K10-1

Summary of Revenue Changes since the Fall *2009 Ontario Economic Outlook and Fiscal Review* ($ Millions) — Table 3

		Interim 2009–10
Taxation Revenue		257
Government of Canada		
Infrastructure	(777)	
Other	96	
		(681)
Income from Government Business Enterprises		
Ontario Power Generation Inc. and Hydro One Inc.	(186)	
Ontario Lottery and Gaming Corporation	(83)	
Liquor Control Board of Ontario	93	
All Other Government Business Enterprises	7	
		(169)
Other Non-Tax Revenue		
Power Sales	472	
Other Non-Tax Revenue	(118)	
		354
Total Revenue Changes		(239)

Note: The Fall *2009 Ontario Economic Outlook and Fiscal Review* forecast is restated to reflect accounting changes due to the implementation of line-by-line consolidation of controlled broader public-sector organizations. For a restated version of the *2009 Budget* and Fall *2009 Ontario Economic Outlook and Fiscal Review* revenue outlook, see Section D of this chapter.

Revenue Changes

Highlights of key 2009–10 revenue changes from the Fall *2009 Ontario Economic Outlook and Fiscal Review* forecast are as follows:

- ☑ **Taxation Revenues** are slightly higher (0.4 per cent) than projected due to favourable changes in the composition of economic growth.
- ☑ Transfers from the Government of Canada for **infrastructure** are $777 million lower due to revised timelines for capital projects and changes in federal funding. A significant portion of the expenditure planned for 2009–10 will occur in 2010–11 or later years.

- ☑ **Other Government of Canada transfers** are $96 million higher, largely due to Labour Market program funding re-profiled to 2009–10.
- ☑ The combined net income of **Hydro One Inc. and Ontario Power Generation Inc. (OPG)** is estimated to be $186 million lower, largely due to lower electricity market prices received by OPG for its unregulated and non-contracted electricity output.
- ☑ **Ontario Lottery and Gaming Corporation** net income is $83 million lower, mainly due to lower gaming revenue from slot machines and casinos.
- ☑ Net income from the **Liquor Control Board of Ontario** is $93 million higher due to stronger-than-expected sales, including better-than-expected sales of higher-margin products.
- ☑ **All Other Government Business Enterprises** are $7 million higher, largely due to an accounting change in reporting financial results for the Ontario Northland Transportation Commission (ONTC). The impact of the reporting change is fiscally neutral.
- ☑ Revenues recorded under **Power Sales** are $472 million higher due to the Lambton and Nanticoke support contract between the Ontario Electricity Financial Corporation and OPG. The increase in "Power Purchase" expense for the Lambton and Nanticoke contract is fully offset by the increase in revenues recovered from electricity ratepayers under Power Sales.
- ☑ **Other Non-Tax Revenue** is $118 million lower, largely due to lower Electricity Debt Retirement Charge revenue, lower Vehicle and Driver Registration Fees, lower Royalties, and lower Other Fees, Licences and Permits. These decreases are partially offset by higher Reimbursements and Sales and Rentals revenues.

The forecast for **Income from Government Business Enterprises** is based on information provided by each of these enterprises. Revenues from government enterprises are projected to increase by $0.5 billion, or at an annual average rate of 3.9 per cent, between 2009–10 and 2012–13.

The forecast for **Other Non-Tax Revenue** is based on information provided by government ministries and provincial agencies. Between 2009–10 and 2012–13, other non-tax revenues are projected to decline by $1.0 billion. Reimbursements from municipalities decline by $0.5 billion over this period due to the government's previously announced decision to upload the municipal share of the Ontario Disability Support Program costs. Most of the remaining decline is due to the previously announced replacement of certain alcohol charges, including Beer and Wine Fees, with taxes beginning on July 1, 2010. This change is revenue neutral to the government. Additional information on this change can be found in Ontario's Tax Plan for Jobs and Growth available at ontario.ca/taxchange.

CHANGES SINCE THE FALL *2009 ONTARIO ECONOMIC OUTLOOK AND FISCAL REVIEW*

Summary of Medium-Term Revenue Changes since Fall *2009 Ontario Economic Outlook and Fiscal Review* ($ Billions) — Table 17

	Interim 2009–10	Plan 2010–11	Outlook 2011–12
Stronger Economic Growth	0.2	0.6	0.7
Tax Measures	0.0	(0.2)	(0.3)
Federal Payments	(0.7)	0.7	1.0
Government Enterprises	(0.2)	(0.3)	(0.4)
Power Sales (Fiscally Neutral)	0.5	0.4	0.4
All Other	(0.1)	(0.1)	(0.2)
Total Revenue Changes	**(0.2)**	**1.0**	**1.2**

Note: Numbers may not add due to rounding.

The medium-term forecast for total revenues is slightly lower in 2009–10 but higher in 2010–11 and 2011–12 compared to the Fall *2009 Ontario Economic Outlook and Fiscal Review*.

Stronger Economic Growth projections (see Section C of this chapter) have increased the outlook for taxation revenues.

Tax Measures announced since the Fall *2009 Ontario Economic Outlook and Fiscal Review* have resulted in a modest decrease in projected revenues. These include measures announced in this *Budget*; additional point-of-sale exemptions for the provincial component of the HST for qualifying prepared food and beverages sold for $4.00 or less and print newspapers; and the impact of paralleling measures announced in the 2010 federal budget. For details on measures announced in this *Budget*, see Chapter III: *Tax and Pension Systems for Ontario's Future*.

The forecast for **Federal Payments** has changed due to revised timelines for capital projects funded through federal–provincial infrastructure stimulus programs, and reflects the outlook for existing federal–provincial funding arrangements, based on current demographic, economic and fiscal information.

Net income from **Government Business Enterprises** is lower over the forecast period. The outlook for the combined net incomes of Hydro One Inc. and Ontario Power Generation Inc. (OPG) has decreased in each year over the medium term primarily due to lower OPG earnings as a result of lower projected market electricity prices for its unregulated and non-contracted generation. Ontario Lottery and Gaming Corporation net income is lower over the forecast period, largely due to the projected impact of a strong Canadian dollar and an unfavourable economic outlook for U.S. border states. These decreases are partially offset by a higher net income outlook for the Liquor Control Board of Ontario.

Revenues recorded under **Power Sales** are higher over the forecast period due to the Lambton and Nanticoke support contract between the Ontario Electricity Financial Corporation (OEFC) and OPG. The increase in Power Purchase expense for the Lambton and Nanticoke contract is fully offset by the increase in revenues recovered from electricity ratepayers under Power Sales.

Other revenue changes largely reflect lower revenue from the Electricity Debt Retirement Charge, Vehicle and Driver Registration Fees, Crown Stumpage Royalties, and Other Fees, Licences and Permits, partially offset by higher Reimbursements and Sales and Rentals revenue.

Section H: Details of Ontario's Finances

This section provides information on the Province's historical performance, key fiscal indicators, and details on Ontario's fiscal plan and outlook.

Medium-Term Fiscal Plan and Outlook[1] **Table 26**
($ Billions)

	Interim	Plan	Outlook	
	2009–10	2010–11	2011–12	2012–13
Revenue	96.4	106.9	107.7	112.0
Expense				
Programs	108.8	115.9	112.9	114.3
Interest on Debt[2]	8.9	10.0	11.1	12.5
Total Expense	117.7	125.9	124.1	126.9
Reserve	–	0.7	1.0	1.0
Surplus/(Deficit)	(21.3)	(19.7)	(17.3)	(15.9)
Net Debt[3]	193.2	220.0	245.0	267.8
Accumulated Deficit[3]	134.6	154.3	171.6	187.5

1 Both revenue and expense have been restated to reflect a fiscally neutral accounting change for the revised presentation of education property taxes.
2 Interest on Debt expense is net of interest capitalized during construction of tangible capital assets of \$0.1 billion in 2009–10, \$0.2 billion in 2010–11, \$0.2 billion in 2011–12, and \$0.2 billion in 2012–13.
3 Net Debt is calculated as the difference between liabilities and financial assets. The annual change in Net Debt is equal to the surplus/deficit of the Province plus the change in non-financial assets; and the change in the fair value of the Ontario Nuclear Funds. Accumulated Deficit is calculated as the difference between liabilities and total assets. The annual change in the Accumulated Deficit is equal to the surplus/deficit plus the change in the fair value of the Ontario Nuclear Funds.
Note: Numbers may not add due to rounding.

Revenue (\$ Millions) — **Table 27**

	2007–08	Actual 2008–09	Interim 2009–10	Plan 2010–11
Taxation Revenue				
Personal Income Tax	25,472	25,738	24,049	25,942
Sales Tax[1]	16,745	17,021	17,410	19,137
Corporations Tax	12,990	6,748	5,381	7,390
Education Property Tax[2]	5,754	5,696	5,673	5,316
Employer Health Tax	4,605	4,617	4,551	4,701
Ontario Health Premium	2,713	2,776	2,726	2,871
Gasoline Tax	2,360	2,323	2,365	2,366
Land Transfer Tax	1,363	1,013	1,022	1,023
Tobacco Tax	1,127	1,044	1,080	966
Fuel Tax	733	698	646	652
Beer and Wine Tax (replacing Fees)[3]	–	–	–	414
Electricity Payments-In-Lieu of Taxes	546	830	525	481
Other Taxes	481	352	353	342
	74,889	68,856	65,781	71,601
Government of Canada				
Canada Health Transfer	8,487	8,942	9,737	10,217
Canada Social Transfer	3,778	4,079	4,204	4,327
Equalization	–	–	347	972
Infrastructure Programs	207	151	969	2,146
Labour Market Programs	664	797	1,261	1,207
Social Housing	525	520	492	487
Wait Times Reduction Fund	468	235	97	97
Other Federal Payments	2,468	1,867	1,458	4,230
	16,597	16,591	18,565	23,683
Government Business Enterprises				
Ontario Lottery and Gaming Corporation	1,857	1,921	1,883	1,859
Liquor Control Board of Ontario	1,374	1,410	1,419	1,465
Ontario Power Generation Inc./Hydro One Inc.	1,214	713	797	844
Other Government Enterprises	(8)	(2)	(1)	(4)
	4,437	4,042	4,098	4,164
Other Non-Tax Revenue				
Reimbursements	1,464	1,379	1,375	1,095
Vehicle and Driver Registration Fees	1,051	1,034	1,045	1,067
Electricity Debt Retirement Charge	982	970	912	916
Power Sales	929	953	1,436	1,385
Sales and Rentals	553	733	645	673
Other Fees and Licences	677	683	710	749
Beer and Wine Fees (replaced by Tax)[3]	466	459	458	115
Net Reduction of Power Purchase Contract Liability	398	373	348	339
Royalties	193	205	184	195
Miscellaneous Other Non-Tax Revenue	943	655	852	885
	7,656	7,444	7,965	7,419
Total Revenue	103,579	96,933	96,409	106,867

1 Sales Tax in 2010–11 includes Retail Sales Tax and Harmonized Sales Tax. As announced in the *2009 Budget*, effective July 1, 2010, the Retail Sales Tax will be replaced with a value-added tax and combined with the federal Goods and Services Tax to create a federally administered Harmonized Sales Tax.

2 Education Property Tax (EPT) revenue, rather than netting against Education expense, will now be reported as revenue. These presentation changes are fiscally neutral.

3 Beer and Wine Tax replaces reduced Beer and Wine Fees (–\$343 million) and the reduced sales tax on alcohol (–\$71 million). There is no net new revenue for the Province.

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Effective Pricing in Ontario's Hybrid Electricity Market

Presentation to SAC
October 28th, 2009

Summary

- Study Objective
- Ontario's Hybrid Electricity Market
- Recent Price Trends
- Identified Issues
  - Wholesale Market Price Fidelity
  - Incentive Design of Contracts or Regulations
  - GA Cost Recovery Impact on Future Electricity Costs and Economic Activity
- Feedback

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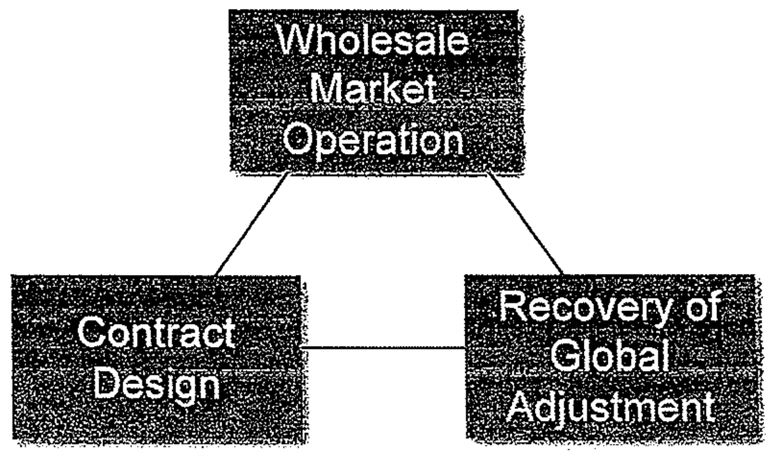
Study Objective

- IESO and OPA, have coordinated efforts to address electricity pricing issues in Ontario.
- This work reviews the effectiveness of the current hybrid structure, specifically the pricing and cost recovery mechanisms, in meeting the government's energy policy objectives.
- Identifies three fundamental aspects that are inter-related, thus requiring consideration as part of an integrated framework.
- Contemplates what, if any, incremental changes might be made to promote key policy objectives to the benefit of the Province.



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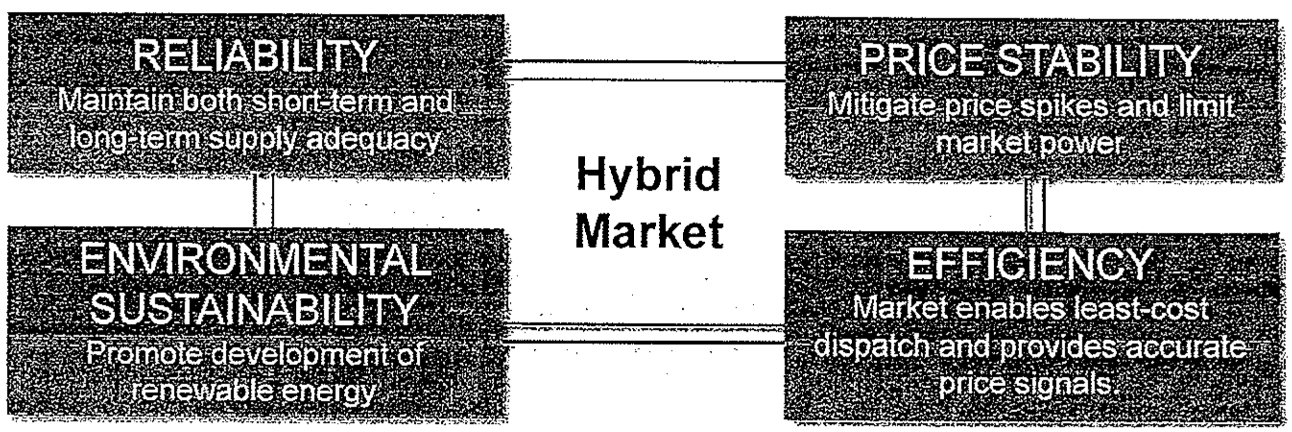
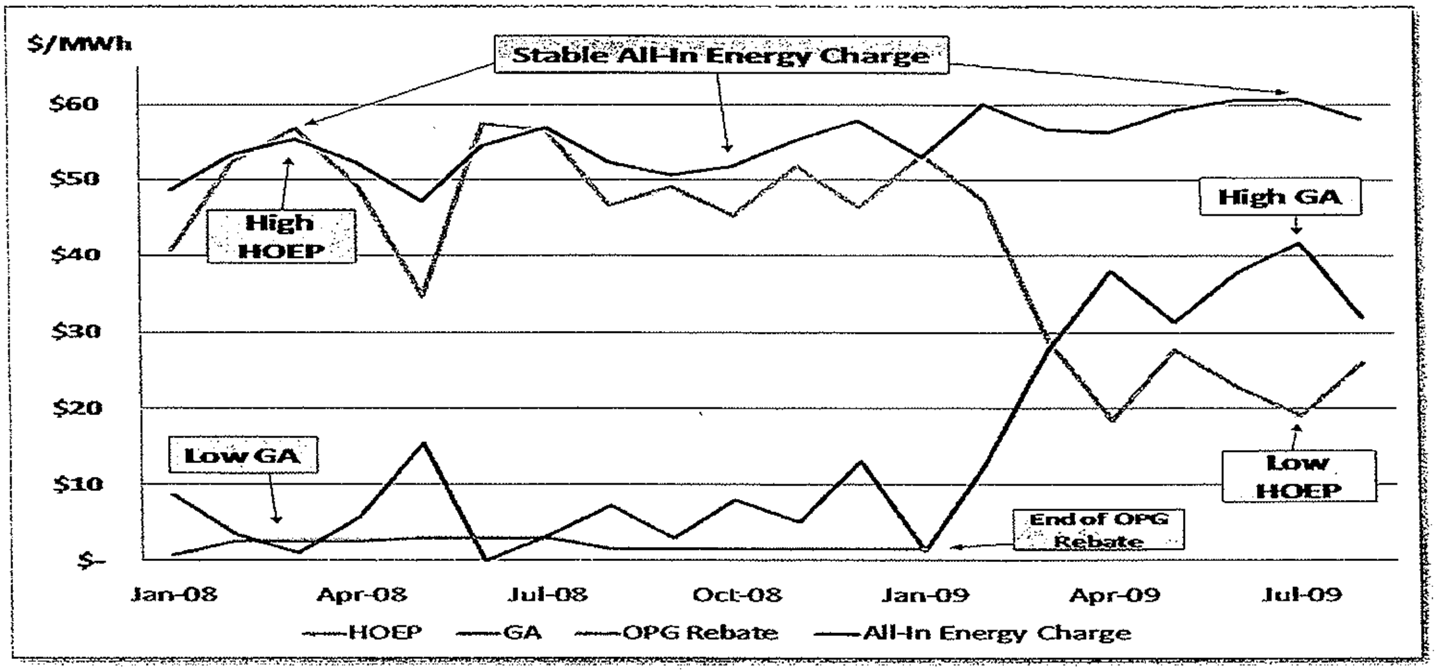
The Hybrid Market

- Ontario has a hybrid market structure, consisting of a competitive wholesale energy market and significant amounts of centrally procured or regulated supply.
  - The wholesale energy market is used to dispatch generation efficiently and to produce price signals that coordinate the actions of the many diverse participants.
  - Central procurement and regulated prices are used to ensure that key government energy policy objectives are achieved.



Recent Price Trends

- Recent electricity prices have led commentators to question the "sensibility" of electricity prices in Ontario.
  - The HOEP portion of the energy cost on the customer bill has decreased significantly, while the Global Adjustment (GA) charge has risen.



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Factors Affecting HOEP

Recent changes in average monthly HOEP can be explained by changes in fundamental macro factors.

- HOEP has declined 37% from the year before*.

Lower Demand	7% decrease
Increased Supply	+ 3,700 MW new capacity
Lower Fuel Costs	48% decline in Natural Gas prices
Regional Trade	41% fall in price in competing markets**
Changing Supply Mix	More low marginal cost supply (i.e.: wind)

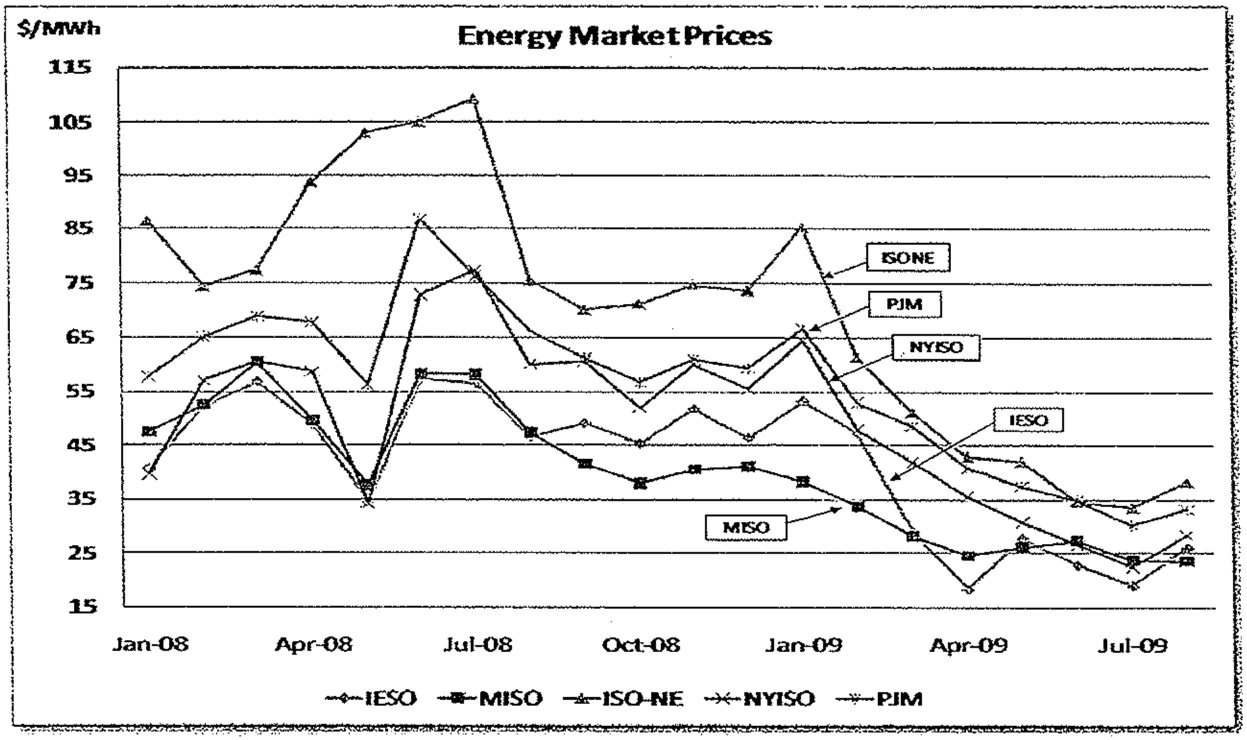
- All of these factors put downward pressure on the market price.

** Weighted HOEP for the period January to August 2009 compared to January to August 2008.*

*** Simple average of price in NYISO, MISO, PJM and ISO-NE*

Prices in Competing Markets

- Regional market prices have fallen considerably, driven by analogous supply and demand factors. Trade helps to stabilize prices and facilitates price convergence between markets.



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Negative Prices

- Negative prices can occur when demand is less than the supply of self-scheduling/intermittent generation and baseload generation.
- Off-peak demand has decreased, while off-peak supply has grown.
- Negative prices reflect an unwillingness or inability of generators to reduce their output, offering to pay to stay on-line.
  - *(i.e.: Nuclear or hydro units limited by operational or environmental constraints)*
- Exports play an important role in achieving an efficient outcome.
- Other jurisdictions have also experienced negative prices, though to a lesser degree.

The frequency of negative prices in Ontario has been aggravated by generators incented by their contract design to produce in all hours, regardless of market conditions.

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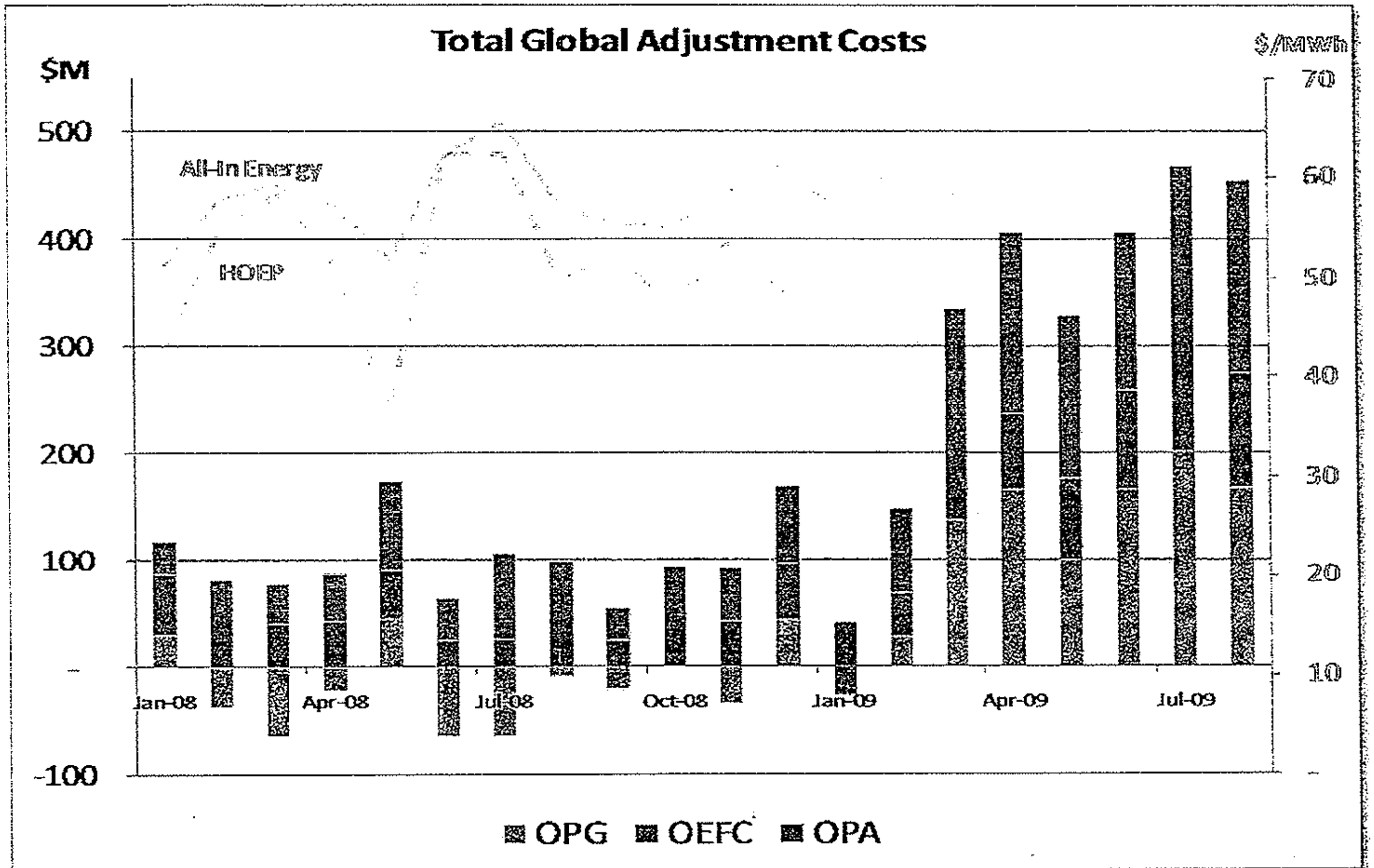
Factors Affecting GA

- GA is the difference between the total payments made to certain contracted or regulated facilities and any offsetting market revenues.
  - There is an inverse relationship between GA and HOEP.
  - This creates a moderating effect on the volatility of the all-in energy price paid by consumers, providing price stability.
- GA costs have increased almost five-fold compared to last year*.
- Low market prices mean reduced wholesale market revenues, thereby increasing the need for revenue recovery through GA.
- Other factors (outside of HOEP) have also driven GA costs upwards.

Rates paid to OPG regulated nuclear and hydro assets increased by 11 %.
OEFC entered into a Contingency Support Agreement for Lambton and Nanticoke facilities as part of OPG's carbon dioxide reduction strategy **.
3,700 MW of OPA contracted supply has come online in the last 12 months.

** Jan – Aug 2008: $545M, Jan – Aug 2009: $2,562M* *** Q1-2009: $39M , Q2-2009: $141M*

Monthly GA Costs by Category



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Issues to Address

- Efficiency of Wholesale Market Prices and Price Fidelity
- Incentive Design of Contracts or Regulations
- GA Cost Recovery

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Efficiency of Wholesale Market Prices

- **Issue:** Are wholesale market prices efficient?
- Efficient pricing - price is equal to the marginal (opportunity) cost of the last increment of generating capacity used to balance supply and demand at any point in time.
- Prices that do not equal marginal cost at each point in time induce inefficient production and consumption decisions.

There are specific changes within the IESO administered wholesale market that would provide for a more efficient scheduling of resources. These changes will resolve current distortions in price formation and provide for more efficient pricing.

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Incentive Design of Contracts or Regulations

- **Issue:** Do supply contracts provide the incentives for suppliers to operate in the wholesale market when efficient to do so?

Well-designed contracts maintain the financial incentives for generators to offer their supply into the wholesale market at prices that reflect marginal costs. This helps to ensure efficient dispatch and efficient pricing.

- Clean Energy Supply contracts, using deemed dispatch, motivates units to offer at their marginal cost.
- NUG contracts pay a fixed price for output. While innovative at contract inception (pre-market), these contracts create distortions under our hybrid market structure. Contribute to SBG and inefficient pricing.

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GA Cost Recovery (1)

- **Issue:** Does the current approach to GA cost recovery encourage demand response that will reduce the need for costly new capacity?

- A large share of GA costs represent the fixed cost of capacity that was built to meet demand in a few peak hours.
- However, these fixed costs are currently recovered equally in all hours based on consumption.

Spreading these costs evenly across all hours is likely to induce too little consumption in the relatively low demand hours, and too much consumption in the hours when demand is at its peak.

- This means there may not be sufficient incentive to reduce our system peak demand and avoid the need to build new capacity.

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GA Cost Recovery (2)

- **Issue:** Is the current approach to GA cost recovery harmful to the province's industrial competitiveness?
- GA costs are fixed and largely sunk cost that must be recovered from consumers. These costs are sunk, as they have been contractually incurred and generally cannot be avoided.

The manner in which sunk costs are recovered is important. Too high of a cost burden may cause some of the more mobile consumers to stop consuming, leaving the same total costs to be recovered from a smaller pool of customers.

- Many of the more mobile consumers are businesses that create jobs. The exit of these consumers can lead to a reduction in economic activity and the loss of jobs in the province.

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Alternative Approaches

- The **Coincident Peak** allocation methodology - GA costs are allocated to consumers based upon their demand during the system peak hour(s) of demand in a given period (monthly, annually, etc.)
  - Consistent with methodology used by OEB for allocating transmission system costs.
- OEB 's **Time-of-use allocation** for RPP customers
  - GA payments made to different sources of generation allocated in different hours (off-peak, mid-peak and peak) according to when assets are most like to operate. Objective is to restore the 1:2:3 ratio for TOU prices.

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Feedback

- Have we properly characterized the issues?
- Are there other issues to be addressed?