

Global Adjustment and OPG Rebate

December 6, 2006

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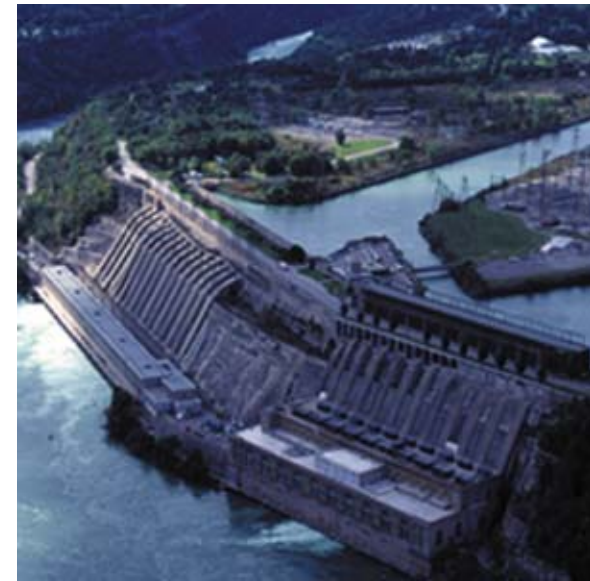
- Global Adjustment (GA)
(NOT a rebate – can be a credit or debit)
- OPG Rebate
(also known as ONPA Rebate, MPMA Rebate Replacement, BPPR Replacement)
- The GA and OPG Rebate do not affect normal market or system operations
- Calculated monthly and quarterly (respectively)

Global Adjustment (GA)

- An allocation mechanism for refunding/recovering the
 - adjustment for OPG's prescribed generation
 - Non-Utility Generation (NUG) adjustment
 - Request for Proposal (RFP) payments (renewable, new clean generation and demand side projects)
 - Contracts entered into pursuant to a direction by the minister
 - Standard Offer Program adjustment
- Known as:
 - The Global Adjustment by wholesale market participants
 - The Provincial Benefit for non-regulated consumers who are billed by local distribution companies (LDCs)

Global Adjustment = NUG adj + Regulated Generation adj + RFP Payments

- Prescribed generators are Pickering, Darlington, Sir Adam Beck, R H Saunders and DeCew
 - Sometimes referred to as regulated baseload generation
- Contribution to the Global Adjustment is the difference between regulated energy payments and market payments for energy (regulated rate vs. market prices)



- Regulated rate is paid for all nuclear generation and on a fixed amount of baseload hydroelectric generation
 - Nuclear generation rate is \$49.50/MWh
 - Baseload hydraulic generation rate is \$33.00/MWh for the first 1900 MW each hour (above 1900 MW receives market clearing price (MCP))
- For April 1, 2005 until March 31, 2008 rates are set by the government
 - Beyond March 2008, rates will be set by the OEB

- NUG adjustment is the difference between NUG contract costs paid by OEFC and market payments for NUG energy received by OEFC
- OEFC receives market payments from
 - the IESO for NUG output delivered to the IESO Controlled Grid
 - distributors for embedded NUGs

- The number of contracted generating stations in service has grown considerably and is expected to grow further
- Payments associated with RFP contracts (renewable, new clean generation and demand side projects)
- Other contracts as directed by the government (early movers, Bruce Power Agreement, Standard Offer contracts, Toronto Portlands, ...)
- Difference between contract payments and any related market payments



- The Global Adjustment is calculated monthly and allocated to all Ontario loads
- Results to date:

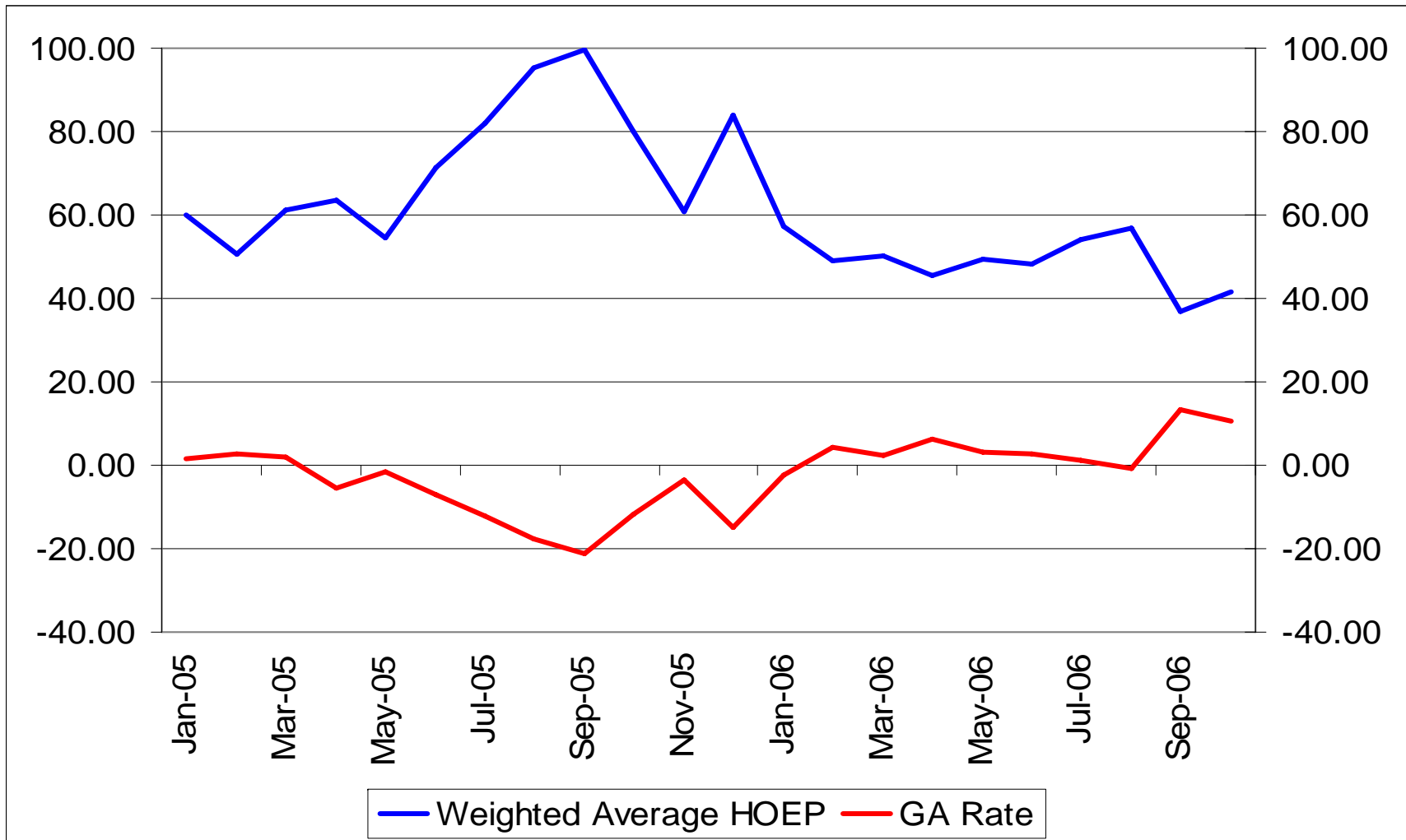
2005	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
HOEP	59.83	50.45	61.01	63.59	54.70	71.21	82.04	95.23	99.72	80.15	60.67	83.86
GA	1.44	2.78	2.01	-5.40	-1.55	-7.06	-12.31	-17.82	-21.37	-11.66	-3.57	-14.82

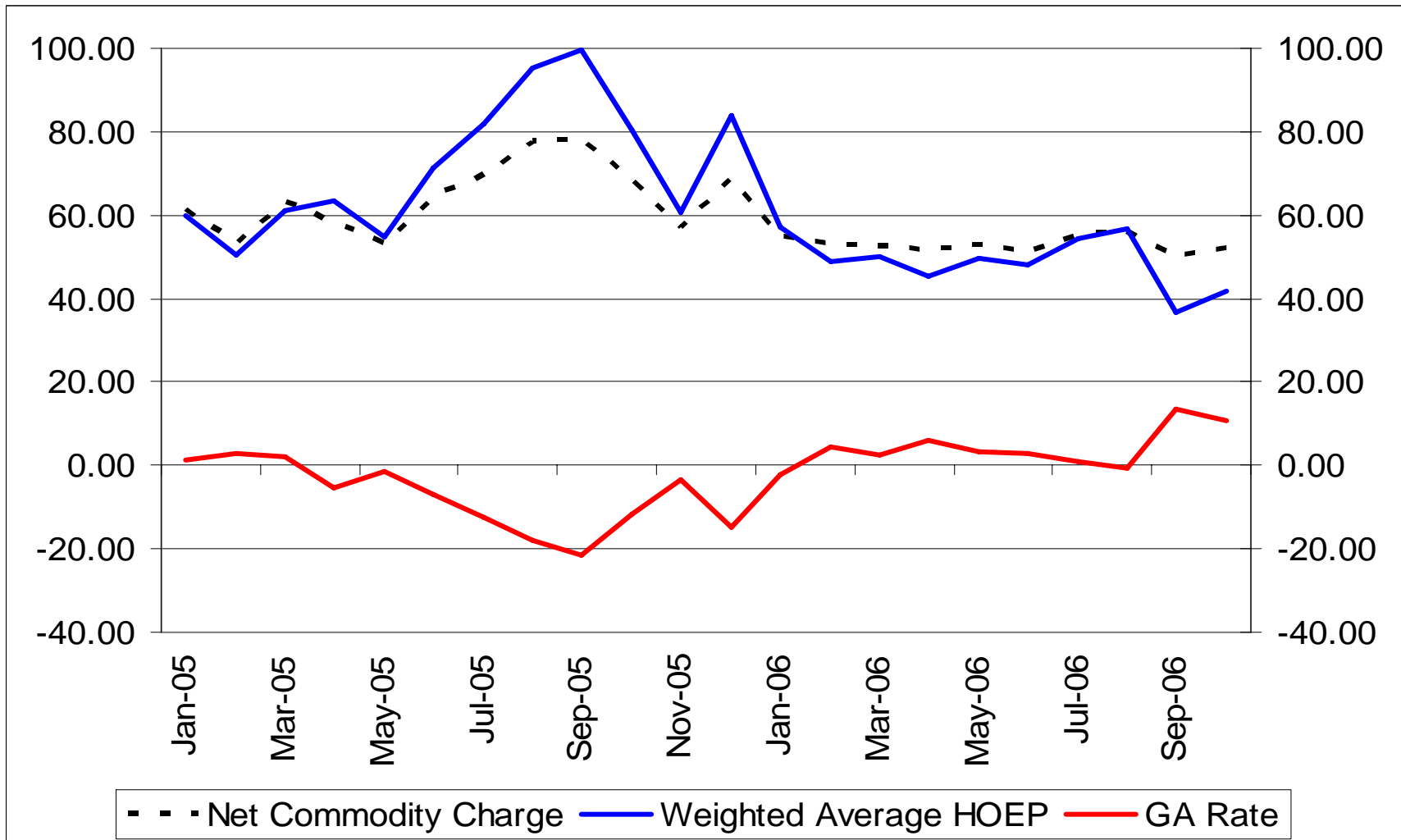
2006	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
HOEP	57.10	49.01	50.09	45.43	49.59	48.20	54.29	56.67	36.79	41.66
GA	-2.40	4.26	2.36	6.15	3.10	2.85	1.02	-0.66	13.46	10.55

- negative amount denotes a credit

- all quantities are in \$/MWh

- First 3 months of 2005 only included NUGs
- OPG prescribed assets added to the GA in April 2005
- First quarter 2006, the early mover contracts were included
- Throughout 2006 new generation and DSM contracts came online





OPG Rebate

Background

- Regulations pursuant to Bill 100 defined a set of OPG prescribed assets that are covered by the GA
- At the same time, the government amended the licenses of OPG and the IESO to:
 - End Business Protection Plan Rebate (BPPR) on March 31, 2005
 - End Market Power Mitigation Agreement (MPMA) on March 31, 2005
 - Create a new rebate for OPG's non-prescribed assets effective April 1, 2005
- OPG non-prescribed assets rebate
 - Intended originally for 13 months (ending April 30, 2006)
 - Today called the OPG Rebate

- OPG Non Prescribed Asset (ONPA) production excludes:
 - Lennox output
 - Energy sold in forward contracts (in effect as of Jan 1, 2005)
 - Energy sold in TRO (Transitional Rate Option)
- Referred to as ONPA (output)

- 85 per cent of the ONPA (output) receives a fixed energy price of \$47/MWh until April 30, 2006
- The rebate is the difference between market prices and the fixed price paid to 85 per cent of ONPA output

$$\text{OPG Rebate} = \text{Sum over all hours } [(\text{HOEP} - \$47) \times (\text{ONPA (output)} \times 0.85)]$$

- Transitional measure for the 13 month period beginning April 1, 2005 and ending April 30, 2006
- The OPG Rebate was designed as a one time payment to market participants based on their AQEW



Changes to OPG Rebate

February 9, 2006

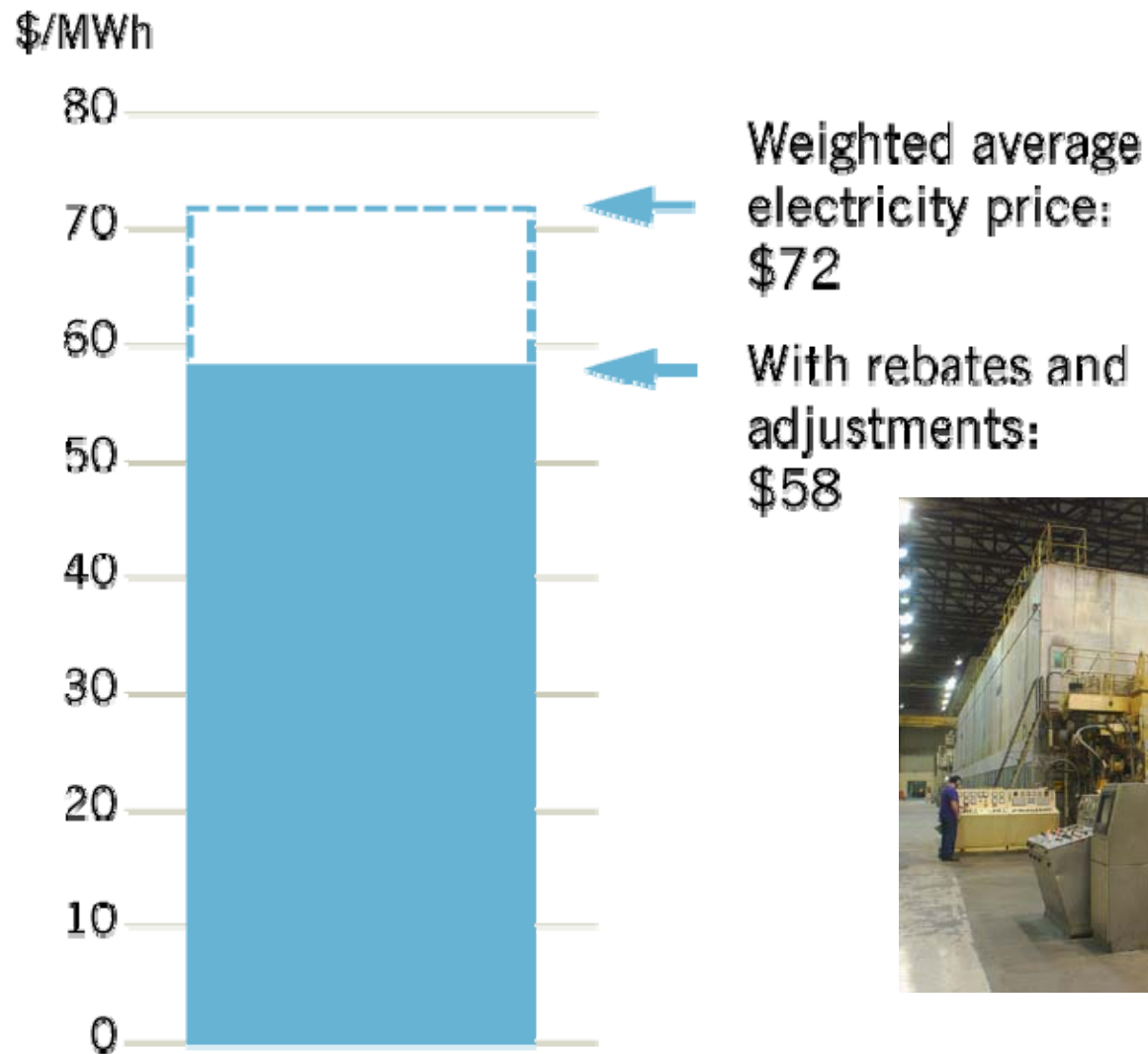
- The 13 month rebate period was split into two periods
 - A single rebate for the nine month period April 1, 2005 – December 31, 2005
 - A single rebate for the four month period January 1, 2005 - April 30, 2006
- The “transitional” rebate has been extended for 3 years beyond the original end date of April 30 2006
 - The fixed price will drop to \$46/MWh in May/06,
 - increase to \$47/MWh in May/07, and
 - increase to \$48/MWh in May/08.
- Beginning in May/06 the OPG Rebate is paid quarterly to market participants

- Starting January 1, 2006, the formula for the OPG rebate was changed to separate the treatment for energy sold through a Pilot Auction (PA) administered by the OPA
 - The change in the formula allows OPG to keep \$5/MWh more for the PA amounts
- Pilot Auction administered by the OPA
 - Energy forward auction conducted in the first half of 2006
 - Energy supplied by Bruce Power and OPG
 - Up to 400 MW from OPG

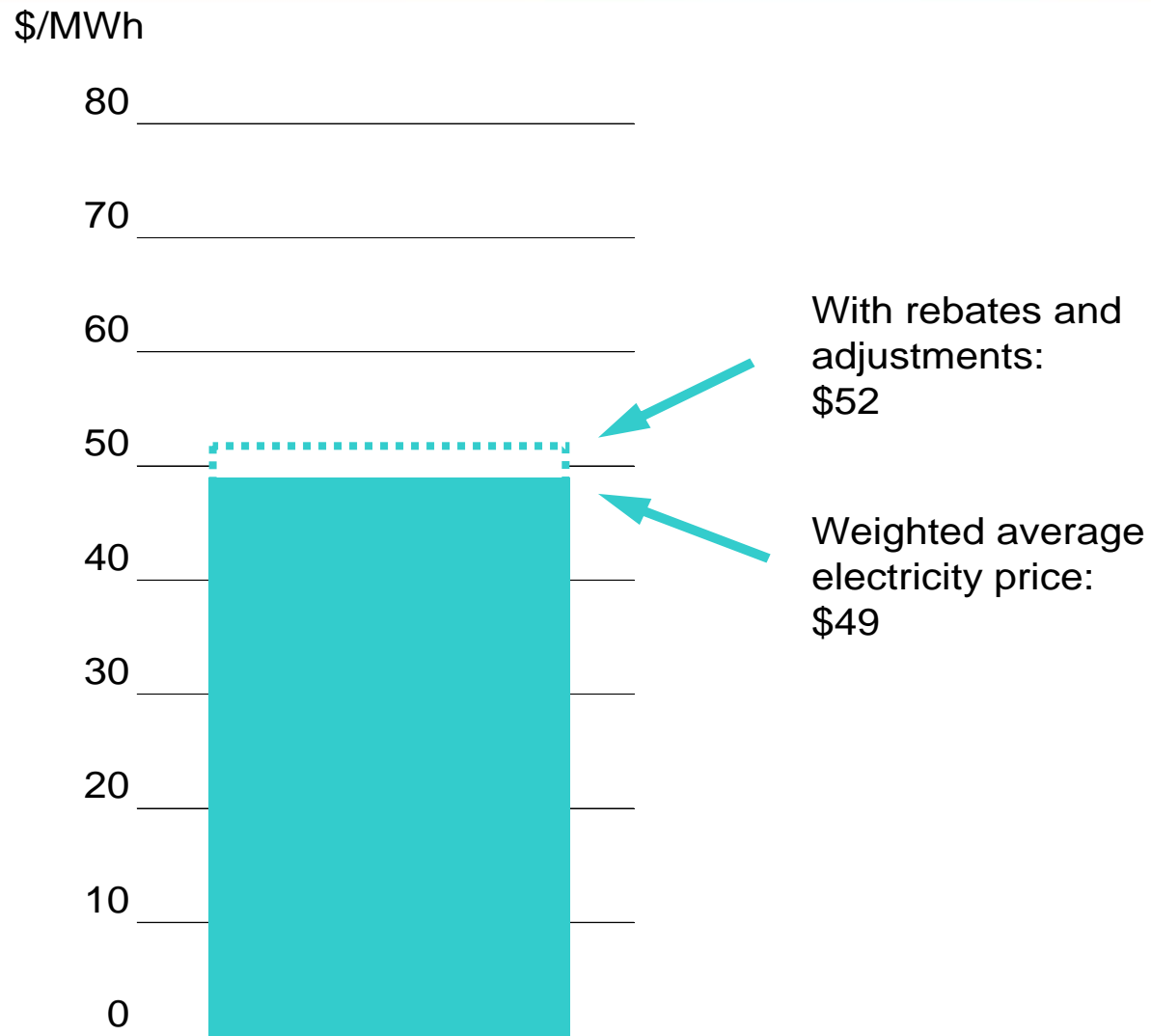
- Starting April 1, 2005, the OPG rebate has been:

Period	Rebate Amount (M\$)	Rebate Rate (\$/MWh)
April 1, 2005 - December 31, 2005	739.1	6.52
January 1, 2006 - April 30, 2006	62.9	1.27
May 1, 2006 - July 31, 2006	57.9	1.54
August 1 2006 - October 31, 2006 (estimate)	22.0	0.61

- The rebates for the 3 periods from April 1, 2005 up to July 31, 2006 were credited to Ontario load in 2006 on their March, July and October invoices respectively



Pricing for January to October 2006



More information is available on our website:

- Quick Take 19, "Electricity Pricing: OPG Rebate/Global Adjustment"
http://www.ieso.ca/imoweb/pubs/training/QT19_pricing.pdf
- OPG rebate http://www.ieso.ca/imoweb/b100/b100_ONPA.asp
- Global Adjustment http://www.ieso.ca/imoweb/b100/b100_ga.asp

QUESTIONS ?