,422	23,406
01-Mar-09	22,804	24,029	29-Nov-09	22,454	23,909
08-Mar-09	22,344	23,824	06-Dec-09	23,331	24,629
15-Mar-09	21,830	23,144	13-Dec-09	23,450	24,692
22-Mar-09	21,450	22,670	20-Dec-09	23,328	24,494
29-Mar-09	20,805	22,046	27-Dec-09	22,697	23,734
05-Apr-09	20,644	22,288	03-Jan-10	22,128	23,586
12-Apr-09	19,797	20,984	10-Jan-10	23,651	24,576
19-Apr-09	19,790	22,357	17-Jan-10	23,918	25,045
26-Apr-09	19,257	22,367	24-Jan-10	24,314	25,353
03-May-09	19,308	22,048	31-Jan-10	24,097	25,246
10-May-09	19,902	22,630	07-Feb-10	23,922	25,025
17-May-09	20,191	22,028	14-Feb-10	23,574	24,599
24-May-09	20,557	22,972	21-Feb-10	23,325	24,320
31-May-09	20,852	24,087	28-Feb-10	22,901	24,126
07-Jun-09	21,383	24,516	07-Mar-10	22,940	23,826
14-Jun-09	23,692	26,074	14-Mar-10	22,265	23,765
21-Jun-09	24,674	27,163	21-Mar-10	21,750	23,085
28-Jun-09	24,182	26,824	28-Mar-10	21,392	22,590

Table A5 Demand Forecast Range for Planned Scenario

Week Ending Day	Ontario Demand Normal Weather MW	Ontario Demand Extreme Weather MW	Week Ending Day	Ontario Demand Normal Weather MW	Ontario Demand Extreme Weather MW
05-Oct-08	19,142	23,436	05-Jul-09	22,607	24,722
12-Oct-08	19,405	20,046	12-Jul-09	24,531	26,356
19-Oct-08	19,790	20,687	19-Jul-09	24,987	27,275
26-Oct-08	20,240	20,988	26-Jul-09	24,236	26,203
02-Nov-08	20,908	21,589	02-Aug-09	23,221	24,909
09-Nov-08	21,120	21,907	09-Aug-09	24,266	27,198
16-Nov-08	21,696	22,582	16-Aug-09	23,996	26,397
23-Nov-08	22,062	23,078	23-Aug-09	23,006	25,642
30-Nov-08	22,120	23,543	30-Aug-09	23,519	25,731
07-Dec-08	23,028	24,269	06-Sep-09	22,107	25,622
14-Dec-08	23,155	24,260	13-Sep-09	21,254	25,345
21-Dec-08	23,032	24,330	20-Sep-09	20,356	24,398
28-Dec-08	22,449	23,703	27-Sep-09	19,761	22,862
04-Jan-09	21,457	22,742	04-Oct-09	19,035	23,250
11-Jan-09	23,345	24,317	11-Oct-09	19,085	19,754
18-Jan-09	23,708	24,748	18-Oct-09	19,505	20,407
25-Jan-09	23,517	24,666	25-Oct-09	19,976	20,758
01-Feb-09	23,159	24,286	01-Nov-09	20,699	21,424
08-Feb-09	23,209	24,312	08-Nov-09	20,901	21,642
15-Feb-09	22,880	23,889	15-Nov-09	21,199	22,263
22-Feb-09	22,714	23,593	22-Nov-09	21,761	22,731
01-Mar-09	22,260	23,485	29-Nov-09	21,725	23,205
08-Mar-09	21,811	23,201	06-Dec-09	22,562	23,860
15-Mar-09	21,277	22,583	13-Dec-09	22,757	23,999
22-Mar-09	20,946	22,138	20-Dec-09	22,644	23,839
29-Mar-09	20,245	21,527	27-Dec-09	22,007	23,044
05-Apr-09	20,079	21,759	03-Jan-10	21,514	22,925
12-Apr-09	19,255	20,470	10-Jan-10	21,983	22,909
19-Apr-09	19,281	21,922	17-Jan-10	22,053	23,180
26-Apr-09	18,736	21,878	24-Jan-10	22,440	23,480
03-May-09	18,787	21,555	31-Jan-10	22,072	23,221
10-May-09	19,311	22,165	07-Feb-10	22,296	23,400
17-May-09	19,579	21,413	14-Feb-10	21,740	22,735
24-May-09	20,022	22,425	21-Feb-10	21,428	22,359
31-May-09	20,246	23,534	28-Feb-10	21,310	22,535
07-Jun-09	20,790	23,923	07-Mar-10	21,026	21,913
14-Jun-09	23,108	25,490	14-Mar-10	20,502	21,941
21-Jun-09	24,080	26,569	21-Mar-10	20,026	21,309
28-Jun-09	23,540	26,182	28-Mar-10	19,659	20,751

Table A6 Assessment of Resource Adequacy: Extreme Weather, Firm Scenario

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Oct-08	31,817	7,727	299	24,389	26,782	2.9	692	13.0	3,085	-2,393
12-Oct-08	31,817	8,240	299	23,876	22,638	17.9	3,616	11.7	2,378	1,238
19-Oct-08	31,817	7,597	299	24,519	23,414	17.2	3,603	11.9	2,498	1,105
26-Oct-08	31,817	7,187	299	24,929	23,765	17.5	3,709	12.0	2,545	1,164
02-Nov-08	31,817	8,069	299	24,047	24,572	10.2	2,216	12.6	2,741	-525
09-Nov-08	31,817	7,172	299	24,944	24,928	12.4	2,745	12.3	2,729	16
16-Nov-08	31,817	7,181	299	24,935	25,654	9.0	2,054	12.1	2,773	-719
23-Nov-08	31,817	5,922	299	26,194	26,181	12.1	2,823	12.0	2,810	13
30-Nov-08	31,817	6,529	299	25,587	26,779	7.3	1,731	12.3	2,923	-1,192
07-Dec-08	32,822	5,950	299	27,171	27,370	10.5	2,591	11.4	2,790	-199
14-Dec-08	32,822	5,002	299	28,119	27,416	14.2	3,505	11.4	2,802	703
21-Dec-08	32,822	4,497	299	28,624	27,514	16.3	4,007	11.8	2,897	1,110
28-Dec-08	32,822	4,166	299	28,955	26,968	20.6	4,942	12.3	2,955	1,987
04-Jan-09	33,102	4,652	299	28,749	25,868	24.6	5,677	12.1	2,796	2,881
11-Jan-09	33,102	4,978	299	28,423	27,580	14.3	3,557	10.9	2,714	843
18-Jan-09	33,102	5,229	299	28,172	28,070	11.3	2,858	10.9	2,756	102
25-Jan-09	33,102	5,281	299	28,120	27,946	11.5	2,909	10.9	2,735	174
01-Feb-09	33,102	5,345	299	28,056	27,535	13.0	3,216	10.9	2,695	521
08-Feb-09	33,102	5,901	299	27,500	27,563	10.3	2,571	10.6	2,634	-63
15-Feb-09	33,102	5,951	299	27,450	27,070	12.1	2,957	10.5	2,577	380
22-Feb-09	33,102	5,957	299	27,444	26,768	13.5	3,253	10.7	2,577	676
01-Mar-09	33,102	5,544	299	27,857	26,837	15.9	3,828	11.7	2,808	1,020
08-Mar-09	33,962	6,203	299	28,058	26,583	17.8	4,234	11.6	2,759	1,475
15-Mar-09	33,962	6,829	299	27,432	25,846	18.5	4,288	11.7	2,702	1,586
22-Mar-09	33,962	7,780	299	26,481	25,228	16.8	3,811	11.3	2,558	1,253
29-Mar-09	33,962	8,378	299	25,883	24,458	17.4	3,837	10.9	2,412	1,425
05-Apr-09	34,048	8,212	299	26,135	24,792	17.3	3,847	11.2	2,504	1,343
12-Apr-09	34,048	8,212	299	26,135	23,467	24.6	5,151	11.8	2,483	2,668
19-Apr-09	34,048	8,325	299	26,022	24,889	16.4	3,665	11.3	2,532	1,133
26-Apr-09	34,048	10,295	299	24,052	25,424	7.5	1,685	13.7	3,057	-1,372
03-May-09	34,048	10,285	299	24,062	25,060	9.1	2,014	13.7	3,012	-998
10-May-09	34,048	9,699	299	24,648	25,757	8.9	2,018	13.8	3,127	-1,109
17-May-09	34,048	10,172	299	24,175	24,913	9.8	2,147	13.1	2,885	-738
24-May-09	34,048	9,589	299	24,758	26,068	7.8	1,786	13.5	3,096	-1,310
31-May-09	34,048	6,955	299	27,392	27,076	13.7	3,305	12.4	2,989	316
07-Jun-09	34,048	7,589	299	26,758	27,442	9.2	2,242	11.9	2,926	-684
14-Jun-09	34,048	6,926	299	27,421	29,269	5.2	1,347	12.3	3,195	-1,848
21-Jun-09	34,048	6,619	299	27,728	30,439	2.1	565	12.1	3,276	-2,711
28-Jun-09	34,048	6,825	299	27,522	30,025	2.6	698	11.9	3,201	-2,503

Note: The reader should be aware that Security and Adequacy Assessments are published on the IESO web site on a weekly and daily basis that progressively supersedes information presented in this report.

(Table A6 continued)

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Jul-09	34,048	5,748	299	28,599	28,248	12.8	3,237	11.4	2,886	351
12-Jul-09	34,048	4,924	299	29,423	30,222	9.1	2,445	12.0	3,244	-799
19-Jul-09	34,048	4,507	299	29,840	31,246	6.8	1,895	11.8	3,301	-1,406
26-Jul-09	34,048	4,553	299	29,794	29,885	11.1	2,970	11.4	3,061	-91
02-Aug-09	34,048	4,562	299	29,785	28,384	16.5	4,225	11.1	2,824	1,401
09-Aug-09	34,048	4,239	299	30,108	31,169	8.2	2,278	12.0	3,339	-1,061
16-Aug-09	34,048	4,741	299	29,606	30,164	9.7	2,619	11.8	3,177	-558
23-Aug-09	34,048	4,794	299	29,553	29,274	12.6	3,305	11.5	3,026	279
30-Aug-09	34,048	4,812	299	29,535	29,372	12.2	3,199	11.5	3,036	163
06-Sep-09	34,048	5,926	299	28,421	29,346	8.2	2,156	11.7	3,081	-925
13-Sep-09	34,048	6,671	299	27,676	28,972	6.7	1,737	11.7	3,033	-1,296
20-Sep-09	34,048	6,962	299	27,385	27,900	9.3	2,326	11.3	2,841	-515
27-Sep-09	34,048	7,499	299	26,848	26,081	14.3	3,355	11.0	2,588	767
04-Oct-09	34,048	7,652	299	26,695	26,699	11.8	2,824	11.9	2,828	-4
11-Oct-09	34,048	7,151	299	27,196	22,926	34.2	6,927	13.1	2,657	4,270
18-Oct-09	34,048	7,504	299	26,843	23,508	28.3	5,914	12.3	2,579	3,335
25-Oct-09	34,048	7,986	299	26,361	23,658	24.3	5,148	11.5	2,445	2,703
01-Nov-09	34,048	8,574	299	25,773	24,290	17.7	3,869	10.9	2,386	1,483
08-Nov-09	34,048	8,043	299	26,304	24,660	18.1	4,032	10.7	2,388	1,644
15-Nov-09	34,048	7,559	299	26,788	25,437	16.9	3,872	11.0	2,521	1,351
22-Nov-09	34,048	7,961	299	26,386	26,017	12.7	2,980	11.2	2,611	369
29-Nov-09	34,048	7,557	299	26,790	26,636	12.1	2,881	11.4	2,727	154
06-Dec-09	34,048	6,644	299	27,703	27,284	12.5	3,074	10.8	2,655	419
13-Dec-09	34,048	5,975	299	28,372	27,319	14.9	3,680	10.6	2,627	1,053
20-Dec-09	34,048	5,147	299	29,200	27,193	19.2	4,706	11.0	2,699	2,007
27-Dec-09	34,048	4,605	299	29,742	26,505	25.3	6,008	11.7	2,771	3,237
03-Jan-10	34,048	4,132	299	30,215	26,428	28.1	6,629	12.1	2,842	3,787
10-Jan-10	34,048	4,523	299	29,824	27,303	21.4	5,248	11.1	2,727	2,521
17-Jan-10	34,048	4,450	299	29,897	27,775	19.4	4,852	10.9	2,730	2,122
24-Jan-10	34,048	4,457	299	29,890	28,083	17.9	4,537	10.8	2,730	1,807
31-Jan-10	34,048	4,438	299	29,909	27,977	18.5	4,663	10.8	2,731	1,932
07-Feb-10	34,048	5,948	299	28,399	27,745	13.5	3,374	10.9	2,720	654
14-Feb-10	34,048	5,971	299	28,376	27,250	15.4	3,777	10.8	2,651	1,126
21-Feb-10	34,048	5,943	299	28,404	26,929	16.8	4,084	10.7	2,609	1,475
28-Feb-10	34,048	6,148	299	28,199	26,703	16.9	4,073	10.7	2,577	1,496
07-Mar-10	34,037	6,849	299	27,487	26,534	15.4	3,661	11.4	2,708	953
14-Mar-10	34,037	6,846	299	27,490	26,431	15.7	3,725	11.2	2,666	1,059
21-Mar-10	34,037	7,021	299	27,315	25,634	18.3	4,230	11.0	2,549	1,681
28-Mar-10	34,037	7,139	299	27,197	25,108	20.4	4,607	11.2	2,518	2,089

Table A7 Assessment of Resource Adequacy: Extreme Weather, Planned Scenario

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Oct-08	31,817	7,705	542	24,653	26,480	5.2	1,217	13.0	3,044	-1,827
12-Oct-08	31,817	8,240	542	24,118	22,420	20.3	4,072	11.8	2,374	1,698
19-Oct-08	31,817	7,606	542	24,752	23,168	19.7	4,065	12.0	2,481	1,584
26-Oct-08	31,817	7,216	542	25,142	23,530	19.8	4,154	12.1	2,542	1,612
02-Nov-08	31,817	8,114	542	24,244	24,270	12.3	2,655	12.4	2,681	-26
09-Nov-08	31,817	7,246	542	25,112	24,528	14.6	3,205	12.0	2,621	584
16-Nov-08	31,817	7,247	542	25,111	25,272	11.2	2,529	11.9	2,690	-161
23-Nov-08	31,817	5,973	542	26,385	25,806	14.3	3,307	11.8	2,728	579
30-Nov-08	31,817	6,592	542	25,766	26,411	9.4	2,223	12.2	2,868	-645
07-Dec-08	32,822	6,057	542	27,306	26,995	12.5	3,037	11.2	2,726	311
14-Dec-08	32,822	5,086	542	28,277	27,050	16.6	4,017	11.5	2,790	1,227
21-Dec-08	32,822	4,546	542	28,817	27,224	18.4	4,487	11.9	2,894	1,593
28-Dec-08	32,822	4,211	542	29,152	26,655	23.0	5,449	12.5	2,952	2,497
04-Jan-09	33,342	4,827	542	29,057	25,538	27.8	6,315	12.3	2,796	3,519
11-Jan-09	33,342	5,163	542	28,721	27,030	18.1	4,404	11.2	2,713	1,691
18-Jan-09	33,342	5,397	542	28,487	27,450	15.1	3,739	10.9	2,702	1,037
25-Jan-09	33,342	5,408	542	28,476	27,367	15.5	3,810	11.0	2,701	1,109
01-Feb-09	33,342	5,455	542	28,429	26,985	17.1	4,143	11.1	2,699	1,444
08-Feb-09	33,342	6,067	542	27,817	26,893	14.4	3,505	10.6	2,581	924
15-Feb-09	33,342	6,130	542	27,754	26,467	16.2	3,865	10.8	2,578	1,287
22-Feb-09	33,342	6,129	542	27,755	26,171	17.6	4,162	10.9	2,578	1,584
01-Mar-09	33,342	5,657	542	28,227	26,295	20.2	4,742	12.0	2,810	1,932
08-Mar-09	34,772	6,877	542	28,437	26,023	22.6	5,236	12.2	2,822	2,414
15-Mar-09	34,772	7,504	542	27,810	25,354	23.2	5,227	12.3	2,771	2,456
22-Mar-09	34,772	8,387	542	26,927	24,760	21.6	4,789	11.8	2,622	2,167
29-Mar-09	34,772	8,503	542	26,811	24,029	24.6	5,284	11.6	2,502	2,782
05-Apr-09	34,858	8,792	542	26,608	24,309	22.3	4,849	11.7	2,550	2,299
12-Apr-09	34,858	8,877	542	26,523	23,016	29.6	6,053	12.4	2,546	3,507
19-Apr-09	34,858	8,812	542	26,588	24,480	21.3	4,666	11.7	2,558	2,108
26-Apr-09	34,858	10,767	542	24,633	24,800	12.6	2,755	13.4	2,922	-167
03-May-09	34,858	10,784	542	24,616	24,373	14.2	3,061	13.1	2,818	243
10-May-09	34,858	9,714	542	25,686	25,168	15.9	3,521	13.6	3,003	518
17-May-09	34,858	10,817	542	24,583	24,146	14.8	3,170	12.8	2,733	437
24-May-09	34,858	10,058	542	25,342	25,376	13.0	2,917	13.2	2,951	-34
31-May-09	34,858	7,342	542	28,058	26,414	19.2	4,524	12.2	2,880	1,644
07-Jun-09	35,119	7,995	542	27,666	26,663	15.7	3,743	11.5	2,740	1,003
14-Jun-09	35,119	7,220	542	28,441	28,550	11.6	2,951	12.0	3,060	-109
21-Jun-09	35,119	7,090	542	28,571	29,683	7.5	2,002	11.7	3,114	-1,112
28-Jun-09	35,119	7,302	542	28,359	29,215	8.3	2,177	11.6	3,033	-856

Note: The reader should be aware that Security and Adequacy Assessments are published on the IESO web site on a weekly and daily basis that progressively supersedes information presented in this report.

(Table A7 continued)

Week Ending Day	Total Resources MW	Total Reductions in Resources MW	Demand Measures MW	Available Resources MW	Required Resources MW	Available Reserve %	Available Reserve MW	Required Reserve %	Required Reserve MW	Reserve Above Requirement MW
05-Jul-09	35,119	6,718	542	28,943	27,558	17.1	4,221	11.5	2,836	1,385
12-Jul-09	35,119	5,882	542	29,779	29,399	13.0	3,423	11.6	3,043	380
19-Jul-09	35,119	5,276	542	30,385	30,369	11.4	3,110	11.3	3,094	16
26-Jul-09	35,119	5,429	542	30,232	29,091	15.4	4,029	11.0	2,888	1,141
02-Aug-09	35,119	5,531	542	30,130	27,792	21.0	5,221	11.6	2,883	2,338
09-Aug-09	35,119	4,990	542	30,671	30,361	12.8	3,473	11.6	3,163	310
16-Aug-09	35,119	5,498	542	30,163	29,384	14.3	3,766	11.3	2,987	779
23-Aug-09	35,119	5,677	542	29,984	28,555	16.9	4,342	11.4	2,913	1,429
30-Aug-09	35,119	5,664	542	29,997	28,645	16.6	4,266	11.3	2,914	1,352
06-Sep-09	35,869	7,344	542	29,067	28,444	13.5	3,445	11.0	2,822	623
13-Sep-09	35,869	8,088	542	28,323	28,106	11.8	2,978	10.9	2,761	217
20-Sep-09	35,869	8,584	542	27,827	27,083	14.1	3,429	11.0	2,685	744
27-Sep-09	35,869	8,145	542	28,266	25,506	23.6	5,404	11.6	2,644	2,760
04-Oct-09	35,953	8,293	542	28,202	26,035	21.3	4,952	12.0	2,785	2,167
11-Oct-09	35,953	8,078	542	28,417	22,582	43.9	8,663	14.3	2,828	5,835
18-Oct-09	35,953	8,448	542	28,047	23,155	37.4	7,640	13.5	2,748	4,892
25-Oct-09	35,953	8,817	542	27,678	23,371	33.3	6,920	12.6	2,613	4,307
01-Nov-09	35,953	9,361	542	27,134	23,979	26.7	5,710	11.9	2,555	3,155
08-Nov-09	35,953	8,877	542	27,618	24,198	27.6	5,976	11.8	2,556	3,420
15-Nov-09	35,953	8,268	542	28,227	24,955	26.8	5,964	12.1	2,692	3,272
22-Nov-09	35,953	8,695	542	27,800	25,341	22.3	5,069	11.5	2,610	2,459
29-Nov-09	35,953	8,264	542	28,231	25,897	21.7	5,026	11.6	2,692	2,334
06-Dec-09	35,953	7,944	542	28,551	26,456	19.7	4,691	10.9	2,596	2,095
13-Dec-09	35,953	7,269	542	29,226	26,681	21.8	5,227	11.2	2,682	2,545
20-Dec-09	35,953	6,681	542	29,814	26,676	25.1	5,975	11.9	2,837	3,138
27-Dec-09	35,953	6,125	542	30,370	25,952	31.8	7,326	12.6	2,908	4,418
03-Jan-10	35,953	5,767	542	30,728	25,892	34.0	7,803	12.9	2,967	4,836
10-Jan-10	35,953	6,239	542	30,256	25,766	32.1	7,347	12.5	2,857	4,490
17-Jan-10	35,953	6,146	542	30,349	26,042	30.9	7,169	12.4	2,862	4,307
24-Jan-10	35,953	6,173	542	30,322	26,341	29.1	6,842	12.2	2,861	3,981
31-Jan-10	35,953	6,141	542	30,354	26,083	30.7	7,133	12.3	2,862	4,271
07-Feb-10	35,953	7,630	542	28,865	26,146	23.4	5,465	11.7	2,746	2,719
14-Feb-10	35,953	7,718	542	28,777	25,475	26.6	6,042	12.1	2,740	3,302
21-Feb-10	35,953	7,663	542	28,832	25,102	29.0	6,473	12.3	2,743	3,730
28-Feb-10	35,953	7,651	542	28,844	25,219	28.0	6,309	11.9	2,684	3,625
07-Mar-10	36,692	9,180	542	28,054	24,607	28.0	6,141	12.3	2,694	3,447
14-Mar-10	36,692	9,098	542	28,136	24,620	28.2	6,195	12.2	2,679	3,516
21-Mar-10	36,692	9,349	542	27,885	23,953	30.9	6,576	12.4	2,644	3,932
28-Mar-10	36,692	9,516	542	27,718	23,360	33.6	6,967	12.6	2,609	4,358

Table A8 Zonal Bottled Generation for Extreme Weather, Scenario

Week Ending Day	Firm Resource Scenario			Planned Resource Scenario		
	Bruce & West MW	Northeast MW	Northwest MW	Bruce & West MW	Northeast MW	Northwest MW
05-Oct-08	39	0	0	18	0	0
12-Oct-08	0	0	0	0	0	0
19-Oct-08	0	0	0	0	0	9
26-Oct-08	0	0	112	0	0	141
02-Nov-08	0	329	27	0	343	59
09-Nov-08	45	350	61	68	369	93
16-Nov-08	58	0	45	78	0	90
23-Nov-08	301	0	102	321	0	133
30-Nov-08	202	0	25	226	0	64
07-Dec-08	649	0	20	721	0	55
14-Dec-08	738	0	208	780	0	250
21-Dec-08	832	0	154	851	0	185
28-Dec-08	966	0	220	976	0	256
04-Jan-09	1,090	0	224	1,215	0	259
11-Jan-09	962	0	183	1,094	0	221
18-Jan-09	1,239	0	157	1,352	0	197
25-Jan-09	1,229	0	220	1,306	0	256
01-Feb-09	1,279	0	234	1,338	0	270
08-Feb-09	1,342	0	272	1,445	0	319
15-Feb-09	1,372	0	292	1,492	0	336
22-Feb-09	1,366	0	304	1,480	0	347
01-Mar-09	924	0	277	986	0	314
08-Mar-09	961	0	230	1,573	0	277
15-Mar-09	250	0	295	869	0	336
22-Mar-09	0	0	246	555	0	282
29-Mar-09	0	0	259	75	0	294
05-Apr-09	0	0	0	564	0	0
12-Apr-09	0	0	0	649	0	0
19-Apr-09	0	0	0	471	0	0
26-Apr-09	0	0	0	457	0	0
03-May-09	0	0	0	483	0	0
10-May-09	0	0	0	0	0	0
17-May-09	542	0	0	1,172	0	0
24-May-09	0	0	0	438	16	0
31-May-09	0	0	0	372	0	0
07-Jun-09	0	0	0	199	0	0
14-Jun-09	0	0	5	45	0	47
21-Jun-09	69	0	178	292	0	220
28-Jun-09	238	0	215	469	0	255

Note: The bottled generation values indicated in the table are capacity values calculated at the hour of weekly peak. In real time operation, the actual amount of bottled generation will depend on many conditions prevailing at the time, including the local generation levels, overall generation dispatch and the direction and levels of flows into and out of Ontario.

Zonal information is found on page 6 of the Ontario Transmission System document.

(Table A8 continued)

Week Ending Day	Firm Resource Scenario			Planned Resource Scenario		
	Bruce & West MW	Northeast MW	Northwest MW	Bruce & West MW	Northeast MW	Northwest MW
05-Jul-09	408	0	255	1,127	0	300
12-Jul-09	146	0	222	855	0	264
19-Jul-09	135	0	220	653	0	264
26-Jul-09	183	0	217	811	0	259
02-Aug-09	154	0	254	875	0	296
09-Aug-09	89	0	207	593	0	247
16-Aug-09	107	0	195	618	0	235
23-Aug-09	136	0	219	774	0	258
30-Aug-09	159	0	215	765	0	254
06-Sep-09	87	0	124	1,268	0	164
13-Sep-09	110	0	208	1,287	0	250
20-Sep-09	422	0	187	1,799	0	233
27-Sep-09	0	0	196	405	0	240
04-Oct-09	0	0	190	402	0	236
11-Oct-09	8	0	280	702	0	319
18-Oct-09	0	0	266	702	0	315
25-Oct-09	0	0	232	602	0	268
01-Nov-09	0	0	204	555	0	242
08-Nov-09	0	0	233	597	0	282
15-Nov-09	0	0	224	480	0	265
22-Nov-09	0	0	231	487	0	290
29-Nov-09	0	0	202	474	0	247
06-Dec-09	0	0	168	1,034	0	247
13-Dec-09	0	0	199	1,038	0	267
20-Dec-09	233	0	168	1,514	0	233
27-Dec-09	304	0	281	1,573	0	344
03-Jan-10	358	0	211	1,742	0	274
10-Jan-10	259	0	228	1,711	0	304
17-Jan-10	234	0	180	1,659	0	263
24-Jan-10	235	0	185	1,682	0	267
31-Jan-10	234	0	168	1,660	0	257
07-Feb-10	302	0	231	1,711	0	316
14-Feb-10	312	0	87	1,783	0	174
21-Feb-10	301	0	70	1,749	0	154
28-Feb-10	0	0	71	1,236	0	150
07-Mar-10	0	0	0	2,027	0	123
14-Mar-10	0	0	17	1,996	0	91
21-Mar-10	0	0	91	2,066	0	173
28-Mar-10	0	0	110	2,112	0	194

Table A9 Energy Production Capability Forecast

Month	Firm Scenario Forecast Energy Production Capability (GWh)	Planned Scenario Forecast Energy Production Capability (GWh)
Oct 2008	14,820	14,820
Nov 2008	15,304	15,304
Dec 2008	18,294	18,294
Jan 2009	18,581	18,734
Feb 2009	16,583	16,721
Mar 2009	16,880	17,396
Apr 2009	16,004	16,503
May 2009	17,880	18,395
Jun 2009	17,745	18,326
Jul 2009	18,960	19,559
Aug 2009	18,742	19,341
Sep 2009	16,739	17,821
Oct 2009	16,471	17,643
Nov 2009	16,614	17,748
Dec 2009	18,425	19,597
Jan 2010	18,468	19,640
Feb 2010	16,790	17,848
Mar 2010	18,460	20,151

- End of Section -

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Appendix B Transmission Projects

Table B Transmission Projects

Zone	CAA-ID#	Transmitter	Description	Proposed I/S Date
East	2007-EX333	Hydro One Networks Inc.	Whitby TS: new shunt capacitor at T3/T4 DESN station	2008-Q3
	2003-EX176	Hydro One Networks Inc.	Kingston-Gardiner TS: new T3/T4 DESN station	2008-Q4
Essa	2006-211	Hydro One Networks Inc.	new Holland TS	2009-Q2
	2005-190	Hydro One Networks Inc.	Stayner TS: modifications and new 230 kV line	2009-Q2
Niagara	2002-085	Hydro One Networks Inc.	Queenston Flow West: new 230 kV circuits Q26M & Q35M (Allanburg x Middleport)	To be determined
	2007-257	Hydro One Networks Inc.	thermal uprating of 115 kV circuits D9HS, D10S and Q11S	2009-Q2
	2002-EX070	Hydro One Networks Inc.	Venessa Junction to Norfolk TS: new 115 kV circuit	2009-Q3
	2007-EX379	Hydro One Networks Inc.	retirement of Q5G (25 Hz circuit)	2008-Q4
	N/A	Hydro One Networks Inc.	reconnect of Beck G7 to 60 Hz	2008-Q4
	N/A	Hydro One Networks Inc.	thermal upgrade of 115 kV circuit Q4N	2009-Q2
	N/A	Hydro One Networks Inc.	retirement of 25 Hz system	2009-Q2
Northeast	2005-207	Five Nations Energy Inc.	Kashechewan TS: new transformer	2009-Q3
	2005-207	Five Nations Energy Inc.	Fort Albany TS: new back-up transformer	2008-Q4
	2000-015	Five Nations Energy Inc.	new 115 kV transmission line from Moosonee SS to Kashechewan TS to supply Victor Mine	2008-Q3
	N/A	Hydro One Networks Inc.	retirement of 25 Hz system	2009-Q4
	N/A	Great Lakes Power Ltd.	Mackay TS 115 kV yard refurbishment - on going	2009-Q3
	N/A	Great Lakes Power Ltd.	Third Line TS 115 kV yard refurbishment - on going	2010-Q4
	2006-262	Hydro One Networks Inc.	Mississagi Area Generation Rejection Scheme Expansion	2009-Q4
Northwest	2006-247	Hydro One Networks Inc.	Lakehead TS: new static var compensator (SVC)	2009-Q4
Ottawa	2000-001	Hydro One Networks Inc.	Hawthorne TS: new 1,250 MW Ontario-Quebec interconnection	2009-Q1

(Table B continued)

Zone	CAA-ID#	Transmitter	Description	Proposed I/S Date
Southwest	2006-221	Hydro One Networks Inc.	Halton TS and Meadowvale TS: new shunt capacitors	2008-Q4
	2006-EX299	Hydro One Networks Inc.	Burlington TS: Replace the lower rated 230/115 kV transformer	2008-Q4
	2006-249	Hydro One Networks Inc.	230 kV circuits B4V & B5V: uprate Hanover x Orangeville sections	2009-Q1
	2007-295	Hydro One Networks Inc.	Middleport TS: new 4x250 Mvar shunt capacitors	2009-Q2
	2007-295	Hydro One Networks Inc.	Buchanan TS: new 200 Mvar shunt capacitor	2009-Q3
	2007-295	Hydro One Networks Inc.	Nanticoke TS: new 2x250 Mvar shunt capacitors	2009-Q4
Toronto	2006-220	Hydro One Networks Inc.	Claireville TS: Install 230 kV bus-tie circuit breaker K1K2 Reterminate 230 kV circuit V73RS to Cardiff (V42H) & 230 kV circuit V73RS to Goreway (V42H) Reterminate 230 kV circuit V76R to Richview Reterminate 230 kV circuit B82V to Brown Hill	Partially I/S Completion by 2008-Q3
	2006-220	Hydro One Networks Inc.	Claireville TS: Reterminate 230 kV side of autotransformer T15 Reterminate 230 kV circuit V73R to Richview Reterminate 230 kV circuit V75R to Kleinburg (V44)	2008-Q4
	2006-220	Hydro One Networks Inc.	Claireville TS: Reterminate circuit 230 kV V71RP to Parkway (V71P) Reterminate circuit 230 kV V72R to Cardiff (V41H)	2009-Q4
	2006-246	Hydro One Networks Inc.	terminate 230 kV circuit V75R (V77R) into Richview TS & Claireville TS	2009-Q2
	2007-264	Hydro One Networks Inc.	Goreway TS: new T1/T2 DESN station	2010-Q2
	2006-224	Hydro One Networks Inc.	Hurontario SS and Transmission Line	2010-Q4
	2008-320	PowerStream	Markham MTS#2: new DESN station	2009-Q4
West	2007-EX328	Hydro One Networks Inc.	Lambton TS: Replace Air Blast breakers with SF6 breakers and replace buswork (strain bus with rigid bus)	2009-Q1

- End of Section -

Appendix C Planned Transmission Outages

The following tables list the planned transmission outages by transmission zone, for transmission outages with an expected duration greater than five days, and/or for those transmission outages associated with a major project.

Table C1 Bruce Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Sep 14 2009 5:00 AM	Sep 20 2009 6:00 PM	Longwood TS: B562L::LONGWOOD_TS::BRUCE_A_TS, W52-B562L, B562L::LONGWOOD_TS::BRUCE_A_TS, 21-B562L	4675791	8 Hour	CWW	NBLIP FABC @ max. NBLIP FABC @ max. BLIP	500 MW 260 MW 950 MW

Table C2 East Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 06 2008 4:01 AM	Oct 31 2008 4:01 PM	Dobbin TS: C27P::DOBBIN_TS::GALETTA_JCT, C27P::GALETTA_JCT::CHATS_FALLS_SS, HL27, C27P::DOBBIN_TS::GALETTA_JCT, C27P::GALETTA_JCT::CHATS_FALLS_SS, D_BUS, AL27, DL33, DL3	5277035	8 Hour	CWW	None	
Sep 21 2009 6:00 AM	Oct 09 2009 4:00 PM	Easton JCT: L22H::EASTON_JCT::HINCHINBROOKE_SS, L22H::EASTON_JCT::HINCHINBROOKE_SS, L22H::EASTON_YULE_JCT::ST.LAWRENCE_TS, L22H::EASTON_YULE_JCT::EASTON_JCT, 49-L22H, 10-L22H, 24T1-L22H, L22H::EASTON_YULE_JCT::ST.LAWRENCE_TS, L22H::EASTON_YULE_JCT::EASTON_JCT, L22H::EASTON_YULE_JCT::SMITHS_FALLS_TS, L22H::EASTON_YULE_JCT::SMITHS_FALLS_TS, T3-L22H, L22H::BROCKVILLE_TS::EASTON_JCT, L22H::BROCKVILLE_TS::EASTON_JCT	5310000	8 Hour	CWW	None	
Mar 09 2009 6:00 AM	Mar 27 2009 6:00 PM	St.Lawrence TS: 49-L21H, T3-L21H, L21H::CROSBY_JCT::HINCHINBROOKE_SS, L21H::EASTON_YULE_JCT::CROSBY_JCT, L21H::CROSBY_JCT::HINCHINBROOKE_SS, L21H::EASTON_YULE_JCT::SMITHS_FALLS_TS, L21H::CROSBY_JCT::CROSBY_TS, L21H::EASTON_YULE_JCT::CROSBY_JCT, L21H::EASTON_YULE_JCT::SMITHS_FALLS_TS, L21H::CROSBY_JCT::CROSBY_TS, T1-L21H, 10-L21H, L21H::ST.LAWRENCE_TS::EASTON_YULE_JCT, L21H::ST.LAWRENCE_TS::EASTON_YULE_JCT, T4-L21H	5326751	8 Hour	CWW	None	
Oct 13 2008 5:00 AM	Nov 07 2008 6:00 PM	Dobbin TS: T5-H, T5, T5-D	5541971	8 Hour	CWW	None	
Aug 25 2008 5:00 AM	Oct 02 2008 6:00 PM	St.Lawrence TS: PS33, PS33-S, PS33-2, L33P::FDRX-USA_LXP_TS::ST.LAWRENCE_TS, R33, PS33-1, R33-2, PS33-1, R33-1, PS33-2, PS33-S, PS33-2, L33P::FDRX-USA_LXP_TS::ST.LAWRENCE_TS	5542138	16 Hour	CWW	NY import NY export	150 MW
Nov 10 2008 5:30 AM	Nov 21 2008 6:00 PM	Cobden JCT: 69T1B-38, T1B::RED_ROCK_CGS::COBDEN_JCT, T1B::RED_ROCK_CGS::COBDEN_JCT	5579029	4 Hour	CWW	None	
Nov 10 2008 6:00 AM	Nov 18 2008 12:00 PM	Lennox TS: DL3, T2, X3H::CATARAQUI_TS::HINCHINBROOKE_SS, P_BUS, T2L3, L3L23, T2L5, X3H::CATARAQUI_TS::HINCHINBROOKE_SS, H51L3, X3H::CATARAQUI_TS::LENNOX_TS, HL3, X3H::CATARAQUI_TS::LENNOX_TS	5701131	3 Day	CWW	None	
Oct 06 2008 8:30 AM	Oct 11 2008 4:00 PM	Chenaux TS: 4X6	6206314	8 Hour	CWW	None	

Table C3 Essa Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 20 2008 4:00 AM	Oct 31 2008 4:00 PM	Minden TS: 87-M80B, L3L80, HL80	6301916	8 Hour	CWW	None	None

Table C4 Niagara Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Jul 16 2008 10:15 AM	Dec 31 2008 4:00 PM	Swann Rd 4: 1306, 1306	5006424	Non-Recallable	CWW	None	None
Apr 06 2009 7:00 AM	Apr 17 2009 8:00 PM	Beck #2 TS: TL21L23	5205809	6 Hour	CWW	None	None
Sep 14 2008 11:00 PM	Dec 12 2008 6:00 PM	Beck #1 SS: E7_BUS	5797599	48 Hour	CWW	None	None
Oct 21 2008 6:30 AM	Oct 28 2008 2:30 PM	Allanburg TS: HL37	5980210	4 Hour	CWW	None	None
Jul 16 2008 10:15 AM	Dec 12 2008 4:00 PM	Beck #1 SS: 20Q5G-E, 106-DBO, A7_BUS, A7_BUS, 6A-7, 20BSH106-7, 20Q5G-E, 20Q5G-A, 20Q5G-A, E7DBO, E7DBO, 20BSH106-7, 6A-7, 20Q5G, 20Q5G, 106-DBO	5840243	4 Hour	CWW	None	None
Jul 21 2008 11:15 AM	May 15 2009 6:00 PM	Beck #2 TS: R76	6309393	3 Hour	CWW	NY Import NY Export FABC	450 MW 350 MW 50 to 100 MW on top of other outages, see Bruce, Southwest and West tabs

Table C5 Northeast Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 06 2008 5:00 AM	Oct 24 2008 6:00 PM	Algoma TS: S22A::CLARABELLE_JCT::ALGOMA_TS, S22A::CLARABELLE_JCT::ALGOMA_TS, 26-S22A, 9-S22A, S22A::MARTINDALE_TS::CLARABELLE_JCT, T2-S22A, S22A::CLARABELLE_JCT::CLARABELLE_TS, S22A::MARTINDALE_TS::CLARABELLE_JCT, S22A::CLARABELLE_JCT::CLARABELLE_TS	5525309	4 Hour	CWW	EWTE	50 MW
Oct 27 2008 5:00 AM	Nov 09 2008 9:00 PM	Essa TS: 18-X504E, X504E::HANMER_TS::ESSA_TS, X504E::HANMER_TS::ESSA_TS, 33-X504E	5682719	36 Hour	CWW	Flow South	600 MW
Sep 22 2008 6:00 AM	Oct 02 2008 6:00 PM	Martindale TS: 9-H23S, H23S::PEDLEY_JCT::MARTINDALE_TS, H23S::PEDLEY_JCT::MARTINDALE_TS, H23S::WIDDIFIELD_SS::PEDLEY_JCT, T5-H23S, H23S::WIDDIFIELD_SS::PEDLEY_JCT, H23S::PEDLEY_JCT::CRYSTAL_FALLS_TS, H23S::PEDLEY_JCT::CRYSTAL_FALLS_TS, 38H23S-9	6096748	4 Hour	CWW	None	
Oct 06 2008 4:00 AM	Nov 19 2008 7:00 PM	Sudbury JCT: L1S-LC1, 9-L1S	6253484	1 Day	CWW	None	
Nov 24 2008 4:00 AM	Dec 19 2008 7:00 PM	Sudbury JCT: L1S-LC1, 9-L1S	6253511	1 Day	CWW	None	
Jul 24 2008 9:00 AM	Dec 02 2008 10:00 AM	Spruce Falls P&P CTS: SW-9A1-27, 2-115-J, SW-9A1-9, SW-3HTT, 9A1, 1-115-J, SW-2-115-I, SW-1-115-I	6298141	Non-Recallable	CWW	None	
Nov 03 2008 7:00 AM	Nov 10 2008 4:00 PM	Hanmer TS: PL504	6299360	4 Hour	CWW	None	
Jul 16 2008 10:15 AM	Dec 31 2008 6:00 PM	Elliot Lake TS: H1-H2, H1-H2	6265986	Non-Recallable	CWW	None	N/A

Table C6 Northwest Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 08 2008 7:00 AM	Oct 14 2008 5:30 PM	Kenora TS: K24F::KENORA_TS::FORT_FRANCES_TS, 34-K24F, K24F::KENORA_TS::FORT_FRANCES_TS, 22-K24F	5443071	4 Hour	CWW	OMTE, OMTW, EWTE, MPFN, MPFS	OMTE - 50 MW OMTW - 250 MW EWTE - 75 MW MPFN - 50 MW MPFS - 140 MW
Oct 22 2008 7:00 AM	Oct 28 2008 5:30 PM	Kenora TS: 34-K24F, 22-K24F, K24F::KENORA_TS::FORT_FRANCES_TS, K24F::KENORA_TS::FORT_FRANCES_TS	5443076	4 Hour	CWW	OMTE, OMTW, EWTE, MPFN, MPFS	OMTE - 50 MW OMTW - 250 MW EWTE - 75 MW MPFN - 50 MW MPFS - 140 MW
Oct 20 2008 1:00 PM	Oct 30 2008 6:00 PM	Fort Frances TS: T1-K, T1, T1-J	6167874	4 Hour	CWW	None	N/A
Nov 19 2008 7:00 AM	Nov 25 2008 6:00 PM	Kenora TS: 34-K21W, K21W::WHITESHELL_CTS::KENORA_TS, K21W::WHITESHELL_CTS::KENORA_TS	6238123	4 Hour	CWW	OMTE, OMTW, EWTE	OMTE - 100 MW OMTW - 100 MW EWTE - 50 MW
Feb 16 2009 7:00 AM	Mar 15 2009 6:00 PM	Whiteshell CTS: K22W::WHITESHELL_CTS::KENORA_TS, K22W::WHITESHELL_CTS::KENORA_TS, 34-K22W	6267394	4 Hour	CWW	OMTE, OMTW, EWTE, EWTW, MPFN	**Feb 16 - Mar 12: These penalties are for D26A + K21W:** OMTE - 100 MW OMTW - 250 MW EWTE - 75 MW EWTW - 120 MW MPFN - 50 MW **Mar 13-15:** OMTE - 100 MW OMTW - 100 MW EWTE - 50 MW
Feb 14 2009 7:00 AM	Mar 12 2009 6:00 PM	Mackenzie TS: 20-D26A, 25-D26A, D26A::DRYDEN_TS::MACKENZIE_TS, D26A::DRYDEN_TS::MACKENZIE_TS	6267398	4 Hour	CWW	OMTE, OMTW, EWTE, EWTW, MPFN	**These penalties are for D26A + one OM tie outage (K21W or K22W):** OMTE - 100 MW OMTW - 250 MW EWTE - 75 MW EWTW - 120 MW MPFN - 50 MW
Jan 26 2009 7:00 AM	Feb 13 2009 6:00 PM	Fort Frances TS: F25A::FORT_FRANCES_TS::MACKENZIE_TS, 20-F25A, 22-F25A, F25A::FORT_FRANCES_TS::MACKENZIE_TS	6267472	4 Hour	CWW	OMTE, OMTW, EWTE, EWTW, MPFN, MPFS	**These penalties are for F25A + K21W outage:** OMTE - 100 MW OMTW - 250 MW EWTE - 75 MW EWTW - 120 MW MPFN - 50 MW MPFS - 140 MW
Jan 26 2009 7:00 AM	Feb 15 2009 6:00 PM	Kenora TS: 34-K21W, K21W::WHITESHELL_CTS::KENORA_TS, K21W::WHITESHELL_CTS::KENORA_TS	6267477	4 Hour	CWW	OMTE, OMTW, EWTE, EWTW, MPFN, MPFS	**Jan 26 - Feb 13: These penalties are for F25A + K21W outage.** OMTE - 100 MW OMTW - 250 MW EWTE - 75 MW EWTW - 120 MW MPFN - 50 MW MPFS - 140 MW **Feb 14-15: These penalties are for D26A + K21W:** OMTE - 100 MW OMTW - 250 MW EWTE - 75 MW EWTW - 120 MW MPFN - 50 MW

Table C7 Ottawa Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Nov 24 2008 4:30 AM	Dec 05 2008 4:00 PM	Slater TS: 46-A5RK, A5RK-CA	5336659	4 Hour	CWW	None	None
Oct 14 2008 5:00 AM	Oct 31 2008 4:00 PM	Merivale TS: L31L32	5505242	24 Hour	CWW	None	None
Sep 18 2008 7:00 AM	Oct 10 2008 3:00 PM	Merivale TS: PL31	5505258	24 Hour	CWW	None	None
Nov 10 2008 6:00 AM	Nov 15 2008 5:00 PM	Merivale TS: KL32, K1_BUS, K1-K2, K1-K2, KL29, T22-K2, K2_BUS	5608415	4 Hour	CWW	None	None

Table C8 Southwest Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Jan 05 2009 6:00 AM	Jan 30 2009 3:00 PM	Trafalgar TS: K1K2	4702290	3 Day	CWW	None	None
Mar 09 2009 4:00 AM	Mar 19 2009 8:00 PM	Amaranth Jct: 145B4V-MSO1, B4V::HANOVER_TS::AMARANTH_JCT, B4V-22, B4V::HANOVER_TS::AMARANTH_JCT	5252056	5 Day	CWW	FABC	300 - 450 MW
Sep 02 2008 6:00 AM	Nov 21 2008 3:00 PM	Milton SS: L70L73	5335735	5 Day	CWW	None	None
Nov 04 2008 6:00 AM	Nov 14 2008 2:00 PM	Middleport TS: T3-LT3, T3, T3-TL580	5541951	8 Hour	CWW	FABC	Nov. 4 - 6 500 - 900 MW Nov. 6 - 10 200 - 600 Nov. 10 - 14 500 - 900
Oct 20 2008 6:20 AM	Oct 31 2008 2:00 PM	Middleport TS: L2L33	5768932	8 Hour	CWW	None	None
May 04 2009 6:15 AM	May 15 2009 2:00 PM	Middleport TS: L81L85	5776356	24 Hour	CWW	FABC FETT	50 - 300 MW May 4 - 11 700 MW May 11 - 15 about 1000 MW
Sep 15 2008 6:30 AM	Oct 10 2008 3:00 PM	Detweiler TS: ASC21, 26-M21D, AL6, AL4, AL7, A_BUS	5779539	8 Hour	CWW	FABC	Sep. 15 - 22 300 - 500 MW Sep. 22 - 29 600 - 800 MW Sep. 29 - Oct. 2 710 - 910 MW Oct. 2 - 9 410 - 610 MW Oct. 9 - 10 410 - 760 MW
Feb 09 2009 4:00 AM	Feb 19 2009 8:00 PM	Amaranth Jct: 145B5V-MSO1, B5V::HANOVER_TS::AMARANTH_JCT, B5V::HANOVER_TS::AMARANTH_JCT, B5V-22	5802270	12 Hour	CWW	FABC	300 - 450 MW
Sep 22 2008 5:00 AM	Oct 02 2008 7:00 PM	Hanover TS: B4V::HANOVER_TS::AMARANTH_JCT, B4V::HANOVER_TS::AMARANTH_JCT, 145B4V-MSO1, B4V-22	5816972	12 Hour	CWW	FABC	Sep. 22 - 29 600 - 800 MW Sep. 29 - Oct. 2 710 - 910 MW
Oct 14 2008 4:00 AM	Oct 24 2008 8:00 PM	Amaranth Jct: B5V::HANOVER_TS::AMARANTH_JCT, B5V::HANOVER_TS::AMARANTH_JCT, 145B5V-MSO1, B5V-22	5816977	12 Hour	CWW	FABC	Oct. 14 - 17 500 - 700 MW Oct. 17 - 20 500 - 550 MW Oct. 20 - 24 500 - 700 MW
Oct 27 2008 4:00 AM	Nov 06 2008 8:00 PM	Hanover TS: B5V-22, B5V::HANOVER_TS::AMARANTH_JCT, 145B5V-MSO1, B5V::HANOVER_TS::AMARANTH_JCT	5816982	12 Hour	CWW	FABC	Oct. 27 - 31 500 - 700 MW Oct. 31 - Nov. 3 500 - 550 MW Nov. 3 - 4 500 - 850 MW Nov. 4 - 6 500 - 900 MW
Nov 10 2008 5:00 AM	Nov 20 2008 7:00 PM	Hanover TS: B4V-22, B4V::HANOVER_TS::AMARANTH_JCT, B4V::HANOVER_TS::AMARANTH_JCT, 145B4V-MSO1	5816987	12 Hour	CWW	FABC	Nov. 10 - 14 500 - 900 MW Nov. 14 - 20 300 MW
Dec 08 2008 4:00 AM	Dec 18 2008 8:00 PM	Amaranth Jct: 145B5V-MSO1, B5V::HANOVER_TS::AMARANTH_JCT, B5V::HANOVER_TS::AMARANTH_JCT, B5V-22	5817084	12 Hour	CWW	FABC	300 - 450 MW
Jan 12 2009 4:00 AM	Jan 22 2009 8:00 PM	Amaranth Jct: B5V::HANOVER_TS::AMARANTH_JCT, B5V::HANOVER_TS::AMARANTH_JCT, 145B5V-MSO1, B5V-22	5817089	12 Hour	CWW	FABC	300 - 450 MW
Oct 21 2008 7:10 AM	Oct 31 2008 3:30 PM	Detweiler TS: SC11SC, SC11, SC11K	5884876	2 Day	CWW	None	None
Nov 24 2008 5:00 AM	Dec 04 2008 7:00 PM	Hanover TS: B4V-22, 145B4V-MSO1, B4V::HANOVER_TS::AMARANTH_JCT, B4V::HANOVER_TS::AMARANTH_JCT	5951611	12 Hour	CWW	FABC	300 MW
Jan 26 2009 5:00 AM	Feb 05 2009 7:00 PM	Amaranth Jct: 145B4V-MSO1, B4V-22, B4V::HANOVER_TS::AMARANTH_JCT, B4V::HANOVER_TS::AMARANTH_JCT	6133173	12 Hour	CWW	FABC	300 - 450 MW
Feb 23 2009 4:00 AM	Mar 05 2009 8:00 PM	Amaranth Jct: 145B5V-MSO1, B5V-22, B5V::HANOVER_TS::AMARANTH_JCT, B5V::HANOVER_TS::AMARANTH_JCT	6133232	12 Hour	CWW	FABC	300 - 450 MW
Jun 04 2008 7:10 AM	Jul 16 2008 10:15 AM	Detweiler JCT: 59D9F-D1W, 59D9F-D1W	6168426	3 Hour	CWW	None	None
Oct 06 2008 7:00 AM	Oct 15 2008 3:00 PM	Burlington TS: T9K	6244282	4 Hour	CWW	None	None
Oct 20 2008 7:00 AM	Oct 31 2008 3:00 PM	Burlington TS: A1A2	6245997	4 Hour	CWW	None	None
Jul 16 2008 10:15 AM	Dec 31 2008 11:00 PM	Stirton TS: 48HL4-28, HL4::STIRTON_TS::ELGIN_TS, HL4::STIRTON_TS::ELGIN_TS, 48HL4-28, HL4::STIRTON_TS::ELGIN_TS, HL4::STIRTON_TS::ELGIN_TS, A1-H2, A1-H2	2976560	1 Hour	CWW	None	None
Jul 16 2008 10:15 AM	Dec 31 2008 11:59 PM	Middleport TS: 25-Q35M, 25-Q35M	4108511	Non-Recallable	CWW	None	None

Table C9 Toronto Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 27 2008 6:00 AM	Nov 26 2008 7:00 PM	Gerrard TS: H3L::GERRARD_TS::BLOOR_STREET_JCT, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L-34, H3L::GERRARD_TS::BLOOR_STREET_JCT, 34-H3L	4210002	3 Hour	CWW	None	None
Nov 17 2008 6:00 AM	Nov 26 2008 7:00 PM	Leaside TS: 34-H3L, H3L::GERRARD_TS::BLOOR_STREET_JCT, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L-34, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L::GERRARD_TS::BLOOR_STREET_JCT	4211995	3 Hour	CWW	None	None
Jan 12 2009 6:00 AM	Jan 23 2009 7:00 PM	Bloor Street JCT: H3L::BLOOR_STREET_JCT::LEASIDE_TS, 34-H3L, H3L-34, H1L::GERRARD_TS::BLOOR_STREET_JCT, H1L::GERRARD_TS::BLOOR_STREET_JCT, 34-H1L, H3L::GERRARD_TS::BLOOR_STREET_JCT, H3L::GERRARD_TS::BLOOR_STREET_JCT, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H1L-34, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::BLOOR_STREET_JCT::LEASIDE_TS	4214179	4 Hour	CWW	None	None
Jan 12 2009 6:00 AM	Jan 26 2009 7:00 PM	Gerrard TS: H1L-34, 34-H1L, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::GERRARD_TS::BLOOR_STREET_JCT, H1L::GERRARD_TS::BLOOR_STREET_JCT	4214193	4 Hour	CWW	None	None
Jan 12 2009 6:00 AM	Jan 26 2009 7:00 PM	Leaside TS: 34-H1L, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::GERRARD_TS::BLOOR_STREET_JCT, 34-H3L, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::GERRARD_TS::BLOOR_STREET_JCT, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L-34, H3L::GERRARD_TS::BLOOR_STREET_JCT, H1L-34, H3L::GERRARD_TS::BLOOR_STREET_JCT	4214326	4 Hour	CWW	None	None
Sep 15 2008 6:00 AM	Oct 31 2008 7:00 PM	Gerrard TS: H1L-34, H1L::GERRARD_TS::BLOOR_STREET_JCT, 34-H1L, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::GERRARD_TS::BLOOR_STREET_JCT, H1L::BLOOR_STREET_JCT::LEASIDE_TS	4747457	Non-Recallable	CWW	None	None
Feb 02 2009 7:00 AM	Feb 20 2009 7:00 PM	Gerrard TS: H3L-34, H3L::GERRARD_TS::BLOOR_STREET_JCT, H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L::GERRARD_TS::BLOOR_STREET_JCT, 34-H3L, H3L::BLOOR_STREET_JCT::LEASIDE_TS	4747559	4 Hour	CWW	None	None
Feb 02 2009 6:00 AM	Feb 20 2009 6:00 PM	Bloor Street JCT: H3L::BLOOR_STREET_JCT::LEASIDE_TS, H3L-34, H3L::GERRARD_TS::BLOOR_STREET_JCT, 34-H3L, H3L::GERRARD_TS::BLOOR_STREET_JCT, H3L::BLOOR_STREET_JCT::LEASIDE_TS	4747565	4 Hour	CWW	None	None
Jan 26 2009 6:00 AM	Feb 12 2009 6:00 PM	Bloor Street JCT: H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::GERRARD_TS::BLOOR_STREET_JCT, H1L::GERRARD_TS::BLOOR_STREET_JCT, H1L-34, H1L::BLOOR_STREET_JCT::LEASIDE_TS, 34-H1L	4747571	4 Hour	CWW	None	None
Jan 15 2009 6:00 AM	Jan 31 2009 6:00 PM	Leaside TS: 34-H1L, H1L::GERRARD_TS::BLOOR_STREET_JCT, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L::BLOOR_STREET_JCT::LEASIDE_TS, H1L-34, H1L::GERRARD_TS::BLOOR_STREET_JCT	4747618	4 Hour	CWW	None	None
Oct 14 2008 6:30 AM	Oct 24 2008 4:00 PM	Vansco JCT: R15K::HORNER_TS::VANSCO_JCT, R15K::HORNER_TS::VANSCO_JCT, T3-R15K, R15K::MANBYWJCT::RICHVIEW_TS, R15K::MANBYWJCT::RICHVIEW_TS, 88-R15K, R15K::MANBYWJCT::MANBY_WEST_TS, 38-R15K, R15K::VANSCO_JCT::MANBYWJCT, R15K::MANBYWJCT::MANBY_WEST_TS, R15K::VANSCO_JCT::MANBYWJCT	5593984	2 Day	CWW	None	None
Nov 01 2008 3:00 AM	Dec 31 2008 7:00 PM	Cherrywood TS: AL542, JL543	5980717	Non-Recallable	CWW	None	None
Jan 25 2009 3:00 AM	Mar 27 2009 7:00 PM	Cherrywood TS: AL543, JL542	5980721	Non-Recallable	CWW	None	None
Oct 03 2008 6:00 AM	Nov 05 2008 4:00 PM	Claireville TS: L76L82, 51-B82V, HL82	6020489	Non-Recallable	CWW	None	None
Sep 03 2008 6:00 AM	Oct 02 2008 4:00 PM	Claireville TS: KL72, K1L42, KL76, 51-V76R, K1K2, L76L82, KL76, KT15	6020628	Non-Recallable	CWW	None	None
Nov 17 2008 7:00 AM	Nov 22 2008 5:00 PM	Bowmanville SS: B540C::BOWMANVILLE_SS::CHERRYWOOD_TS, 81-B540C, R56-B540C, B540C::BOWMANVILLE_SS::CHERRYWOOD_TS	6051537	2 Hour	CWW	None	None
Nov 24 2008 7:00 AM	Nov 29 2008 5:00 PM	Cherrywood TS: 81-B541C, R56-B541C, B541C::BOWMANVILLE_SS::CHERRYWOOD_TS, B541C::BOWMANVILLE_SS::CHERRYWOOD_TS	6051542	2 Hour	CWW	None	None

(Table C9 continued)

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Nov 17 2008 7:30 AM	Nov 26 2008 3:30 PM	Cherrywood TS: DL10	6104577	7 Hour	CWW	None	None
Nov 14 2008 6:00 AM	Nov 28 2008 5:00 PM	Claireville TS: T13, T13L74, T13-HT13, T13-A, T13-HT13, T13-A, T13L83	6241066	2 Day	CWW	FETT	250 MW
Oct 03 2008 6:00 AM	Nov 05 2008 4:00 PM	Claireville TS: H1-H2, H1_BUS, HL73, HL82, HL75	6244269	Non-Recallable	CWW	None	None
May 16 2009 6:00 AM	May 29 2009 6:00 PM	Claireville TS: T16-W4, T16, T16-HT16	6265562	4 Hour	CWW	FETT	250 MW
Nov 06 2008 6:00 AM	Nov 14 2008 5:00 PM	Claireville TS: 51-V74R, HL74, T13L74	6291672	Non-Recallable	CWW	None	None
Nov 28 2008 6:00 AM	Dec 12 2008 5:00 PM	Claireville TS: 51-B83V, KL83, T13L83	6291876	Non-Recallable	CWW	None	None
Feb 25 2009 7:00 PM	Apr 10 2009 7:00 PM	Claireville TS: 51-V73RS, T15L73, HL73	6291998	Non-Recallable	CWW	None	None
Mar 15 2009 6:00 AM	Apr 10 2009 7:00 PM	Claireville TS: H1L73, H1L82, H1H2, HL75, HL73	6292003	Non-Recallable	CWW	None	None
Apr 20 2009 8:00 AM	May 08 2009 6:00 PM	Claireville TS: KL76, K1K2, K1L42, KT15, KL72	6292072	Non-Recallable	CWW	None	None
May 10 2009 6:00 PM	Jun 23 2009 6:00 PM	Claireville TS: KL72, 51-V72RS, T16L72	6292079	Non-Recallable	CWW	None	None
May 11 2009 5:00 AM	May 29 2009 7:00 PM	Claireville TS: T16-HT16, T16L75, T16L72	6292096	Non-Recallable	CWW	FETT	May 11 - 15 about 1000 MW May 15 - 29 250 MW
May 11 2009 5:00 AM	May 21 2009 7:00 PM	Claireville TS: HL75, 51-V75P, T16L75	6292107	Non-Recallable	CWW	None	None
Jun 24 2009 5:00 PM	Jul 16 2009 5:00 PM	Claireville TS: T14L71, 88-V71RP, KL71, 51-V71RP	6292245	Non-Recallable	CWW	None	None
Jan 05 2009 6:00 AM	Jan 29 2009 7:00 PM	Claireville TS: K2L71, K1K2, KL71, KL83	6297975	Non-Recallable	CWW	None	None
Jan 30 2009 6:00 AM	Feb 24 2009 7:00 PM	Claireville TS: HL74, H2L41, H1H2, H2L43	6297981	Non-Recallable	CWW	None	None
Jun 24 2009 5:00 AM	Jul 24 2009 6:00 PM	Claireville TS: L71L77, K2L71	6298024	Non-Recallable	CWW	None	None
Oct 06 2008 6:30 AM	Oct 17 2008 2:30 PM	Cherrywood TS: JL541	6301835	4 Hour	CWW	None	None
Oct 07 2008 6:30 AM	Oct 17 2008 2:00 PM	Richview TS: L20L21	6301843	8 Hour	CWW	None	None
Oct 27 2008 6:30 AM	Nov 07 2008 3:30 PM	Cherrywood TS: JL550	6301965	4 Hour	CWW	None	None
Oct 27 2008 6:45 AM	Nov 07 2008 3:00 PM	Richview TS: L18L73	6301968	4 Hour	CWW	None	None
Nov 03 2008 5:30 AM	Nov 14 2008 4:00 PM	Manby West TS: 38-R2K, 88-R2K, R2K::MANBYWJCT::RICHVIEW_TS, R2K::MANBYWJCT::RICHVIEW_TS, T4-R2K, R2K::MANBYWJCT::MANBY_WEST_TS, R2K::MANBYWJCT::MANBY_WEST_TS, R2K::HORNER_TS::VANSCO_JCT, R2K::VANSCO_JCT::MANBYWJCT, R2K::HORNER_TS::VANSCO_JCT, R2K::VANSCO_JCT::MANBYWJCT	6301995	2 Day	CWW	None	None
Nov 10 2008 7:45 AM	Nov 21 2008 3:00 PM	Richview TS: L4L74	6302046	4 Hour	CWW	None	None

Table C10 West Zone

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 06 2008 5:00 AM	Oct 24 2008 6:00 PM	Lambton TS #2: T8-L4D, 27-T8, T8	4622886	3 Day	CWW	Michigan Import Michigan Export	about 300 MW about 300 MW
Sep 07 2008 4:00 AM	Oct 02 2008 5:00 PM	Lambton TS #2: PL29	5372957	Non-Recallable	CWW	None	None
Oct 05 2008 4:00 AM	Nov 02 2008 5:00 PM	Lambton TS #2: P1P2	5373391	Non-Recallable	CWW	None	None
Nov 03 2008 4:00 AM	Nov 25 2008 5:00 PM	Lambton TS #2: KL28	5373638	Non-Recallable	CWW	None	None
Nov 26 2008 4:00 AM	Dec 19 2008 6:00 PM	Lambton TS #2: K1K2	5373729	Non-Recallable	CWW	None	None
Dec 03 2008 4:00 AM	Dec 11 2008 6:00 PM	Lambton TS #2: K1K2, K1_BUS, KL37, T5-K, KL25, T5-K, KL51	5378020	Non-Recallable	CWW	None	None
Nov 03 2008 4:00 AM	Nov 14 2008 5:00 PM	Lambton TS #2: 27-L27V, 27-L28C, L27L28, PL27, L27L28, KL28	5378641	4 Hour	CWW	FABC BLIP	Nov. 3 - 4 500 - 850 MW Nov. 4 - 6 500 - 900 MW Nov. 6 - 10 200 - 600 MW Nov. 10 - 14 500 - 900 MW 750 MW
Oct 09 2008 4:00 AM	Oct 17 2008 5:00 PM	Lambton TS #2: KL37, T6-P1, P1_BUS, P1P2, PL23, PL24, PL29	5650420	4 Hour	CWW	FABC BLIP	Oct. 9 - 10 410 - 760 MW Oct. 10 - 14 200 - 400 MW Oct. 14 - 17 500 - 700 MW 500 MW
Oct 26 2008 4:00 AM	Nov 02 2008 5:00 PM	Lambton TS #2: P1P2, PL27, P2_BUS, PL4, P2-P3	5650634	4 Hour	CWW	None	None
Nov 19 2008 6:00 AM	Nov 30 2008 4:00 PM	Lambton TS #2: L26L38, KL26, 27-L26L	5699337	Non-Recallable	CWW	FABC BLIP	0 - 150 MW 500 MW
Feb 03 2009 4:00 AM	Feb 28 2009 5:00 PM	Lambton TS #2: KL25	5757364	Non-Recallable	CWW	None	None
Jan 12 2009 5:00 AM	Mar 27 2009 5:00 PM	Sarnia Scott TS: 40-N22W, N22W::BOSTWICK_ROAD_JCT::LUCASVILLE_JCT, N22W::BOSTWICK_ROAD_JCT::LUCASVILLE_JCT, T4-N22W, N22W::BOSTWICK_ROAD_JCT::BUCHANAN_TS, N22W::BOSTWICK_ROAD_JCT::WONDERLAND_TS, N22W::BOSTWICK_ROAD_JCT::WONDERLAND_TS, N22W::LUCASVILLE_JCT::MODELAND_TS, N22W::LUCASVILLE_JCT::SARNIA_SCOTT_TS, N22W::LUCASVILLE_JCT::SARNIA_SCOTT_TS, 19-N22W, N22W::LUCASVILLE_JCT::MODELAND_TS, T5-N22W, N22W::BOSTWICK_ROAD_JCT::BUCHANAN_TS	6000011	4 Hour	CWW	BLIP FABC	500 MW Jan. 12 - 22 300 - 450 MW Jan. 22 - 26 0 - 150 MW Jan 26 - Feb. 5 300 - 450 MW Feb. 5 - Feb. 9 0 - 150 MW Feb. 9 - 19 300 - 450 MW Feb. 19 - 23 0 -150 MW Feb. 23 - Mar.5 300 - 450 MW Mar. 5 - 9 0 - 150 MW Mar. 9 -19 300 - 450 MW Mar. 19 - 27 0 - 150 MW
Sep 29 2008 4:00 AM	Oct 09 2008 6:00 PM	Crawford TS: T4-J4E, J4E::CRAWFORD_TS::KEITH_TS, J4E::CRAWFORD_TS::KEITH_TS, 23-J4E, J4E::CRAWFORD_TS::ESSEX_TS, J4E::CRAWFORD_TS::ESSEX_TS, 15-J4E	6222167	4 Hour	CWW	None	None

(Table C10 continued)

Planned Start Date	Planned End Date	Equipment O/S	Outage Request Id	Recall Time	Type	Major Transmission Interface Impacted	Reduction in Limit
Oct 20 2008 4:00 AM	Oct 30 2008 6:00 PM	Keith TS: J3E::CRAWFORD_TS::KEITH_TS, J3E::CRAWFORD_TS::ESSEX_TS, J3E::CRAWFORD_TS::ESSEX_TS, 23-J3E, 15-J3E, T3-J3E, J3E::CRAWFORD_TS::KEITH_TS	6222214	4 Hour	CWW	None	None
Jun 22 2009 4:00 AM	Jul 04 2009 7:00 PM	BUCHAN230JCT: W43L::BUCHAN230JCT::LONGWOOD_TS, HL43, W43L::BUCHAN230JCT::LONGWOOD_TS, W52-W43L, W43L::BUCHANAN_TS::BUCHAN230JCT, W43L::BUCHANAN_DESN_TS::BUCHAN230JCT, 19-W43L, 19-W43L, T13-W43L, W43L::BUCHANAN_TS::BUCHAN230JCT, L33L43, W43L::BUCHANAN_DESN_TS::BUCHAN230JCT	6244712	16 Hour	CWW	FABC BLIP	0 -150 MW 500 MW
Aug 31 2009 4:00 AM	Oct 16 2009 7:00 PM	Buchanan TS: SC21-D, SC21, SC21D, SC21SC	6244765	25 Day	CWW	None	None
Oct 19 2009 4:00 AM	Dec 04 2009 7:00 PM	Buchanan TS: SC22-H, SC22SC, SC22, SC22H	6244771	25 Day	CWW	None	None
Oct 20 2008 4:00 AM	Oct 31 2008 6:00 PM	Lambton TS #2: PL27, 27-L27V, L27L28	6269933	4 Hour	CWW	BLIP FABC	500 MW Oct. 20 - 24 500 - 700 MW Oct. 24 - 27 200 - 400 MW Oct. 27 - 31 500 - 700 MW
Dec 01 2008 5:00 AM	Dec 18 2008 5:00 PM	Buchanan TS: N22W::BOSTWICK_ROAD_JCT::BUCHANAN_TS, N22W::BOSTWICK_ROAD_JCT::BUCHANAN_TS, N22W::LUCASVILLE_JCT::SARNIA_SCOTT_TS, N22W::LUCASVILLE_JCT::SARNIA_SCOTT_TS, 19-N22W, N22W::BOSTWICK_ROAD_JCT::LUCASVILLE_JCT, 40-N22W, N22W::LUCASVILLE_JCT::MODELAND_TS, N22W::BOSTWICK_ROAD_JCT::WONDERLAND_TS, N22W::BOSTWICK_ROAD_JCT::WONDERLAND_TS, N22W::BOSTWICK_ROAD_JCT::LUCASVILLE_JCT, T5-N22W, T4-N22W, N22W::LUCASVILLE_JCT::MODELAND_TS	6293409	4 Hour	CWW	BLIP FABC	500 MW Dec. 1 - 8 0 - 150 MW Dec. 8 - 18 300 - 450 MW
Mar 30 2009 5:00 AM	May 01 2009 5:00 PM	Lucasville JCT: 36N21W-62, 19-N21W, N21W::LUCASVILLE_JCT::MODELAND_TS, N21W::LUCASVILLE_JCT::MODELAND_TS, T3-N21W, 40-N21W, 62N21W-36, N21W::BOSTWICK_ROAD_JCT::LUCASVILLE_JCT, T6-N21W, N21W::BOSTWICK_ROAD_JCT::LUCASVILLE_JCT, N21W::LUCASVILLE_JCT::SARNIA_SCOTT_TS, N21W::BOSTWICK_ROAD_JCT::WONDERLAND_TS, N21W::BOSTWICK_ROAD_JCT::BUCHANAN_TS, N21W::LUCASVILLE_JCT::SARNIA_SCOTT_TS, N21W::BOSTWICK_ROAD_JCT::WONDERLAND_TS, N21W::BOSTWICK_ROAD_JCT::BUCHANAN_TS	6293420	4 Hour	CWW	FABC BLIP	0 - 150 MW 500 MW

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