
Monthly Market Report
September 2011
ieso
Power to Ontario.
On Demand.

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This report provides a summary of key market data from the IESO-administered markets. It is intended to provide a quick reference for all market stakeholders. In all cases, the data used to produce all graphs in this report, are available for download from the Market Summaries page of the IESO Web site. Any data used in this report is provided for information purposes only, and should not be used for settlement purposes.

1. Market Prices

1.1 Introduction

This section provides information on several of the key prices in the Ontario wholesale electricity market. A brief description of each displayed price item is included. For more information on any of the price items, please refer to appropriate market rules, market manuals and IESO Marketplace Training materials, or contact the IESO Customer Relations.

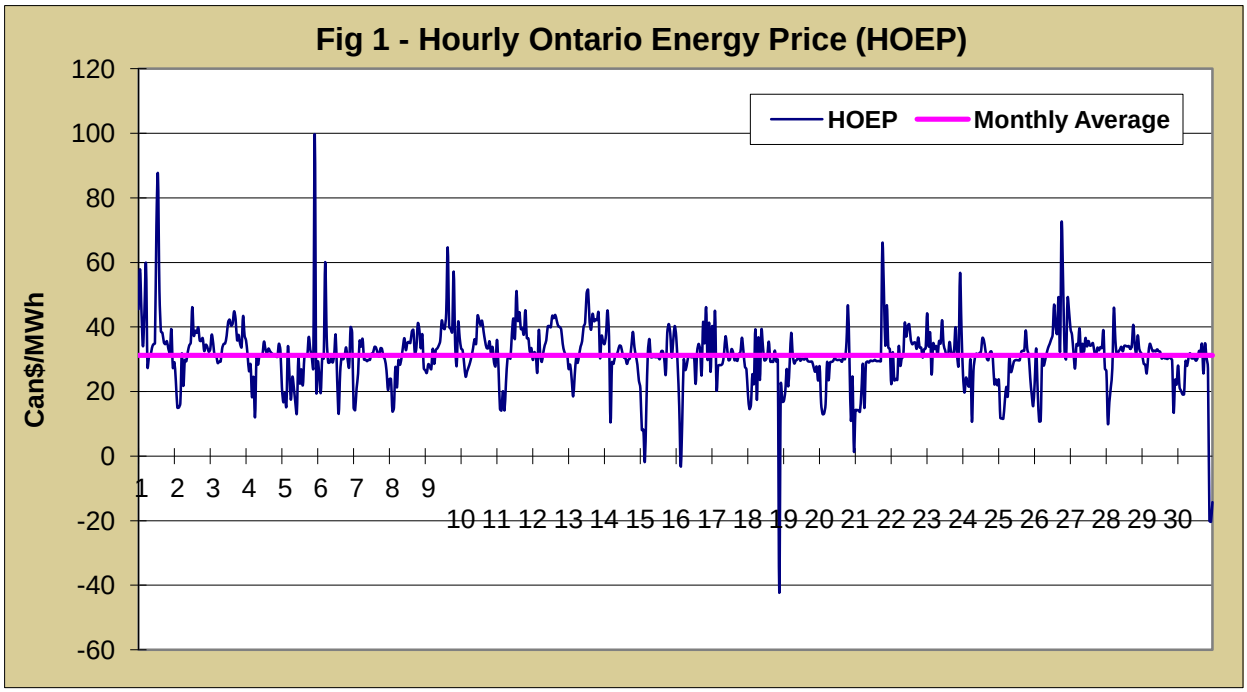
1.2 Hourly Ontario Energy Price (HOEP)

HOEP is the hourly price that is charged to Local Distributing Companies and other non-dispatchable loads. HOEP is also paid to self-scheduling generators. HOEP becomes the basis of the commodity charges in the Retail electricity market if customers receive their electricity from their Local Distributing Company. Customers who have arranged contracts with licensed Retailers are not affected by HOEP, but instead are charged their particular contract rate for the commodity.

Note: The IESO provides a convenient graph of HOEP prices for the current and previous day on the Today's Market page on the IESO Web site. These graphs also provide an estimate of future HOEP prices for the remainder of the day, and by afternoon, estimates for the next day. The estimates for future Hourly Ontario Energy Prices are extracted from an IESO report referred to as the pre-dispatch. Pre-dispatch data is updated every hour. All future prices are derived by simulating a supply/demand balance, using prices offered by suppliers in the market, prices bid by price-sensitive consumers in the market, and the IESO's forecast of the total demand for electricity in the province. The actual supply/demand balance can vary from these projections for a number of reasons:

- The actual demand for electricity can fluctuate as factors such as weather, (temperature, amount of cloud cover, wind etc.), affect the amount of electricity required by consumers.
- At the same time, operational difficulties or delays in a generation unit returning from an outage can result in higher priced generation being called on to fill the gap.
- Finally, any changes in price resulting from such variations can cause some price-sensitive loads to make alternative consumption decisions, or cause importers and exporters to revise their plans.

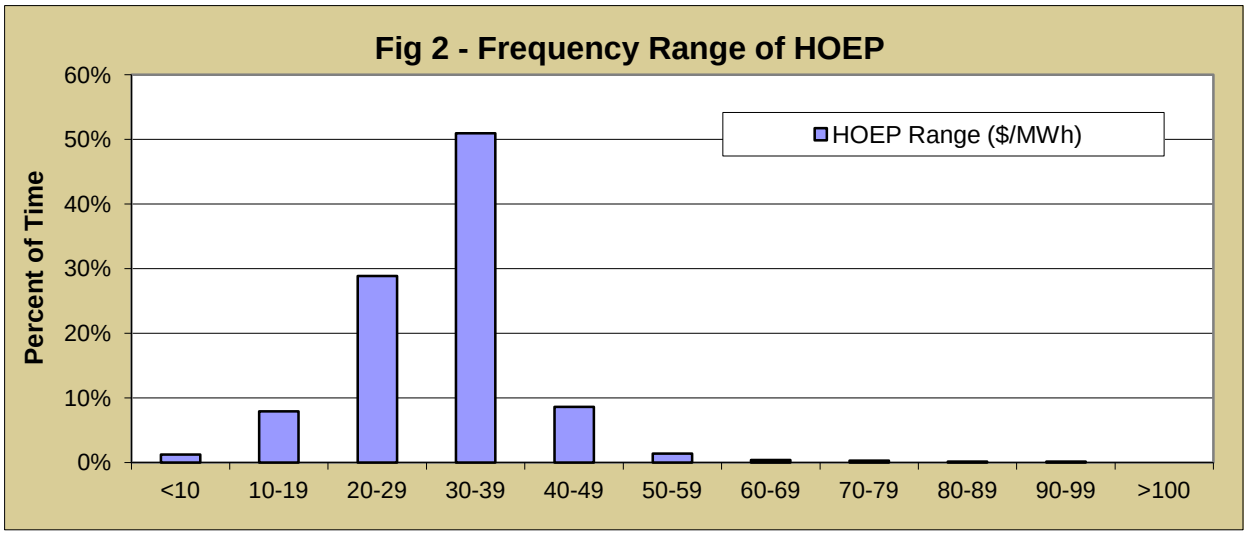
In this report, two graphs of HOEP are provided; the first shows a chronological graph of hourly HOEP prices for the month. The second graph shows the frequency at which the HOEP fell within specific price bands.



Hourly Ontario Energy Price $/MWh			
	For the month	On-Peak	Off-Peak
Average	31.88	34.05	28.68
Maximum	99.75	87.28	99.75
Minimum	-42.39	-20.39	-42.39

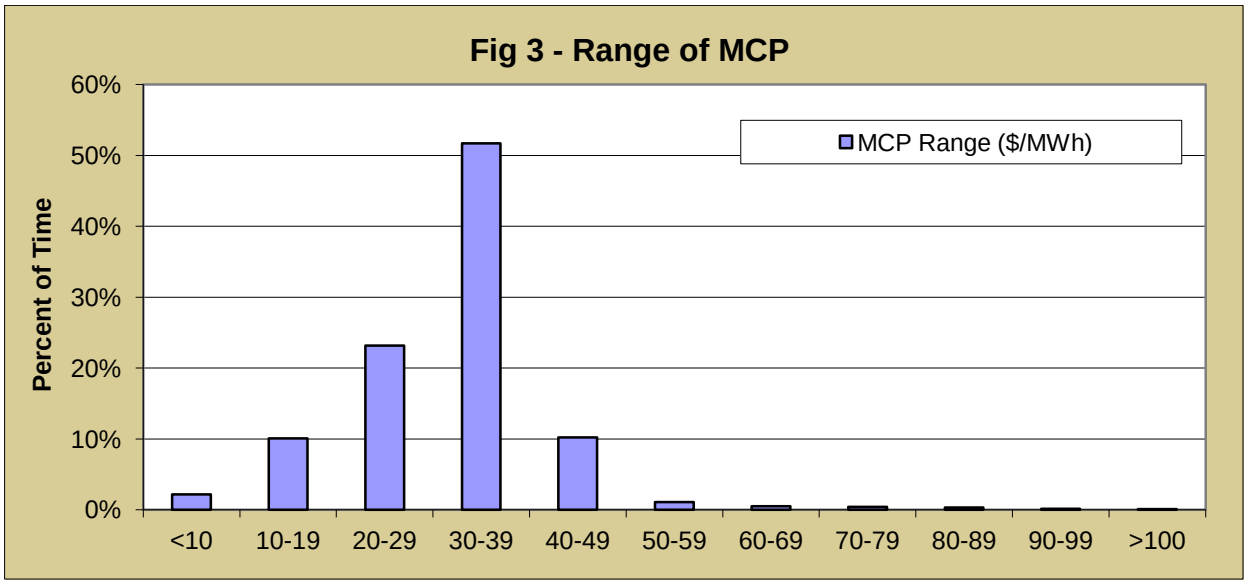
Monthly Weighted Average based on Ontario Demand = $31.98/ MWh or 3.20 ¢/kWh.
This weighted average is provided as information, and may be of use to customers whose consumption pattern, or that of their local distributing company, approximates that of the total Ontario system.

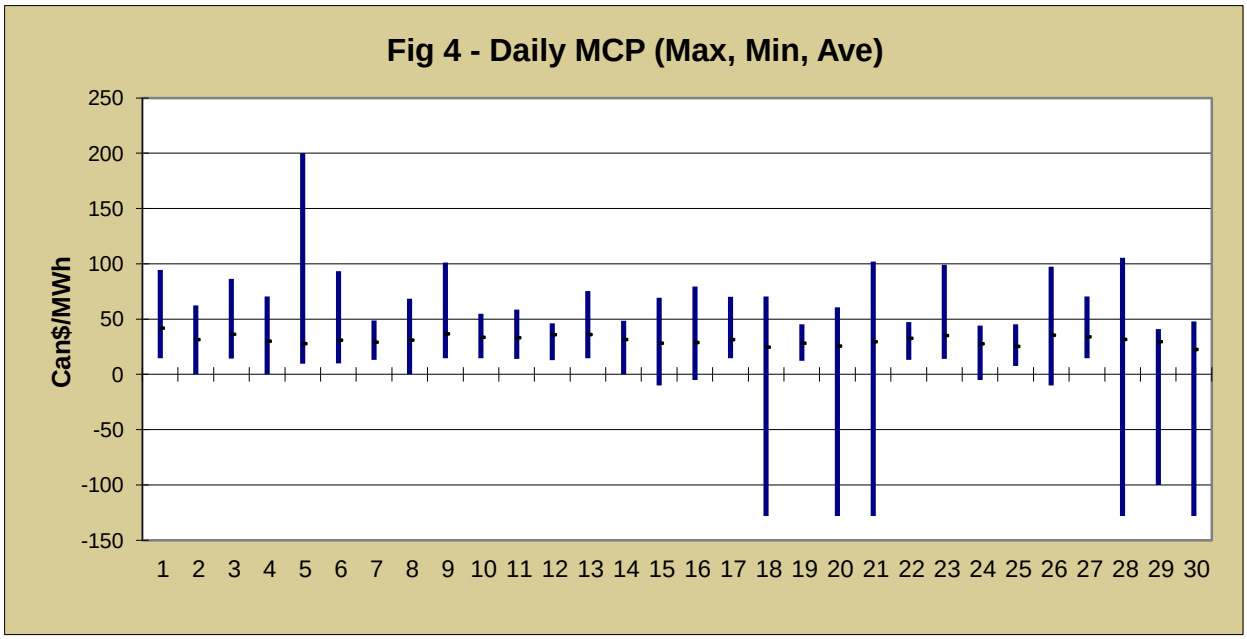
Note: On Peak average price is the straight arithmetic average of HOEP in hours 8 to 23 (EST), Monday to Friday (5 x 16). Off Peak average price is the straight arithmetic average of HOEP for all remaining hours in the week. The wholesale market does not use a formal definition of on and off-peak hours. The IESO is providing this calculation purely for information purposes, and will continue to use this definition throughout the year.



1.3 Ontario 5-Minute Market Clearing Price (MCP)

The Ontario 5-minute MCP is the price paid to dispatchable generators and charged to dispatchable loads. All other participants are charged or paid using hourly prices. The 5-minute price is calculated immediately after the fact for every 5-minute interval, using the unconstrained dispatch algorithm. The algorithm takes generator offers to sell and price-sensitive loads' bids to buy and dispatches these resources to achieve a supply-demand balance, and resulting price. The price is posted on the Market Data page on the IESO Web site, within 5-minutes of the conclusion of an interval. The 5-minute price, by its nature, will fluctuate more than the HOEP (an arithmetic average of the 12 MCPs for any particular hour), as it more directly reflects the short-term supply/demand variations caused by unexpected fluctuations in the demand for electricity or by equipment breakdowns.



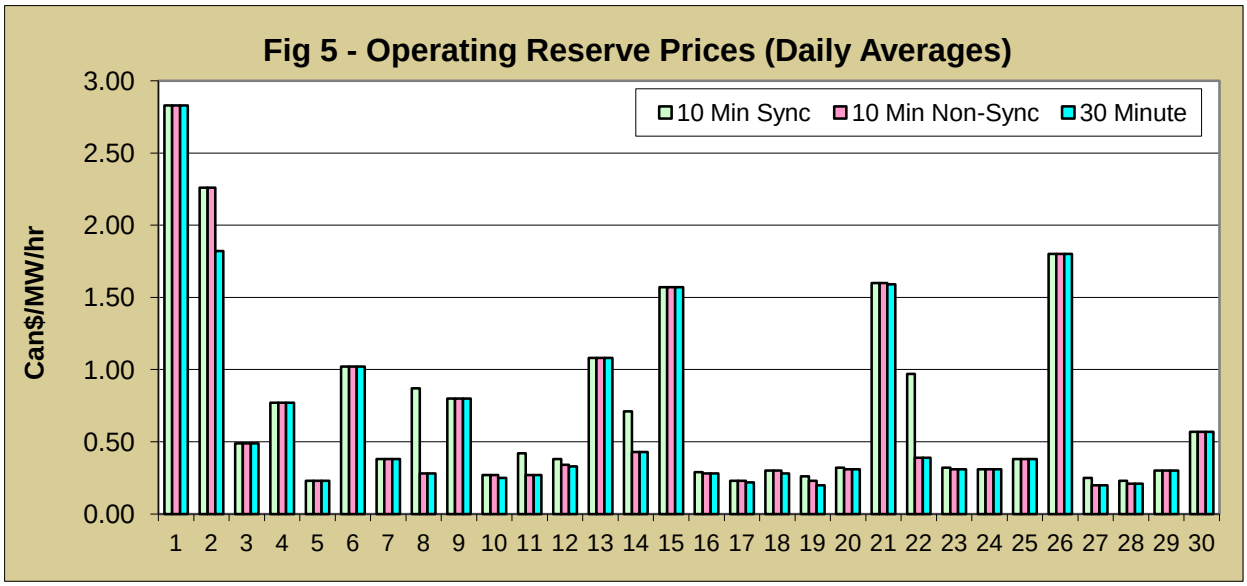


1.4 Operating Reserve Prices

Operating Reserve is generation capacity or load reduction capacity that the IESO can call upon on short notice. Operating Reserve is purchased by the IESO in amounts needed to meet the reliability rules established by the North American Electricity Reliability Council (NERC), and the Northeast Power Coordinating Council (NPCC). The IESO recovers the required funds to pay for the purchased operating reserve from all customers in the wholesale market, via the Hourly Uplift Settlement Charges. These Charges are discussed further and presented in Section 1.5 of this report.

The IESO purchases defined amounts of Operating Reserve from Participants via three real-time markets; a 10 minute synchronized reserve market, a 10 minute non-synchronized reserve market, and a 30-minute reserve market.

The operating reserve is like a buffer - a shock absorber to maintain the reliability of the system by allowing for sudden unexpected surges in demand or unanticipated reductions in supply - that is, in available generation. Like energy dispatch instructions, Operating Reserve schedules are determined every 5 minutes, with a resultant price for each type of operating reserve for every 5-minute interval. The IESO's decisions, on who will provide the market with operating reserve, and who will supply the market with energy, are integrated to arrive at the optimum market outcome. This creates a strong correlation between the energy price fluctuations and the fluctuations in reserve prices.



Average Operating Reserve Prices for this month were:

10 minute synchronized reserve:	$0.74/ MW/hr
10 minute non-synchronized reserve:	$0.68/MW/hr
30 minute reserve:	$0.66/MW/hr

1.5 Hourly Uplift Settlement Charges

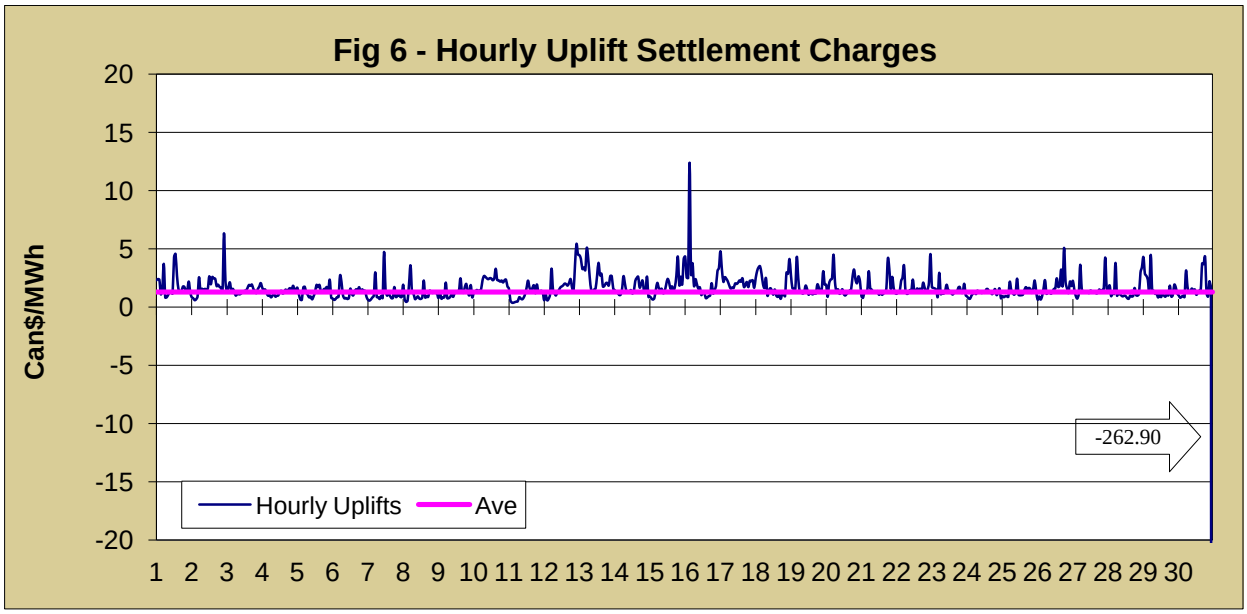
Hourly Uplift Settlement Charges are applied to all customers in the wholesale market. The IESO uses funds collected under these charges to pay for such items as the three types of Operating Reserve, any Congestion Management Settlement Credits owed to dispatchable resources, Intertie Offer Guarantee payments and other incurred hourly costs such as energy losses on the IESO-controlled grid.

For a description of Operating Reserve, and information on Operating Reserve prices, please see Section 1.4 above.

Congestion Management Settlement Credits are payments made by the IESO to all dispatchable resources, such as generators or large consumers, who responded to instructions from the IESO to take specific actions to avoid possible overloads of the transmission system, or to maintain the balance between supply and demand.

Energy losses occur when electricity flows across transmission lines. The resistance in the lines causes them to heat up, consuming power in the same way, as does the filament in a toaster. This is referred to as line losses. Since the IESO pays generators using the same price as it uses to charges customers, and since the presence of line losses requires generators to produce more than what is consumed by customers, the IESO must recoup the additional money required to pay all generators in full, and does so via the Hourly Uplift Settlement Charge.

The information on Hourly Uplift Settlement Charges graph shown below is collected from Market Participant Settlement Statements.



Average Hourly Uplift Settlement Charges to wholesale customers for this month = $1.29/ MWh or 0.13 ¢/kWh
Average Hourly Uplift Settlement Charges to wholesale customers since Jan. 1, 2011 = $1.68 / MWh or 0.17 ¢/kWh
Weighted Average Hourly Uplift Settlement Charges to wholesale customers for this month = $1.34 / MWh or 0.13 ¢/kWh
Weighted Average Hourly Uplift Settlement Charges to wholesale customers since Jan. 1, 2011 = $1.68 / MWh or 0.17 ¢/kWh

Note: The above averages exclude the Local Market Power Rebates.

1.6 Monthly Uplift Charges

The IESO incurs some monthly costs in purchasing services required to ensure the reliability of the Ontario power network, and to meet commitments to other system operators throughout North America. Specifically, there are three services that the IESO must purchase under contract from suppliers; Black Start Capability, Voltage Support, and Regulation Service. The monthly costs incurred by the IESO under these contracts are shared among all wholesale customers on a pro rata basis. This month, the payments made by the IESO for these services resulted in charges to wholesale customers totalling $0.23/MWh, or 0.02 ¢/kWh. In addition, there are a few more monthly uplift charges, which occur occasionally (i.e. Emergency Energy purchase). This monthly total is contained in Section 7.

1.7 Transmission Rights Auction

The Transmission Rights Market is a financial market that is based on the import and export of electricity on the interconnection lines between Ontario and its surrounding markets in Manitoba, Quebec, New York, Michigan and Minnesota. The transmission capacity of these interconnections is limited. When the interconnection lines reach their limits, energy prices can differ between Ontario and its surrounding markets. The Transmission Rights Market allows participants to buy financial protection ahead of time, to hedge against the possible price differences. These transmission rights are financial only. They do not give the holder of these rights any scheduling priority and do not limit other participants' access to physical transmission across the interconnection lines.

The Transmission Rights contracts are auctioned off by the IESO. Successful bidders pay the market clearing price for the particular Transmission Right, in return for the right to receive revenues from the IESO in amounts proportional to the financial congestion which may occur over that interface for the duration of the contract.

This month, the IESO conducted three transmission rights auctions. The market clearing prices in the auctions are listed in the table below. The prices have been rounded to the nearest dollar.

Intertie Zone	Short Term Auction September, 2011 $/MW/Month	
	Import to Ontario	Export from Ontario
New York	101.00	601.00
Michigan	82.00	257.57
Minnesota	n/a	n/a
Manitoba	3377.76	53.49
Quebec - D5A	12.00	12.00
Quebec - D4Z	n/a	n/a
Quebec - P33C	25.00	n/a
Quebec - H4Z	n/a	n/a
Quebec - B5D/B31L	12.00	n/a
Quebec - AT	60.00	531.96
Quebec - X2Y	n/a	n/a

1.8 Transmission Rights Payments

The holders of Transmission Rights Contracts own the right to receive congestion payments from the IESO whenever congestion results in differences between the Ontario price and the relevant external zone price. The table in this section shows the payments that a holder of a 1 MW Transmission Rights Contract received from the IESO in this month. These payments would be made to holders of either Long - Term Transmission Rights Contracts that encompass this month, or Short -Term Transmission Rights contracts for this month.

Intertie Zone	Import to Ontario ($ per 1 MW contract)	Export from Ontario ($ per 1 MW Contract)
Manitoba	3,029.90	83.21
Michigan	-	66.54
Minnesota	2,904.08	181.05
New York	-	249.96
Quebec - B5D/B31L	-	-
Quebec - D4Z	-	-
Quebec - D5A	-	-
Quebec - H4Z	-	-
Quebec - P33C	0.02	-
Quebec - X2Y	-	-
Quebec - AT	4.30	216.54

1.9 Transmission Rights Clearing Account

The table below provides the activity of the Transmission Rights Clearing Account on a monthly basis for the past 12 months. It shows the revenues from the Transmission Rights Auctions, congestion rents from the market, interest earned on the balance and the Transmission Rights payments to Transmission Rights holders in millions of dollars. Long term auction revenues are allocated evenly over the applicable 12 month term and the table below does not include revenues from future months. As per Chapter 8, section 4.18 of the market rules the reserve threshold as set by the IESO Board is equal to $20 million.

$Millions

Transmission Rights (TR) Summary	Previous Balance	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	LTD Total
Allocated TR Auction Revenues	$224.7	$2.0	$1.1	$1.7	$1.6	$1.8	$1.8	$1.7	$1.9	$2.8	$3.8	$3.3	$2.0	$250.2
Congestion Rents Received from the Market	$361.8	$2.0	$1.7	$5.0	$4.3	$1.0	$0.3	$1.6	$7.2	$2.5	$8.9	$1.2	$0.8	$398.2
Interest earned on TR Bank Account	-$1.2	$0.0	$0.0	$0.0	$0.1	$0.0	$0.1	$0.1	$0.1	$0.1	$0.1	$0.1	$0.1	-$0.6
TR Payments to Rights Holders	-$488.5	-$3.7	-$2.3	-$1.1	-$4.4	-$3.7	-$2.7	-$2.8	-$9.0	-$5.7	-$12.3	-$1.6	-$1.4	-$539.4
TR Clearing Account Disbursement	-$57.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	-$57.0
Total	**$39.9**	**$0.3**	**$0.5**	**$5.5**	**$1.5**	**-$0.8**	**-$0.6**	**$0.7**	**$0.0**	**-$0.3**	**$0.4**	**$2.9**	**$1.4**	**$51.4**

2. Market Demand

2.1 Market Demand Definitions and Graphs

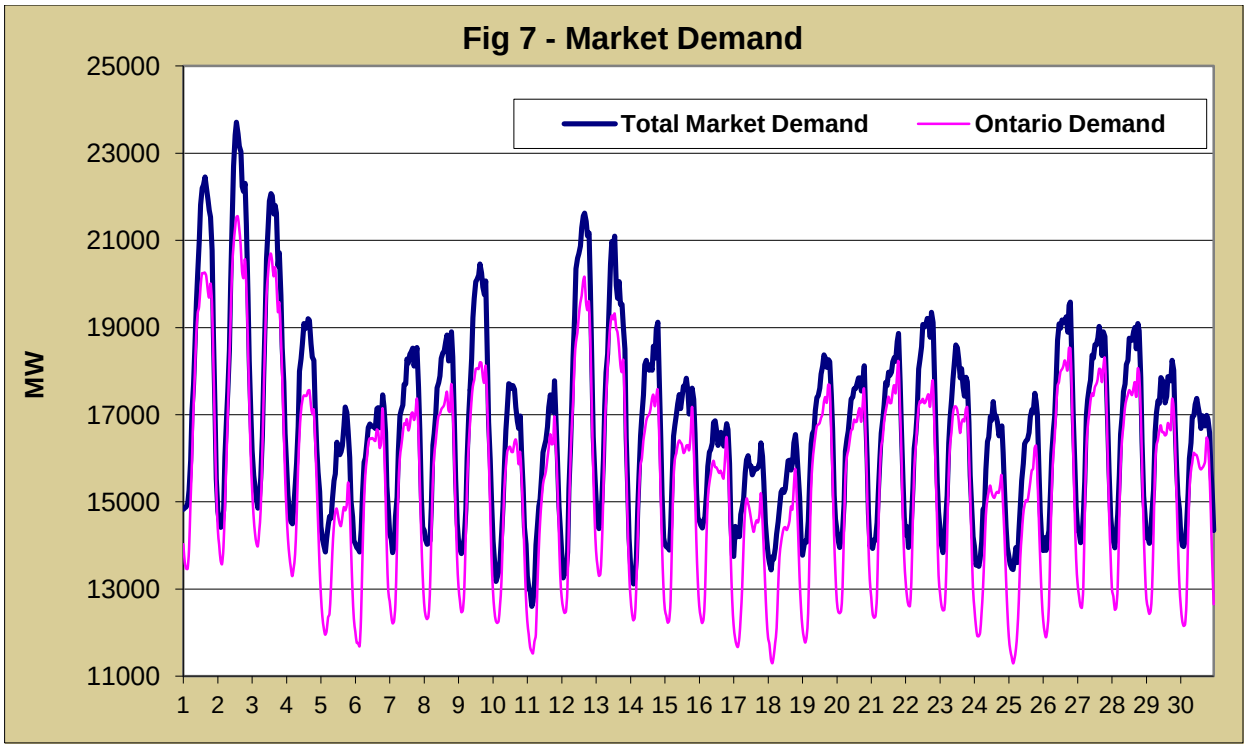
The graph below plots values for both Total Market Demand and Ontario Demand.

Total Market Demand represents the total energy that was supplied from the IESO-Administered Market.

The IESO calculates Total Market Demand by summing all output from generators registered in the Market plus all scheduled imports to the province. It is also equal to the sum of all load supplied from the Market plus exports from the province, plus all line losses incurred on the IESO-controlled grid.

Ontario Demand represents the total energy that was supplied from the IESO-Administered Market for the sake of supplying load within Ontario.

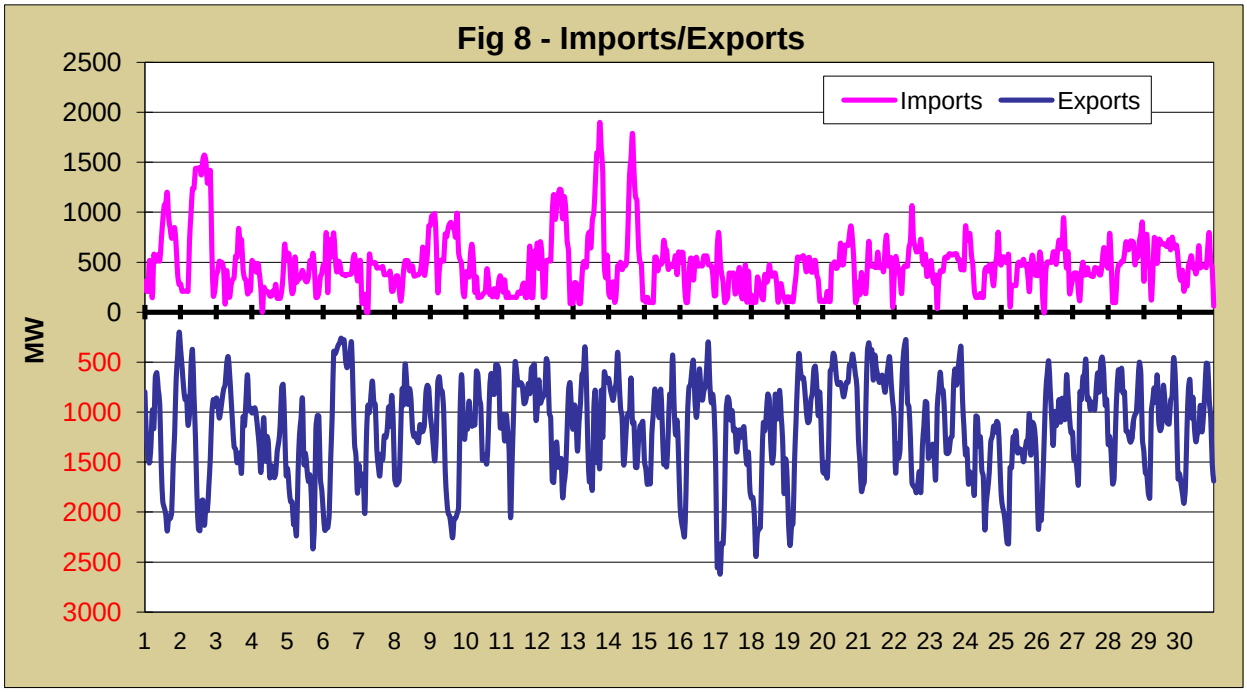
The IESO calculates Ontario Demand by subtracting exports from the Total Market Demand quantity. It is also equal to the sum of all load within Ontario which is supplied from the Market, plus all line losses incurred on the IESO-controlled grid.



	Total Market Demand	Ontario Demand
Average hourly values for the month:	16,642MW	15,479MW
Maximum hourly values for the month:	23,712MW	21,552MW
Minimum hourly values for the month:	12,605 MW	11,300MW
Total Demand for the month:	11,982,278MWh	11,144,548MWh

2.2 Imports & Exports

The graph below plots both imports to Ontario and exports from Ontario during the month. Economic **imports** and **exports** are scheduled into/out of Ontario on an hourly basis, up to the physical capabilities of the Grid and the interconnections between the systems.



Average export schedule for the month = 1,164MW
Average import schedule for the month = 472MW
Average net intertie schedule = 691MW net export

3. Unavailable Capacity

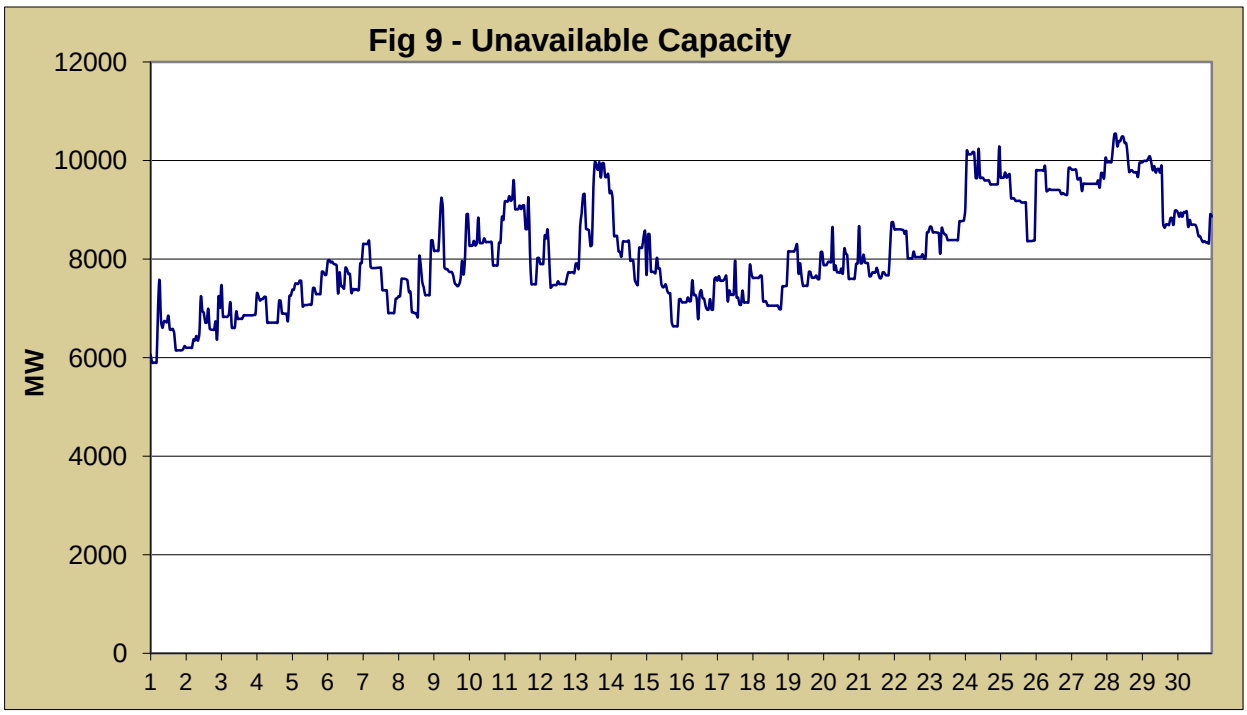
3.1 Unavailable Capacity

It is clear from the various graphs in this report that the demand for electricity varies greatly; from hour to hour, from day to day, and from season to season. The amount of generation available for operation also varies greatly over these same timeframes. The graph in this section shows the total capability of generation within Ontario that is unavailable for operation. These quantities are published by the IESO several times per day in the System Status Reports (SSR). The values in this graph are calculated by summing the following quantities (all in MW):

- capacity of generators on planned and forced outages
- capacity of planned and forced deratings
- unscheduled capacity from Intermittent, Self Scheduling , and Transitional Scheduling Generators
- constrained capacity due to operating security limits

and plotting the highest value for each day. The values are taken from the most up-to-date SSR at any point in time.

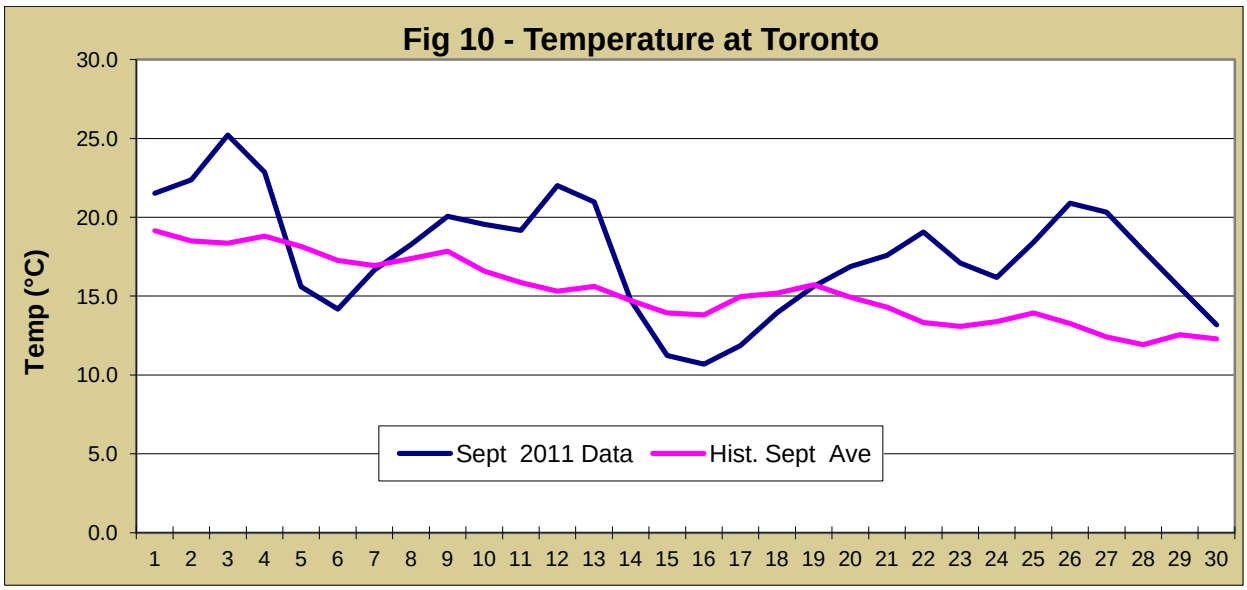
In addition, in accordance with the Market Rules, the IESO is publishing the Generator Disclosure Report on a monthly basis, six months after the fact. This report provides generating station capability and actual energy production factors of all stations with output greater than 20 MW. The report is located on the Market Data page of the IESO Web site.



4. Weather

4.1 Temperature

Demand for electricity is affected by weather in many ways. By far the most significant factor is temperature, with warm summer-like temperatures causing an increase in load due to air conditioning use, and cold winter temperatures resulting in additional heating load. The graph below shows the average daily temperature in Toronto throughout this month, and compares it to historic average temperatures for the corresponding days. This graph displays Toronto temperatures. However, the IESO monitors weather conditions (temperature, humidity, wind speed, illumination, storm activities) across the entire province and factors these conditions into our demand forecasting and our operational decisions.

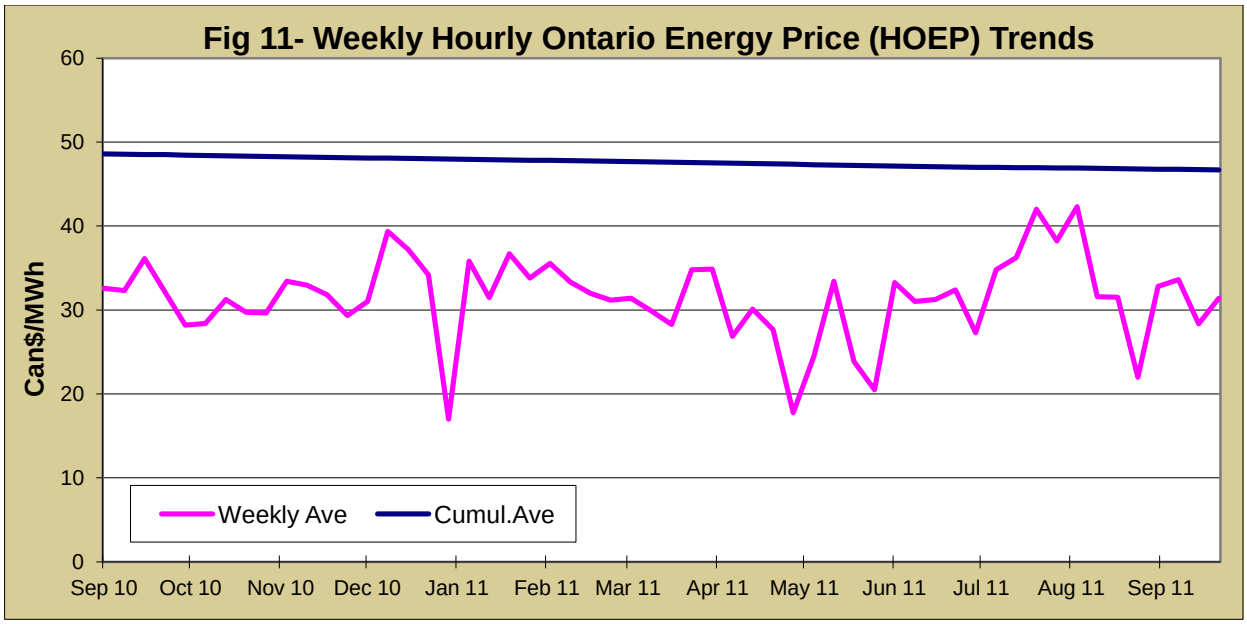


5. Longer-Term Trends

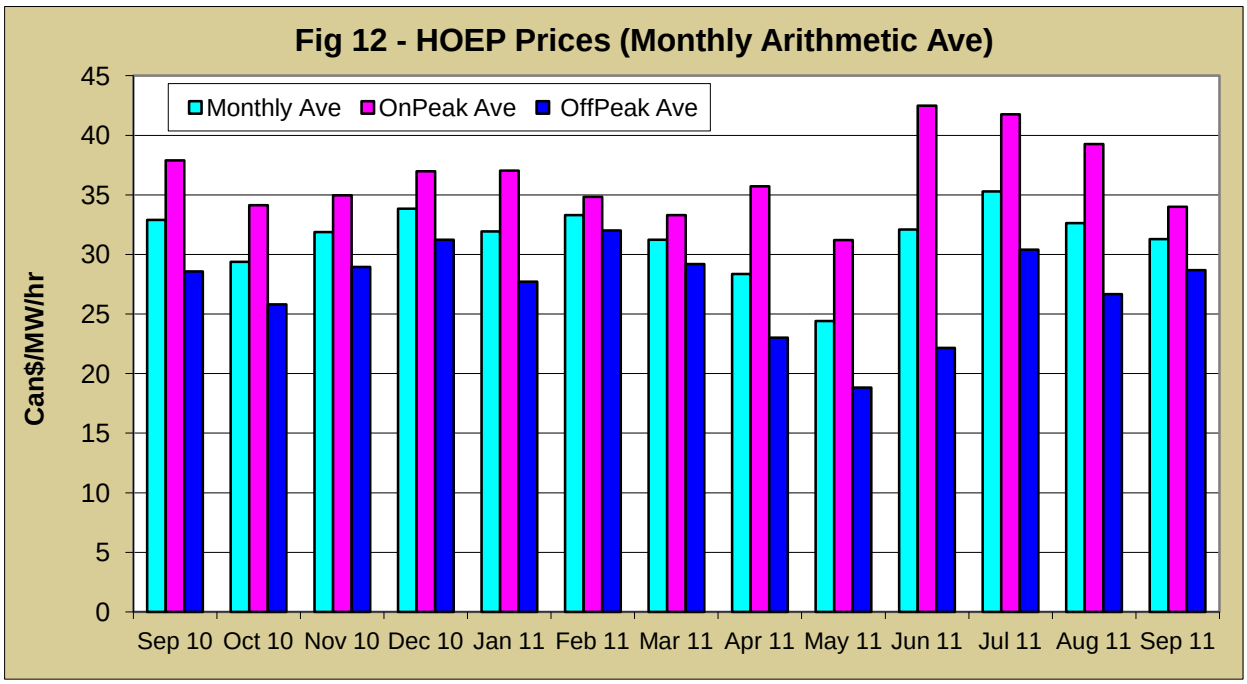
This section provides graphs that display average quantities over longer periods of time than what is available in either the Monthly graphs or in the IESO's Weekly Market Reports. This longer-term perspective will allow seasonal variations to be observed. For additional background on the particular information being graphed, please refer to the relevant monthly graph and write-up presented earlier in this report.

Starting in January, 2004, the Monthly Market Report incorporated nine new graphs. All of these graphs have been produced based on data previously included in the Market Surveillance Panel Reports, and depict a small subset of the tabular data from these reports. In the January 2004 Monthly Market Report these graphs showed information from market opening to January 2004. Starting with the February 2004 Monthly Market Report, the graphs show the most recent month plus one year of history.

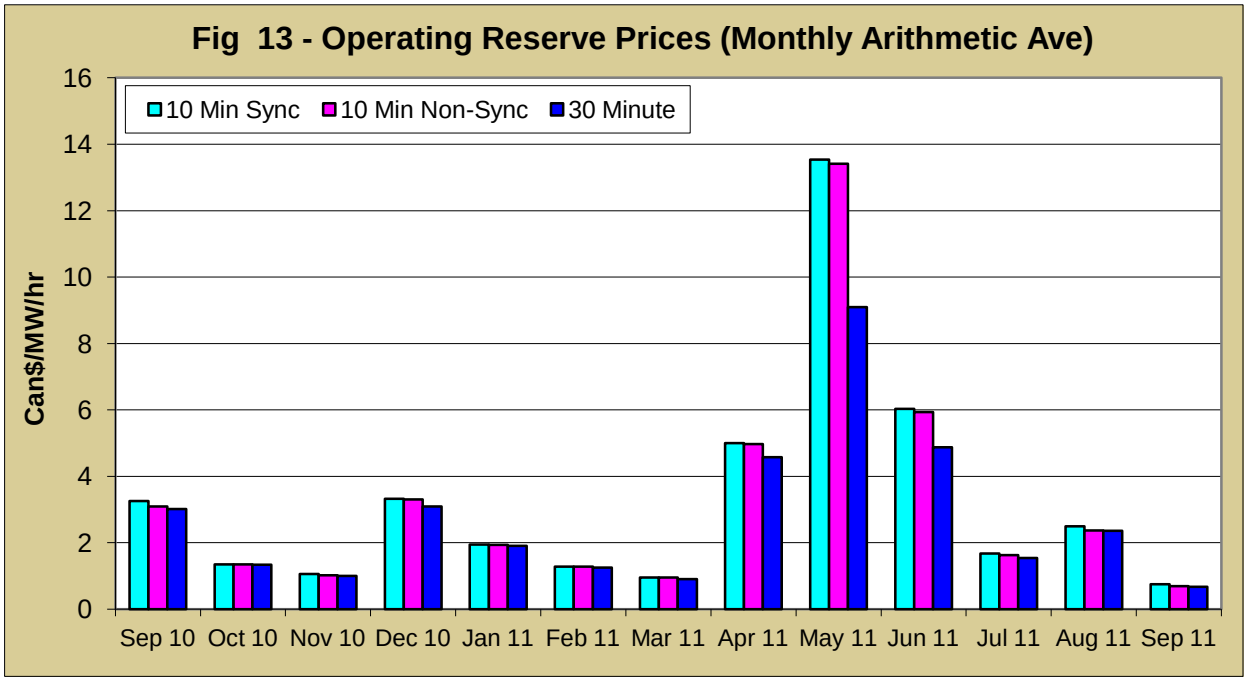
5.1 Weekly Hourly Ontario Energy Price (HOEP) Trends



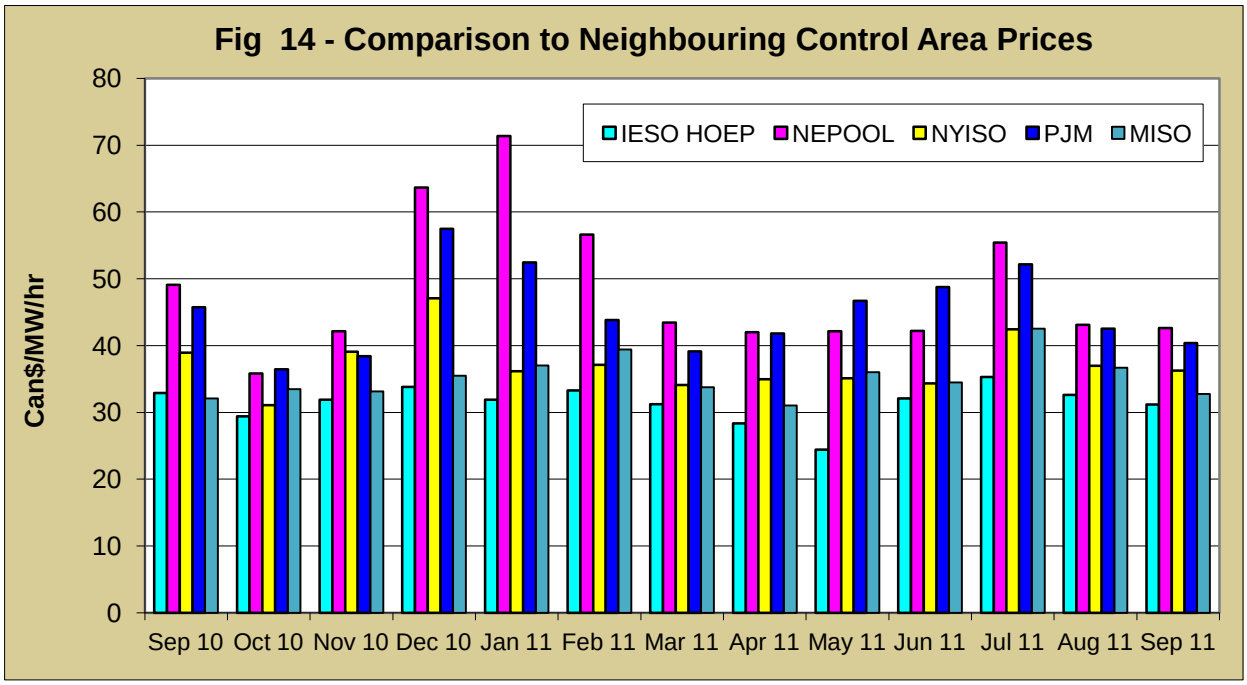
5.2 HOEP Prices (Monthly Arithmetic Ave)



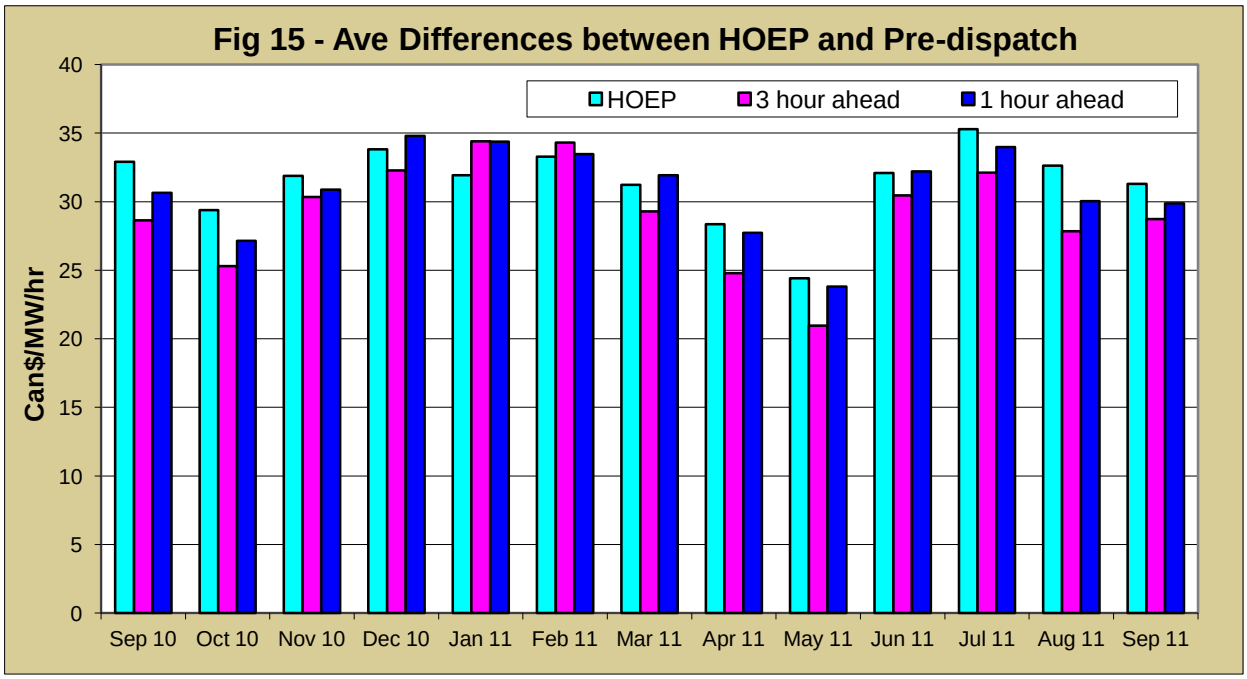
5.3 Operating Reserve Prices (Monthly Arithmetic Ave)



5.4 Comparison to Neighbouring Control Area Prices

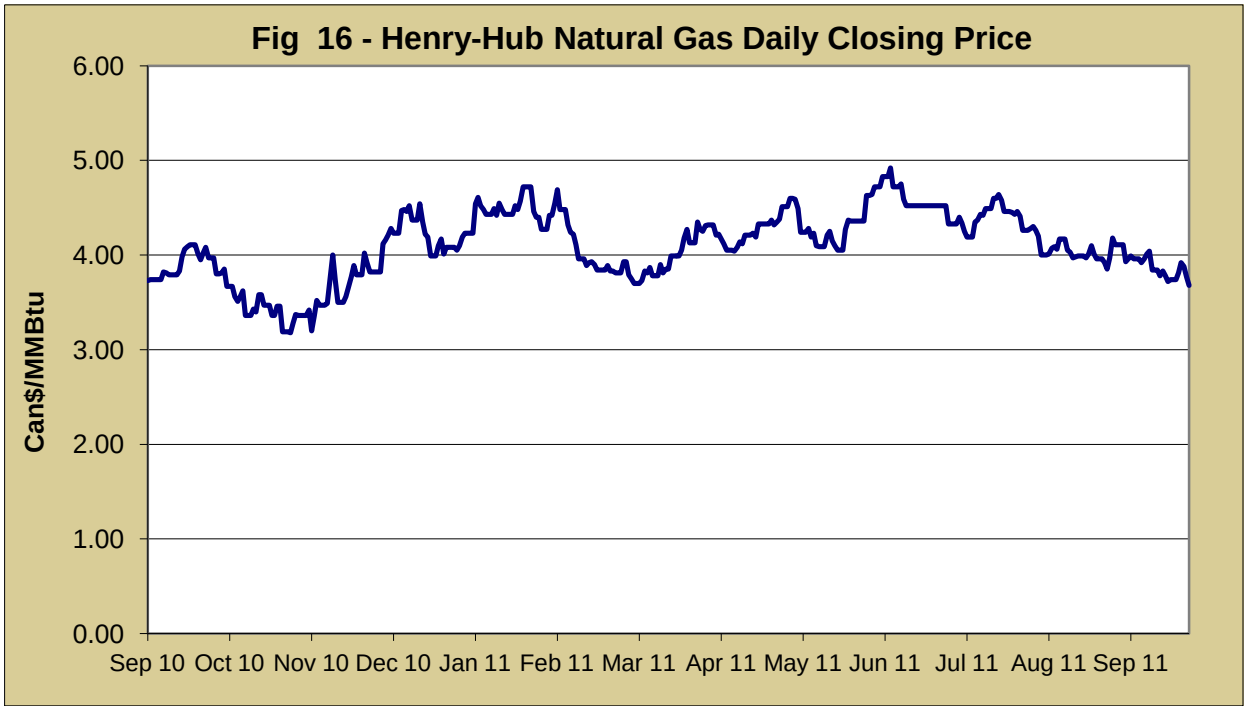


5.5 Ave Differences between HOEP and Pre-dispatch

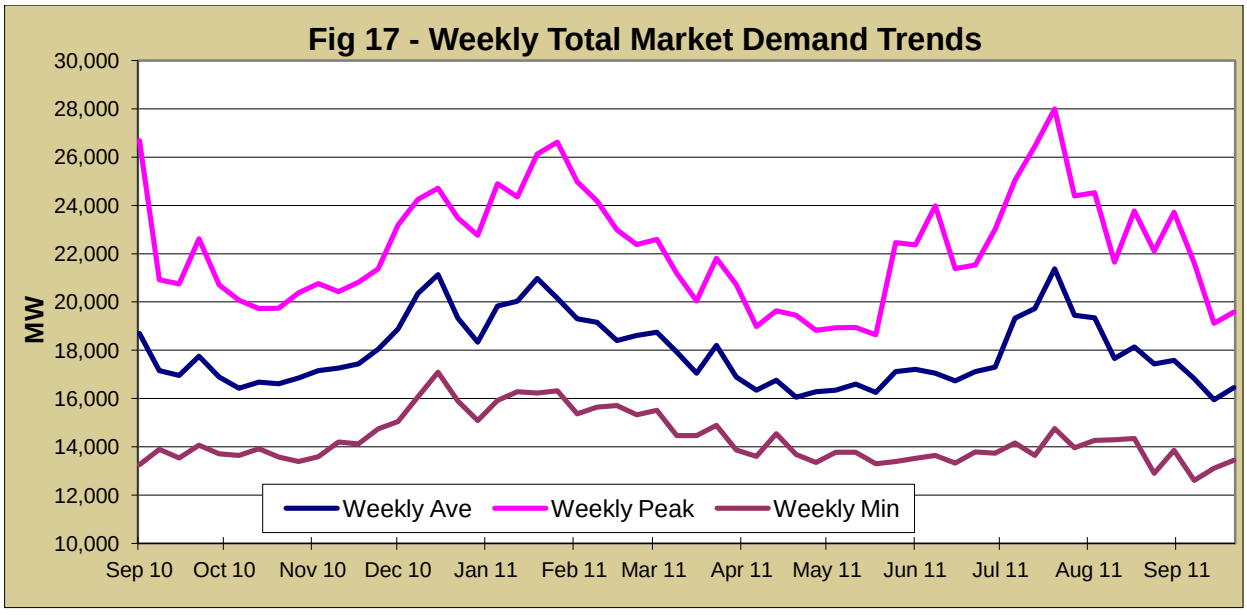


5.6 Henry-Hub Natural Gas Closing Price

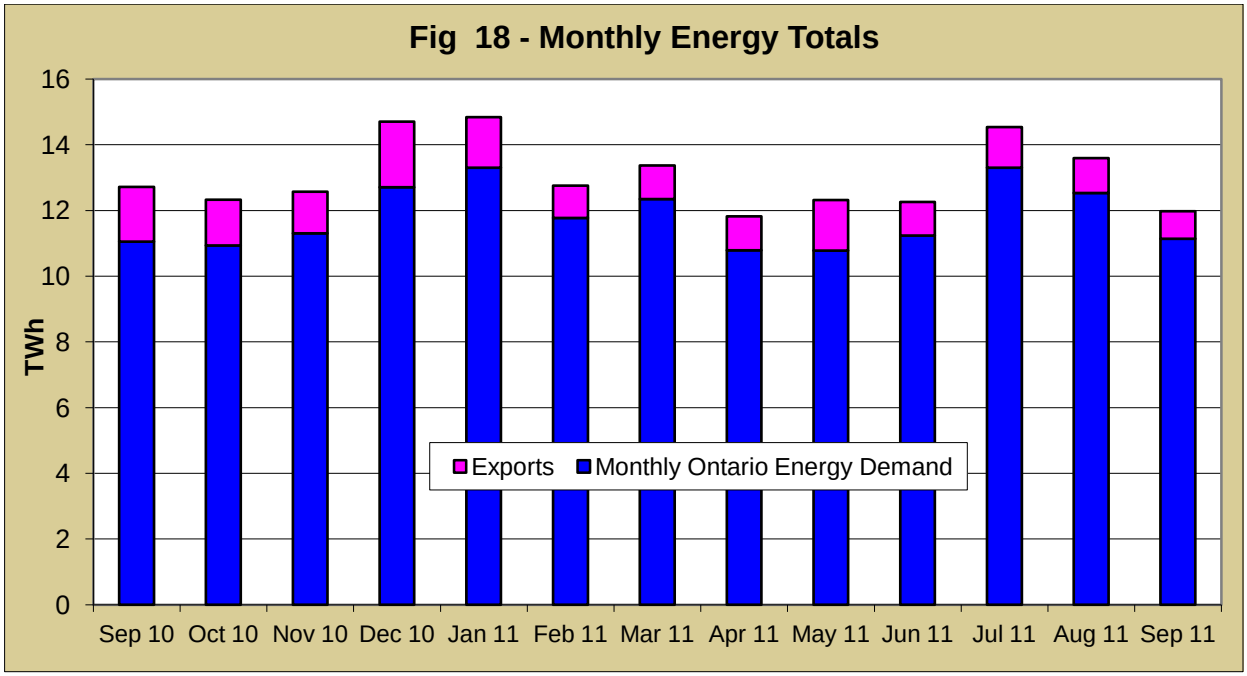
Natural gas is a fuel for some Ontario-based generation, and when dispatched, is often the marginal source of electricity in Ontario. In addition, gas prices influence import offers into Ontario and export bids out of the province.



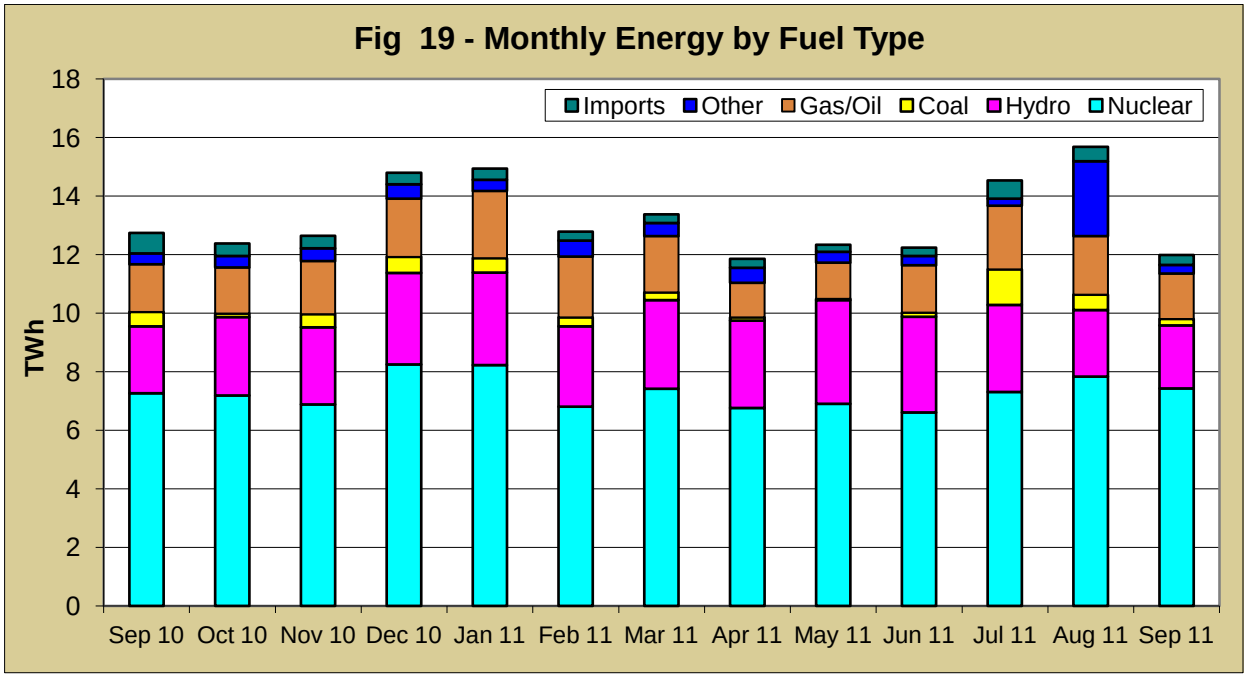
5.7 Weekly Market Demand Trends



5.8 Monthly Energy Totals

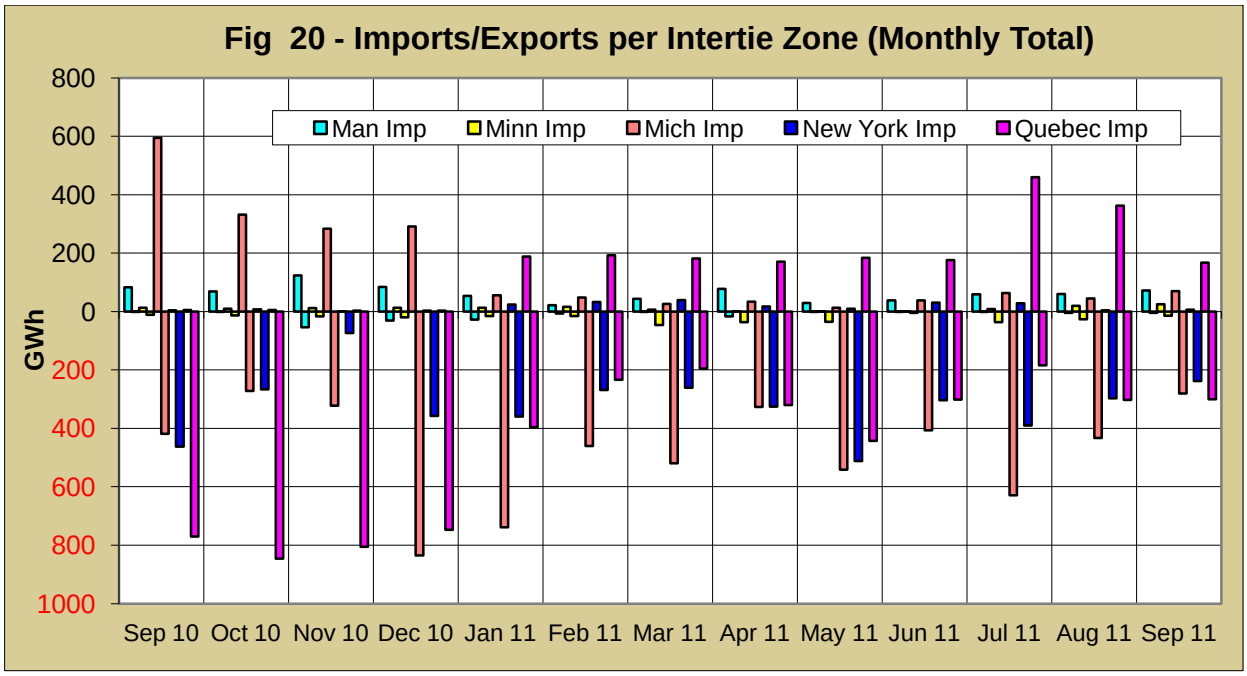


5.9 Monthly Energy by Fuel Type

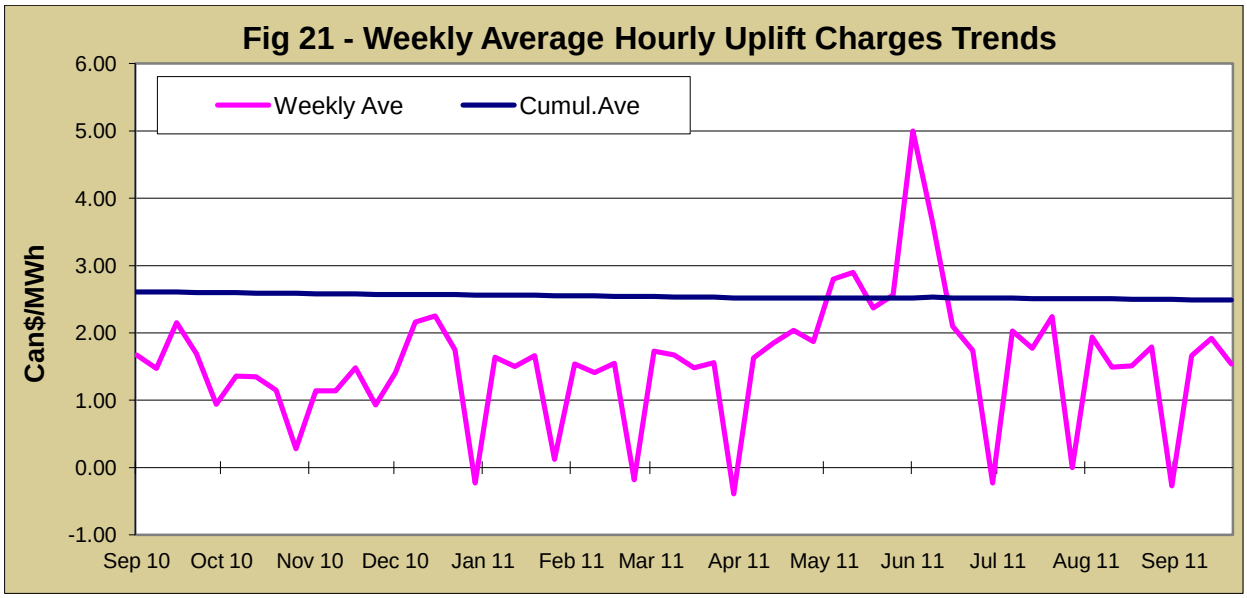


5.10 Imports/Exports per Intertie Zone (Monthly Total)

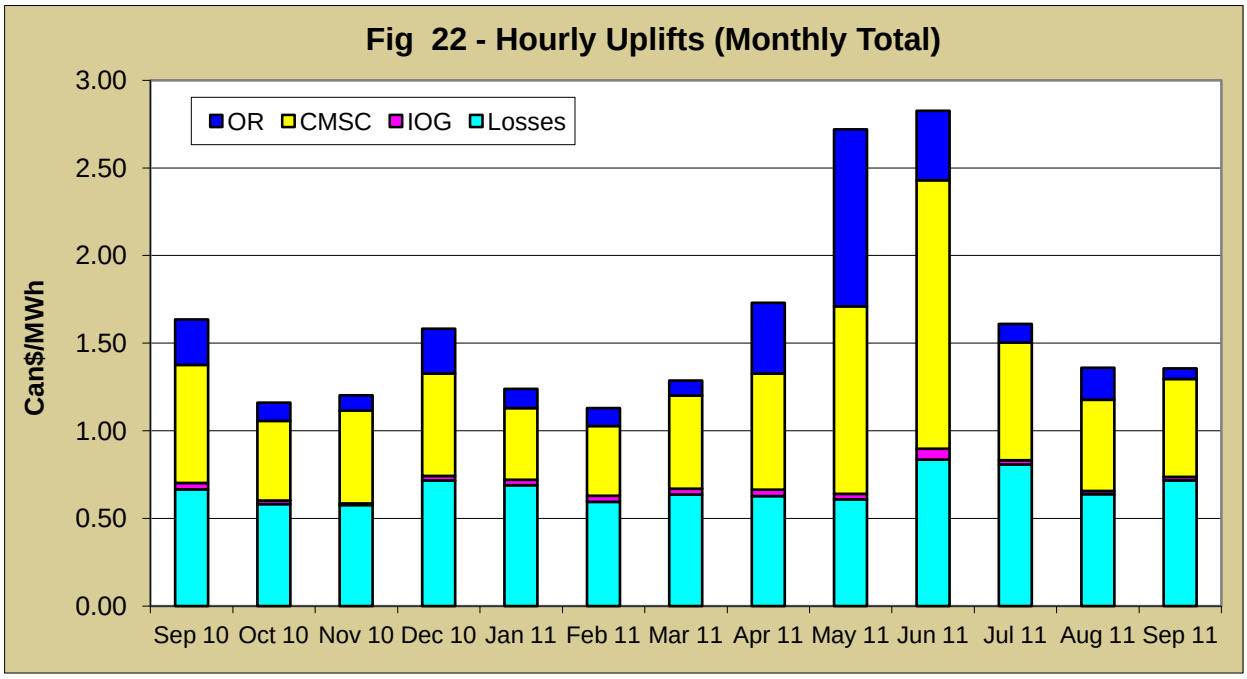
Note: Imports are depicted as above zero, whereas Exports are depicted as below zero



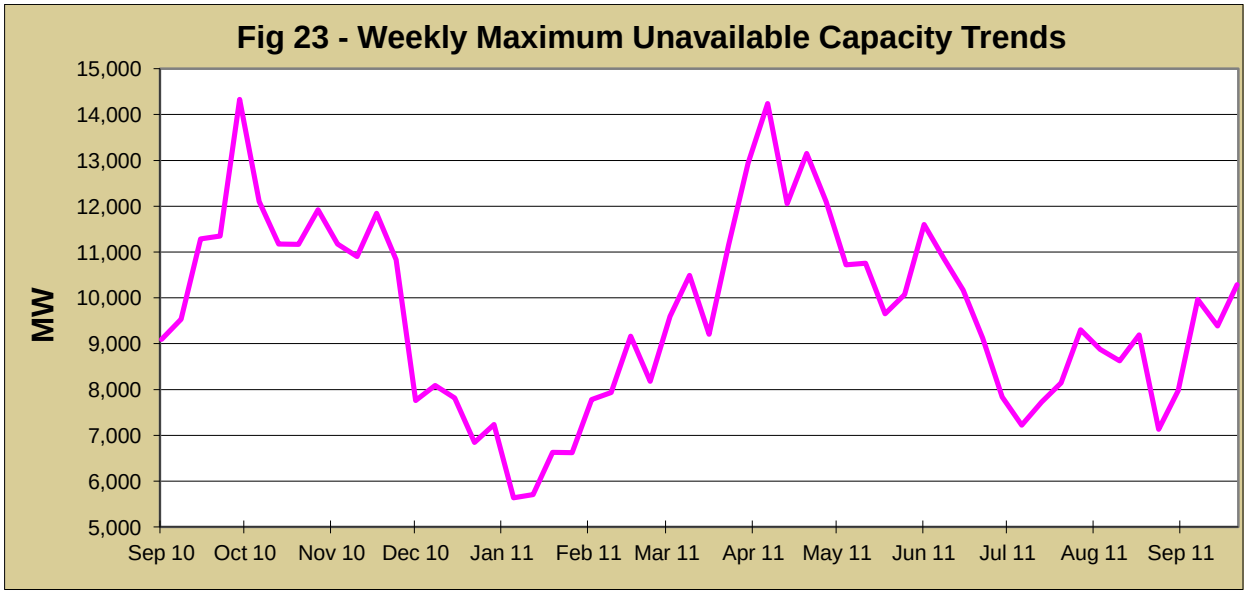
5.11 Weekly Average Hourly Uplift Charges Trends



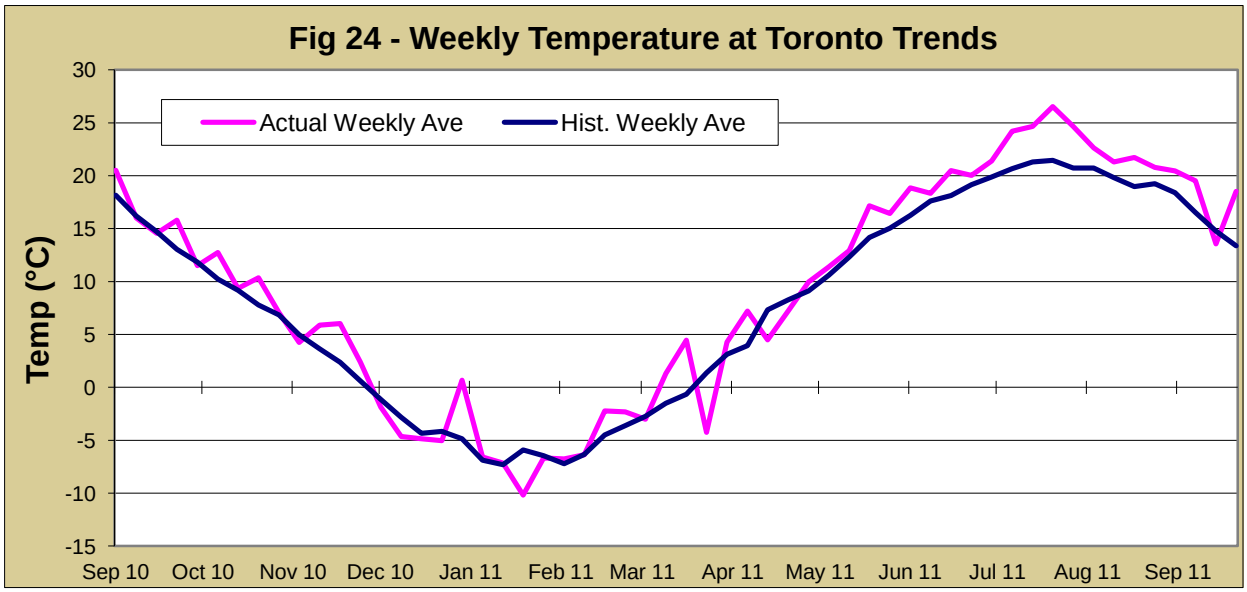
5.12 Hourly Uplifts (Monthly Total)



5.13 Weekly Maximum Unavailable Capacity Trends



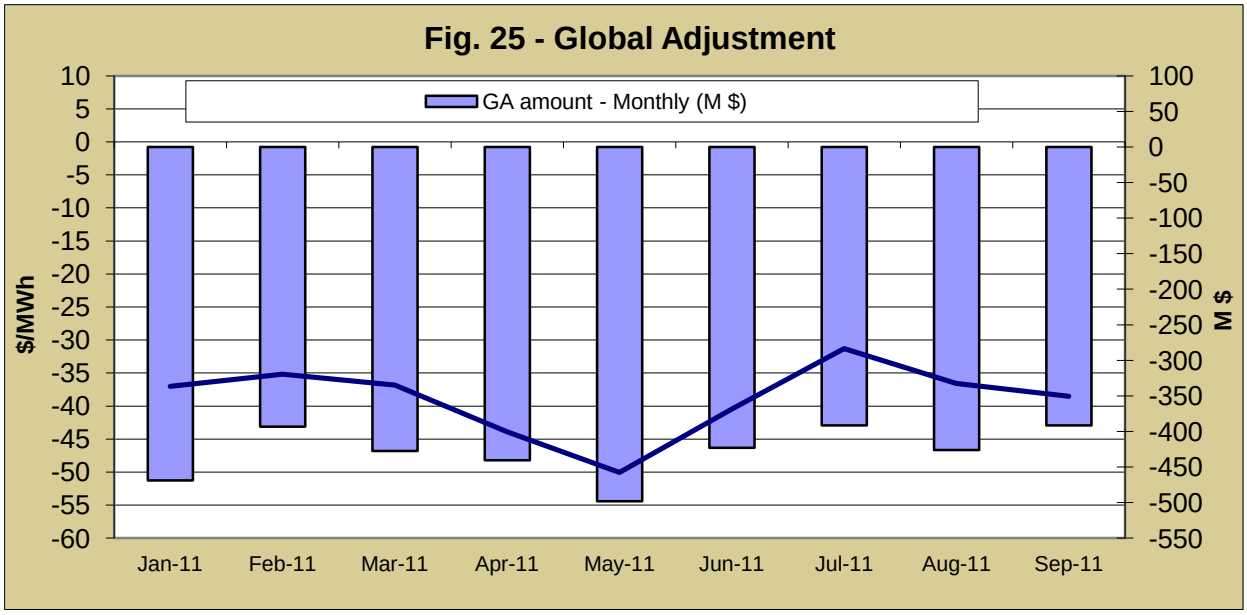
5.14 Weekly Temperature at Toronto Trends



6. Global Adjustment

The global adjustment is the difference between the total payments made to certain contracted or regulated generators/demand management projects, and any offsetting market revenues. The adjustment may be positive or negative.
The global adjustment includes the following:
• OPG's regulated baseload generation
• Ontario Electricity Financial Corporation contracts for generators including non-utility generators (NUGs)
• Ontario Power Authority contracts with generators and suppliers of demand response and conservation

The global adjustment is calculated as a total dollar amount for each month. The global adjustment for the month is applied to the settlement statement for the last trade day of the month for all market participants who withdraw energy from the grid (except exporters). Consumers with an average demand over five megawatts pay for the global adjustment based on a coincident peak calculation. Consumers with an average demand under five megawatts are called Class B consumers and pay the global adjustment based on the total amount of energy they used for the month. The total GA amount and the actual Class B rate are depicted in the chart below.



7. Summary of Wholesale Market Electricity Charges in Ontario's Competitive Marketplace

In early August 2002, the IESO released "A Guide to Electricity Charges in Ontario's Competitive Marketplace". That guide shows how market charges flow from the wholesale market to the retail market, and how these charges may appear on a typical consumer's utility bill. The bar chart contained in this section is taken directly from that Guide. Also shown here, is a summary of this month's market results that correspond with the charge items indicated in the chart.

IESO WHOLESALE MARKET	Arithmetic Average		Weighted Average	
	Current Month	Year-to-Date	Current Month	Year-to-Date
Commodity Charge				
HOEP	$31.18	$30.88	$31.98	$32.32
Actual Global Adjustment Class B Rate	$38.50	$38.87	$38.50	$38.87
Total	$69.68/MWh or 6.97 ¢/kWh	$69.75/MWh or 6.98 ¢/kWh	$70.48/MWh or 7.05 ¢/kWh	$71.19/MWh or 7.12 ¢/kWh
Wholesale Market Service Charges				
CMSC	$0.57	$0.72	$0.56	$0.70
IOG	$0.10	$0.04	$0.10	$0.04
Other Hourly	$0.24	$0.82	$1.05	$1.05
Monthly	$1.53	$1.10	$1.53	$1.10
IESO Administration	$0.82	$0.82	$0.82	$0.82
OPA Administration	$0.55	$0.55	$0.55	$0.55
Rural/Remote Settlement	$1.30	$1.30	$1.30	$1.30
Total	$5.11/MWh or 0.51 ¢/kWh	$5.35/MWh or 0.54 ¢/kWh	$5.91/MWh or 0.59 ¢/kWh	$5.56/MWh or 0.56 ¢/kWh
Wholesale Transmission Charge	$10.18/MWh or 1.02 ¢/kWh	$9.41 MWh or 0.94 ¢/kWh	$10.18/MWh or 1.18 ¢/kWh	$9.41 MWh or 0.94 ¢/kWh
Debt Retirement Charge	$7.00/MWh or 0.70 ¢/kWh	$7.00/MWh or 0.70 ¢/kWh	$7.00 /MWh or 0.70 ¢/kWh	$7.00/MWh or 0.70 ¢/kWh
TOTALS	$91.97/MWh or 9.20 ¢/kWh	$91.51/MWh or 9.15 ¢/kWh	$93.57/MWh or 9.36 ¢/kWh	$93.16/MWh or 9.32 ¢/kWh

Note: Year-to-Date is since January 1, 2011

There are two commodity charges quoted above. The arithmetic average price would be representative of the average commodity charge for a customer whose electrical demand is relatively consistent throughout the day, the night and the weekends. The weighted average price would be applicable to a customer whose consumption mirrored that of the total system. The actual average commodity price paid by a wholesale customer will be very sensitive to their consumption pattern.

The Wholesale Transmission Charge listed above has been calculated by summing all transmission-related fees paid by all loads in the province, and dividing that sum by the total energy delivered to those loads. As such, this number is not representative of the fee paid by any particular customer. Rather, each customer's actual fee for transmission service will depend on many factors such as peak consumption pattern and the types of transmission services applicable to the customer.

Renewable Generation Connection

In addition to the wholesale market charges listed above, participant invoices now include settlement amounts to recover certain costs incurred by distribution companies for the connection of new renewable generation to their local distribution system.

These charges are covered under charge type 1463 - Renewable Generation Connection - Monthly Compensation Settlement Credit. Costs are charged to participants based on their proportion of Allocated Quantity of Energy Withdrawn (AQEW) for the month, including embedded generation for LDCs. The monthly rates are summarized below:

Month (2011)	Rate ($/MWh)	Preliminary/Final
January	0.1234	Final
February	0.1389	Final
March	0.1328	Final
April	0.1507	Final
May	0.1530	Final
June	0.1481	Final
July	0.1258	Final
August	0.1329	Final
September	0.1494	Final

The recovery of these costs was enabled by Regulation 330/09, and the amounts are approved by the Ontario Energy Board. Further details regarding the decision EB-2010-0191 can be found on the OEB website: http://www.oeb.gov.on.ca

Questions on any information contained in this report should be directed to:

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