

# **REGULATED PRICE PLAN – COST TRACKING**

# MONTHLY VARIANCE EXPLANATION (JULY 07)

This document has been prepared at the request of the Ontario Energy Board (OEB, or the "Board"). The Board's objective is to better inform interested stakeholders and consumers about the Regulated Price Plan (RPP) and the factors that have contributed to the difference between the forecast price that RPP consumers currently pay and the actual cost to supply those consumers. An appendix provides monthly values for the key contributing factors. This document is updated on a monthly basis when all the information becomes available.

All of the statistics presented in this report are taken or derived from publicly available information sources. Neither Navigant Consulting nor the OEB has audited this information. Any revisions by the providers of the actual data will be included in future updates of this report.

This report is available on the Regulated Price Plan (RPP) Web page of the OEB Web site at <u>www.oeb.gov.on.ca</u> (see quick link under "Major Key Initiatives"). Any technical questions regarding this report can be directed to Chris Cincar at 416-440-7696 or Russell Chute at 416-440-7682.

Regulated Price Plan consumers pay a stable price for electricity that is set in advance by the Board. The initial RPP prices went into effect on April 1, 2005 and remained in place for a thirteen month period (April 2005 through April 2006). Now the Board reviews RPP prices every six months and adjusts them, as needed, based on:

- a forecast of electricity costs to supply RPP consumers for the coming period; and
- the outstanding variance balance at the end of the previous period.

The current RPP prices, effective May 1, 2007 through April 30, 2008, were announced by the Board on April 12, 2007.

This report focuses on how well current RPP prices recover the costs of electricity supplied to RPP consumers and reduces the outstanding variance account balance.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The current RPP tiered prices are 5.3 cents per kWh (for consumption below the tier threshold) and 6.2 cents per kWh (for consumption above the tier threshold). The tiered prices were previously 5.5 cents per kWh and 6.4 cents per kWh for Tier 1 and Tier 2, respectively.

Monthly Variance Explanation (July 07)

There are essentially three sources of supply for the RPP in the current hybrid electricity market structure:

- 1. Generating facilities subject to regulated prices, or under contract to the Ontario Power Authority (OPA) or the Ontario Electricity Financing Corporation (OEFC);
- 2. Ontario Power Generation (OPG) facilities which are subject to a revenue cap; and,
- 3. Generating facilities that receive the wholesale spot market price.

The first two groups of generating facilities supply electricity into Ontario's wholesale electricity market and are paid the wholesale spot market price. However, under current regulations, the final revenues for these two groups are different from the spot market price.

• Generating facilities subject to regulated prices or under contract to the OPA or OEFC are paid, or must reimburse, any difference between the average monthly revenue earned for their output on the spot market and their contract price or regulated price. This difference is transferred to consumers through the "Provincial Benefit" (or "Global Adjustment").

# Example:

If the spot market price of electricity in a given period was 6 cents per kWh and the average contracted or regulated price (for generating facilities under contract or subject to regulated prices) was 5 cents per kWh, these generating facilities <u>reimburse</u> 1 cent per kWh, on average, to consumers for the electricity they supplied to the Ontario market during that period. This has the effect of reducing their average revenues from 6 cents per kWh to 5 cents per kWh. Conversely, if the spot market price was 4 cents per kWh, these generating facilities would <u>be paid</u> an additional 1 cent per kWh by consumers through the Provincial Benefit to bring their average revenues to 5 cents per kWh.

• Regulations require that OPG generation facilities subject to a revenue cap must reimburse any difference between the average revenue earned on their generation output and their revenue cap (average of 4.7 cents per kWh) to consumers on a quarterly basis. This payment is called the "OPG Rebate" (often also referred to as the OPG Non-Prescribed Asset Rebate, or "ONPA rebate"). For the first year, May 1, 2006 to April 30, 2007, revenues from this group of assets were capped at 4.6 cents per kWh<sup>2</sup>. An estimate of the OPG Rebate is included in RPP prices.

<sup>&</sup>lt;sup>2</sup> Output sold by OPG through the OPA Pilot Auction (PA) is excluded from the revenue cap and instead is subject to a higher revenue cap of 5.1 cents per kWh. On May 1, 2008 the cap will rise to 4.8 cents per kWh.

Monthly Variance Explanation (July 07)



In some months, the average revenue from these OPG assets may be less than the revenue cap. According to the OPG Rebate payment terms<sup>3</sup>, the amount is effectively treated as a "credit" to be applied against future rebate amounts payable by OPG. There is no payment to OPG for months in which the average revenue from these OPG assets is less than the revenue cap. The OPG Rebate is a negative value in these months, representing a credit to be applied against future OPG Rebate payments.

The primary effect of these regulations is that the cost of supplying electricity to RPP consumers from the first two is fixed at a price that was expected to be below the average spot price for electricity. This reduces the average cost of supply and lessens consumers' exposure to volatile spot market prices.

New RPP prices went into effect on May 1<sup>st.</sup> These prices are based on forecasts of many factors. The most important determinants of forecast RPP supply costs (and RPP prices) are: 1) the relative amount of electricity from each of the three electricity supply sources; 2) the price of electricity purchased from the spot market; and, 3) the outstanding variance account balance at the end of the previous RPP period.

The *actual* supply cost for the RPP also depends on many factors but the most important are the same as those used to forecast the RPP price: 1) the relative amount of electricity coming from each of the three supply sources; and, 2) the price of electricity purchased from the spot market. If these factors differ from those in the forecast issued by the Board, the *actual* RPP supply cost will differ from the *forecast* RPP supply cost.

The difference between RPP revenues and the RPP supply cost is defined as the "RPP variance". This report includes a chart that shows the forecasted and actual cumulative outstanding RPP variance at the beginning and the end of each month in the current RPP period and a table that shows the forecasted and actual cumulative outstanding RPP variance at the end of this month. For the purposes of this report, "*Initial RPP Period*" refers to April 1, 2005 through April 30, 2006, and "*Current RPP Period*" refers to May 1, 2007 through April 30, 2008. The two other periods are self-explanatory. Each period has different RPP prices as shown at the beginning of the appendix.

<sup>&</sup>lt;sup>3</sup> The OPG Rebate payment is administered by the Independent Electricity System Operator (IESO) which operates under a licence issued by the OEB. The IESO's licence provides details regarding the OPG Rebate payments and is available at: <u>http://www.ieso.ca/imoweb/pubs/corp/Amd-Licence-IESO-20060912.pdf</u>



# 1. Spot Market Prices and Key Drivers of Spot Prices

#### Simple Average Spot Market Price

This comparison shows the cost of electricity purchased from the spot market (without consideration of the Provincial Benefit and OPG Rebate) for a hypothetical consumer that uses the same amount of electricity in each hour. Actual spot market prices were lower than forecast because of reduced RPP electricity demand. On the supply side, a strong Canadian dollar has also played a role in dampening the electricity prices by lowering fuel costs, particularly natural gas and coal prices.<sup>4</sup>

Simple Average Cost of Electricity		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	5.5 cents per kWh	
Actual	4.2 cents per kWh	
Percent Difference	24% lower	

#### **RPP-Load Weighted Average Spot Market Price**

This comparison shows the cost of electricity purchased from the spot market (without consideration of the Provincial Benefit and OPG Rebate). However, in this case, the consumer (e.g., residential) is assumed to use electricity in the same manner as the average RPP consumer (higher electricity consumption during the peak periods, such as winter evenings, when prices are higher). The actual RPP load-weighted spot market price is lower than forecast for the same reasons as the simple average spot market price.

RPP-Load Weighted Average Cost of Electricity	
Current RPP Period (May 1, 2007 through July 31, 2007)	
Forecast	6.0 cents per kWh
Actual	4.5 cents per kWh
Percent Difference	25% lower

#### Natural Gas Prices

This comparison shows natural gas prices. Natural gas prices have a significant impact on electricity prices because natural gas is the fuel source for generating facilities that often set the hourly spot market price for electricity. If natural gas prices are higher than forecast, the cost of electricity from these generating facilities and the spot market price of electricity will be higher than forecast.

<sup>&</sup>lt;sup>4</sup> Coal and natural gas costs of Ontario generators are affected by the U.S. / Canadian exchange rate. As the value of the Canadian \$ goes up relative to the U.S. \$, the fuel costs for Ontario generators will tend to go down.

Actual natural gas prices that were higher than forecast were a primary contributor to higher than forecast electricity prices in the spot market during the initial RPP period. Preliminary analyses show that for every 10% increase in natural gas prices, Ontario electricity spot market prices would increase by approximately 6%.

Natural gas prices for the current RRP period have been lower than forecast, with prices for July approximately 20% below forecast.

Natural Gas Prices (\$USD)		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	\$7.91 / MMBtu	
Actual	\$7.32 / MMBtu	
Percent Difference	8% lower	

NB - 1 MMBtu (Million British Thermal Units) ≅ 1.055 GJ (Gigajoules) ≅ 27.5 m<sup>3</sup> (cubic meters) of Natural Gas

### Weather, Cooling Degree Days (>24°C)

Degree days for a given day represent the number of Celsius degrees that the mean temperature is above or below a given base. This comparison shows the number of cooling degree days above 24°C per month in the city of Toronto (Lester B. Pearson Int'l Airport). If the temperature is less than or equal to 24°C, then the number will be zero.<sup>5</sup> Values above 24°C are used to estimate the cooling requirements of residential consumers. For example, if the mean daily temperature is 30°C, the number of cooling degree days would be 30°C - 24°C = 6.

During the initial RPP period, the number of cooling degree days far exceeded normal conditions. The number of cooling degree days in the current RPP period is approximately seven more than expected under normal conditions.

Cooling Degree Days (>24 °C)		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	12	
Actual	19	
Difference	59% higher	

## Weather, Heating Degree Days (>15°C)

During the winter heating season, *heating* degree days replace *cooling* degree days as an important factor driving electricity demand and spot market prices. Heating degree days, calculated in the same manner as cooling degree days, indicate the heating requirements of consumers in Ontario.

<sup>&</sup>lt;sup>5</sup> 18°C is another common base temperature used to determine cooling degree days. Navigant Consulting and the OEB share the view that 24°C is more representative of when residential consumers use air conditioning.

Monthly Variance Explanation (July 07)

This comparison shows the number of heating degree days below 15°C in the city of Toronto (Lester B. Pearson Int'l Airport). If the temperature is higher than or equal to 15°C, then the number will be zero. The number of heating degree days for the current RPP period is 41% lower than expected or what would be considered "normal". This was likely a contributing factor to low RPP demand.

Heating Degree Days (<15 °C)			
(	Current RPP Period (May 1, 2007 through July 31, 2007)		
	Forecast	115	
	Actual	68	
	Difference	41% lower	

# 2. Generating Facilities that Pay the Provincial Benefit

The two main supply sources that pay the Provincial Benefit are OPG's nuclear generating stations and OPG's regulated (baseload) hydroelectric generating stations.

## **OPG Nuclear Output**

This comparison shows the output (or production) of OPG's nuclear plants. The Board has taken outages into account when preparing the forecast. However, the planned outage schedules are brought forward or postponed, extended or shortened, or are otherwise subject to change, depending on the operational needs of the specific generation units. Actual output during the current RPP period has been approximately the same as the forecast by the Board.

OPG's Nuclear Output		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	11.3 TWh	
Actual	11.3 TWh	
Percent Difference	0%	

NB - 1 TWh = 1 billion kWh and is roughly equivalent to the electricity used by 100,000 homes in a year.

## OPG Regulated (Baseload) Hydroelectric Output

This comparison shows the amount of electricity produced by OPG's regulated hydroelectric plants (DeCew Falls, Sir Adam Beck, and R.H. Saunders). The output from these facilities is primarily baseload, i.e. they produce electricity all the time ( $24 \times 7$ ). Actual output of these generating facilities is 8 percent lower than the forecast by the Board for the current RPP period.

_	OPG's Baseload Hydroelectric Output		
-	Current RPP Period (May 1, 2007 through July 31, 2007)		
-	Forecast	5.0 TWh	
_	Actual	4.6 TWh	
-	Percent Difference	8% lower	

NB - 1 TWh = 1 billion kWh and is roughly equivalent to the electricity used by 100,000 homes in a year.

#### **Provincial Benefit**

This comparison shows the forecast versus actual Provincial Benefit (also referred to as the "Global Adjustment"). The forecast value of the Provincial Benefit is included in current RPP prices.

Provincial Benefit (Global Adjustment)		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	0.0 cents per kWh	
Actual	-0.8 cents per kWh	
Difference	0.8 cents lower	

Unlike the spot market price, the Provincial Benefit does not vary with time: it is the same unit value for all Ontario electricity consumers whether they consume more electricity during "on-peak" (e.g., daytime) periods when spot market prices are higher or they consume more electricity during "off-peak" (e.g., night) periods when spot market prices are lower.

The Provincial Benefit is a net charge to consumers for the current RPP period, as was the case for May '06 through April '07. This is primarily the result of low spot market prices.

# 3. Generating Facilities that Pay the OPG Rebate (or ONPA rebate)

The two supply sources that pay the OPG Rebate are OPG's coal-fired generating plants and OPG's unregulated hydroelectric generating plants.

#### OPG Coal-fired Output

The output from OPG's coal-fired facilities is strongly correlated with demand in Ontario: higher demand results in greater output from OPG's coal-fired facilities, while lower demand leads to less output from the same facilities. For May 2007, actual RPP demand was 5.0 TWh and coal-fired output was 1.5 TWh. For July 2007, actual RPP demand was 5.5 TWh and coal-fired output was 2.5 TWh.

OPG's Coal Fired Output		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	6.3 TWh	
Actual	6.4 TWh	
Percent Difference	2% higher	

NB - 1 TWh = 1 billion kWh and is roughly equivalent to the electricity used by 100,000 homes in a year.

#### OPG Unregulated (Non-Prescribed) Hydro Electric Output

Most of this output comes from "peaking" capacity which generally operates only during periods of high demand; the remainder is "baseload" capacity.



The actual output of these generators was lower than the output forecast by the Board for the current RPP period, largely the result of lower than forecast demand.

OPG's Unregulated Hydroelectric Output	
Current RPP Period (May 1, 2007 through July 31, 2007)	
Forecast	4.2 TWh
Actual	3.7 TWh
Percent Difference	12% lower

NB - 1 TWh = 1 billion kWh and is roughly equivalent to the electricity used by 100,000 homes in a year.

#### **OPG Rebate (estimated)**

The estimated OPG Rebate is lower than forecast, because actual market prices were lower than forecast market prices. The forecast OPG Rebate is included in current RPP prices.

OPG Rebate		
Current RPP Period (May 1, 2007 through July 31, 2007)		
Forecast	0.4 cents per kWh	
Actual	0.1 cents per kWh	
Difference	0.3 cents lower	

A positive value for the OPG Rebate means that the estimated OPG revenues are greater than the revenue cap for the current RPP period and represents a "credit" towards the cost of supply for RPP consumers. Conversely, a negative value for the OPG Rebate would mean that the estimated OPG revenues are less than the revenue cap for the current RPP period<sup>6</sup>.

Under Government regulations, the revenue cap for the non-prescribed OPG assets increased to 4.7 cents per kWh on May 1, 2007. On May 1, 2008, the revenue cap will increase to 4.8 cents per kWh for the subsequent 12 month period.

# 4. **RPP Supply Costs and Revenues**

The RPP supply cost represents the cost and amount of electricity supplied to RPP consumers that comes from each of the three sources of generation supply discussed above (see page 2). RPP supply costs are calculated as the spot market price of electricity, less the Provincial Benefit and OPG Rebate.

<sup>&</sup>lt;sup>6</sup> The OPG Rebate payment is made on a quarterly basis but there is no actual payment to OPG for months in which the average revenue from these OPG assets is less than the revenue cap. The OPG Rebate will be shown as a negative value to represent the magnitude of the credit to be applied against future OPG Rebate payments. If the cumulative OPG Rebate is below the revenue cap for an entire quarter, the difference is carried forward and applied as a credit to offset rebate payments in future quarterly periods.

Monthly Variance Explanation (July 07)

The RPP revenues represent the total revenues generated from the two tiered pricing structure of 5.3 cents per kWh (for consumption below the tier threshold) and 6.2 cents per kWh (for consumption above the tier threshold).<sup>7</sup>

The difference between the forecast and the actual RPP supply cost is accumulated and tracked in a variance account (held by the OPA) to be either *credited* to RPP consumers (if a positive variance) or *charged* to RPP consumers (if a negative variance).

### **RPP Unit Supply Cost**

The RPP unit supply cost in the current RPP period is lower than forecast through July 2007, largely because of lower than forecast RPP demand and, as a result, a higher proportion of RPP demand being supplied by relatively low cost baseload generation (such as the OPG Regulated assets).

RPP Unit Supply Cost	
Current RPP Period (May 1, 2007 through July 31, 2007)	
Forecast	5.7 cents per kWh
Actual	5.2 cents per kWh
Percent Difference	9% lower

The RPP unit supply cost presented above <u>excludes</u> the adjustment to clear the existing variance balance (or Variance Clearance Adjustment Factor) included in RPP prices which is approximately -0.1 cent per kWh. This adjustment has been factored in, for the current RPP period, in order to credit RPP consumers with the expected accumulated surplus variance of \$70 million at the end of the previous RPP period (November '06 - April '07).<sup>8</sup>

## **RPP Total Supply Cost**

The actual *total* RPP supply cost is lower than forecast. This is a result of lower than forecast RPP demand as well as the lower than forecast RPP *unit* supply cost.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> The Board announced new prices for the two tiers effective May 1, 2007. Those prices are 5.3 cents per kWh for the lower tier and 6.2 cents per kWh for the higher tier. For more information, see the "*Regulated Price Plan: Price Report* (*May* 07 – *April* 08)", issued on April 12, 2007 on the RPP web page of the Board's website: http://www.oeb.gov.on.ca/documents/cases/EB-2004-0205/rpp\_price\_report\_20070412.pdf

<sup>&</sup>lt;sup>8</sup> The actual surplus variance as of April 30, 2007 was about \$91 million compared to an expected positive variance of \$70 million.

<sup>&</sup>lt;sup>9</sup> The RPP total supply cost also includes the stochastic adjustment factor, which is not included in the unit supply cost. For an explanation of the stochastic adjustment factor, please see the RPP Price Report issued on Oct 11, 2006 on the Board's website at <a href="http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects\_regulatedpriceplan\_baseline.htm">http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects\_regulatedpriceplan\_baseline.htm</a>.



RPP Total Supply Cost						
Current RPP Period (May 1, 2007 through July 31, 2007)						
Forecast	\$1,052 million					
Actual	\$834 million					
Percent Difference	21% lower					

#### **RPP Unit and Total Revenues**

The RPP unit revenue was roughly the same as the forecast.

RPP Unit Revenues							
Current RPP Period (May 1, 2007 through July 31, 2007)							
Forecast	5.8 cents per kWh						
Actual	5.8 cents per kWh						
Percent Difference	0%						

Actual RPP revenue was roughly 11% lower than forecast primarily because of lower than forecast RPP demand.

RPP	RPP Total Revenues						
Current RPP Period (May 1, 2007 through July 31, 2007)							
Forecast	\$1,050 million						
Actual	\$930 million						
Percent Difference	11% lower						

#### **RPP Variance**<sup>10</sup>

The RPP Variance represents the difference between the revenues collected from RPP consumers and the cost to supply RPP consumers (i.e., RPP supply cost).

The outstanding variance from the initial RPP period, ending April 30, 2006, was negative \$417 million. In the subsequent twelve months, the negative variance balance was eliminated entirely. The outstanding variance was forecast to be positive \$70 million by the end of April 2007. The actual outstanding variance on April 30, 2007 was \$21 million higher (or positive \$91 million), because actual spot prices were lower than the forecast prices for March and April 2007.

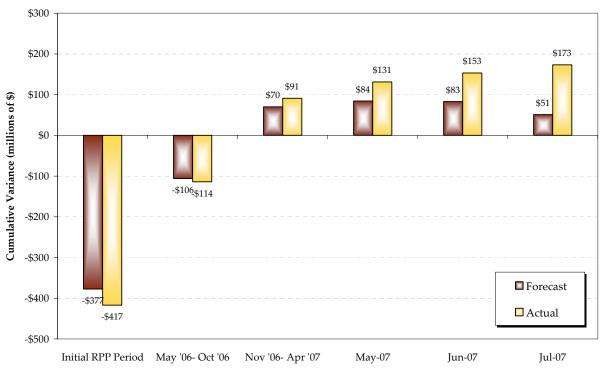
Additional unexpected variance account revenues of \$12.1 million from retailers were received by the OPA in April. These payments are the result of rebate refunds to consumers with retail contracts that were signed prior to November 11, 2002 and who subsequently paid RPP prices.

<sup>&</sup>lt;sup>10</sup> The RPP variance includes interest incurred by the OPA for balances held in the variance account, as required by the Board's RPP Manual.

In April 2006, the Independent Electricity System Operator (IESO) forwarded the OPG Rebate to retailers for all consumers that had signed a contract. However, a number of consumers with retail contracts had not assigned their OPG Rebate to the retailer under the terms of the original contract. Therefore, retailers were required to return to the RPP variance account a portion of the OPG Rebate that was paid out in April 2006 by the IESO. Over the past 16 months, the total OPG Rebate amount "returned" by retailers was \$17.7 million.

The RPP prices effective on November 1, 2006 incorporated a Variance Recovery Factor (or Variance Clearance Adjustment Factor) of 0.144 cents per kWh to pay down the negative outstanding variance from the previous RPP period to zero over the twelve month period from November 2006 through October 2007. However, the outstanding negative variance was eliminated by February 2007 and the variance account accumulated a positive balance of \$91 million by April 30, 2007. The Board has incorporated a Variance Clearance Adjustment Factor of approximately -0.1 cent per kWh to clear this positive variance balance.

The chart below presents the forecast and actual monthly variance outstanding in the current RPP period, the outstanding variances at the end of the *initial* RPP period and the RPP periods preceding the current RPP period.



#### Cumulative Variance (Period Ending) - Forecast vs Actual

The total net variance accumulated in the OPA variance account is roughly positive \$173 million. This balance is \$122 million greater than the forecast variance for July 2007. The RPP variance



RPP	RPP Variance - Overall						
(Apr 1, 2005 through July 31, 2007)							
Forecast	\$51 million						
Actual	\$173 million						
Difference	-\$122 million						

account has completely recovered from the significant negative variance accumulated during the summer of 2005 when Ontario had extreme weather conditions.

The positive \$173 million net RPP variance corresponds to the "Net Variance Account Balance" identified on the OEB's Final RPP Variance Settlement Amount web page.<sup>11</sup> This value is taken to be the surplus amount after the estimated accrued OPG Rebate (attributable to RPP consumers) is taken into account. The difference between the forecast and actual net RPP variance at the end of the RPP period will be used to reset the Variance Clearance Adjustment Factor when RPP prices are adjusted. RPP price adjustments are set by the Board every six months, if needed, effective November 1<sup>st</sup> and May 1<sup>st</sup>.

<sup>&</sup>lt;sup>11</sup> http://www.oeb.gov.on.ca/html/en/industryrelations/ongoingprojects\_regulatedpriceplan\_variance.htm

## APPENDIX A -KEY VARIANCE DRIVERS, MONTHLY VALUES

Presented in this appendix are the monthly values for the factors discussed in the body of this document. As well, one additional summary table is provided for RPP total demand. *"Initial RPP Period"* refers to the thirteen month period from April 1, 2005 through April 30, 2006.

The table below shows all of the RPP two-tier prices since the RPP was introduced and all of the monthly values in this appendix correspond to those different RPP prices.

cents per kWh	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	Current RPP Period
Tier 1	5.0	5.8	5.5	5.3
Tier 2	5.8	6.7	6.4	6.2

# 1. Spot Market Prices and Key Drivers of Spot Prices

Simple Average Spot Market Price

cents per kWh	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	5.5	6.0	6.0	4.2	5.6	6.8	5.5
Actual	6.5	4.5	4.9	3.8	4.4	4.4	4.2
% Difference	18%	-25%	-18%	-10%	-21%	-35%	-24%

#### **RPP Load Weighted Average Spot Market Price**<sup>12</sup>

cents per kWh	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	6.0	6.6	6.4	4.5	6.1	7.5	6.0
Actual	7.0	5.0	5.2	3.9	4.8	4.9	4.5
% Difference	17%	-24%	-19%	-13%	-21%	-35%	-25%

#### **RPP** Demand

TWh	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	<b>Current RPP Period</b>
Forecast	81.0	37.2	37.8	5.7	5.9	6.3	18.0
Actual	81.1	34.6	37.1	5.0	5.4	5.5	15.9
Difference	0.1%	-7.0%	-1.9%	-12.3%	-8.5%	-12.7%	-11.7%

Monthly Variance Explanation (July 07)

<sup>&</sup>lt;sup>12</sup> Actual values are calculated based on LDC reported monthly RPP revenues and costs for RPP supply which was provided by the IESO. The LDCs report these RPP revenues and costs before month-end, and are based on an estimate for the current month plus any reconciliation required for prior submissions. The forecast values were developed based on an estimate of the consumption pattern for RPP consumers.



#### Natural Gas Price

\$/MMBtu	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	<b>Current RPP Period</b>
Forecast	\$7.08	\$7.84	\$9.67	\$7.85	\$7.90	\$7.98	\$7.91
Actual	\$8.89	\$6.14	\$7.37	\$7.96	\$7.58	\$6.44	\$7.32
% Difference	25%	-22%	-24%	3%	-4%	-20%	-8%

Weather, Cooling Degree Days (> 24 °C)

> 24 °C	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Normal	17	17	0.0	0	2	10	12
Actual	81	52	0.0	0	10	9	19
% Difference	376%	206%	0%	0%	400%	-10%	58%

Weather, Heating Degree Days (< 15 °C)

< 15 °C	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	<b>Current RPP Period</b>
Normal	3,517	346	2,892	99	15	1	115
Actual	2,894	291	2,603	63	5	0	68
% Difference	-18%	-16%	-10%	-36%	-67%	-100%	-41%

## 2. Generators that Pay the Provincial Benefit

The tables below show the total output from OPG's regulated generation facilities. However the regulation specifies that any aggregate output above a threshold of 1,900 MW for OPG's regulated hydroelectric generation facilities in any given hour is eligible to receive the spot price, and hence does not contribute to the Provincial Benefit.

#### **OPG Nuclear Output**

TWh	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	<b>Current RPP Period</b>
Forecast	50.6	22.2	25.8	3.9	3.7	3.7	11.3
Actual	49.5	24.3	21.7	4.0	3.6	3.8	11.3
% Difference	-2%	9%	-16%	3%	-3%	3%	0%

#### **OPG Regulated Hydroelectric Output**

TWh	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	19.7	9.8	9.6	1.7	1.6	1.7	5.0
Actual	19.3	8.9	9.5	1.7	1.5	1.4	4.6
% Difference	-2%	-9%	-1%	0%	-6%	-18%	-8%



#### Provincial Benefit (or "Global Adjustment")

cents per kWh	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	0.2	0.4	0.2	(0.9)	0.0	0.7	(0.0)
Actual	0.7	(0.5)	(0.3)	(1.0)	(0.6)	(0.6)	(0.8)
Difference	0.5	(0.9)	(0.5)	(0.1)	(0.6)	(1.3)	(0.8)

# 3. Generators that Pay the OPG Rebate (or "ONPA rebate")

The tables below show the total output from OPG's non-prescribed generation facilities. However, under the existing regulation, approximately 15 percent of the total output from these facilities is not subject to the revenue cap (and rebate).

#### OPG Coal-fired Output

TWh	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	36.2	14.5	16.5	1.9	2.1	2.3	6.3
Actual	30.0	13.3	13.8	1.5	2.4	2.5	6.4
% Difference	-17%	-8%	-16%	-21%	14%	9%	2%

#### OPG Unregulated (Non-prescribed) Hydroelectric Output

TWh	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	<b>Current RPP Period</b>
Forecast	19.7	7.2	6.9	1.7	1.4	1.1	4.2
Actual	15.7	5.7	7.5	1.1	1.3	1.2	3.7
% Difference	-20%	-21%	9%	-35%	-7%	9%	-12%

#### **OPG Rebate**

cents per kWh	Initial RPP Period	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	<b>Current RPP Period</b>
Forecast	0.5	0.5	0.6	0.1	0.4	0.6	0.4
Actual	0.5	0.1	0.2	(0.0)	0.1	0.1	0.1
Difference	0.0	(0.4)	(0.4)	(0.1)	(0.3)	(0.5)	(0.3)

# 4. **RPP Unit and Total Revenues**

The RPP unit revenue for November 2006 onwards is calculated as the weighted average price of electricity consumed by RPP consumers at the two tiered prices (5.3 and 6.2 cents per kWh) less the Variance Clearance Adjustment Factor of -0.097 cents per kWh. The actual unit revenue was roughly the same as the forecast.



cents per kWh	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	5.3	5.8	5.7	5.8	5.8	5.9	5.8
Actual	5.4	5.7	5.8	5.8	5.8	5.9	5.8
% Difference	2%	-2%	2%	0%	0%	0%	0%

The differential between *forecast* and *actual* RPP demand combined with the differential between *forecast* and *actual* RPP unit revenues results in the difference between the *forecast* and *actual* total RPP revenue.

million \$	<b>Initial RPP Period</b>	May '06- Oct '06	Nov '06- Apr '07	May-07	Jun-07	Jul-07	Current RPP Period
Forecast	\$4,300	\$2,158	\$2,170	\$331	\$346	\$373	\$1,050
Actual	\$4,358	\$1,991	\$2,141	\$293	\$315	\$322	\$930
% Difference	1%	-8%	-1%	-12%	-9%	-14%	-11%