



Ontario Energy Board

Commission de l'énergie de l'Ontario

Consultations on Development of 3rd Generation IRM

Board Staff Presentation

March 25-26, 2008

Objectives of this Stakeholder Meeting

- to allow participants and their experts to express their views;
- to provide participants with an opportunity to explore the rationale and merits of alternatives or options put forward by other participants and their experts; and
- to help staff, the Board and participants to gain, through the presentations and an interactive exchange, an understanding of different perspectives and of significant issues and areas of concern.



Guide for Presentations and Discussions

- Vision for a sustainable and long-term incentive regulation
- Addressing the issues of capital investment, lost revenue due to changes in consumption and distributor diversity through elements of the IR plan such as:
 - Inflation factor;
 - Empirical approaches to derive X-factor, including stretch factor;
 - Z-factors, off-ramps and earnings sharing mechanisms to fairly mitigate, in whole or in part, company and ratepayer risk;
 - trade-offs, if any, when designing the plan
- Implementation considerations



Draft Agenda for Today and Tomorrow

Tuesday, March 25, 2008

01:40 PM	Overview of Staff Discussion Paper (Board Staff)
02:00 PM	Calibrating Rate Indexing Mechanisms (Dr. Lawrence Kaufmann, Pacific Economics Group)
03:00 PM	(Break)
03:10 PM	... continuation (Dr. Kaufmann)

Wednesday, March 26, 2008

09:00 AM	(Time available for Q&A from Tuesday (tentative))
09:30 AM	Hydro One Networks, Inc. and the Coalition of Large Distributors (Julia Frayer, London Economics)
11:30 AM	(Lunch)
12:00 PM	Electricity Distributors' Association (Prof. Adonis Yatchew, The University of Toronto)
02:00 PM	(Break)
02:10 PM	Power Workers' Union (Dr. Frank Cronin)
04:10 PM	(Time available for additional discussion)
05:10 PM	Closing Remarks (Board Staff)



Overview of Reports – Elements of A Core Plan

Work to develop a core plan does not mean that it will be designed to the lowest common denominator. Proactively providing for an appropriate level of flexibility to complement the core plan is needed to develop a sustainable plan.

Core Mechanism	Form	Price Cap Index
	Coverage	Comprehensive (i.e., Capital and OM&A)
	Inflation	Industry Specific Index
	X-factor	Peer Group X-factors comprised of: (1) Industry TFP growth potential; and (2) a stretch factor
	K-Factor	Continued Migration to Common Capital Structure
	Earnings Sharing	Consideration of recent gas settlements
	Off-ramps	Same as 2 nd Generation IRM & consideration of recent gas settlements
Options	Term	Choice of 3 to 5 years
	Incremental Capital Module	On application
	Z-factor	On application
	CDM	On application



Inflation Factor Discussion

- **Macroeconomic**
 - Measures price trends in the economy
 - Easy to understand
 - Can be adjusted to better reflect industry input price trend (differentials part of the X-factor)
- **Industry-Specific Input Price Index (IPI)**
 - Tracks industry input price trends
 - Relatively easy to calculate
 - Eliminates need for differentials in the X-factor
 - More volatile
- Paper illustrates 1st Generation PBR IPI methodology



Illustrative Industry-Specific Input Price Index

$$\text{IPI} = (w_k * P_k) + (w_l * P_l) + (w_m * P_m) \quad [1]$$

0.6318

0.2577

0.1105

Weights for use in calculation derived from Ontario distributor data (2002-2006)



Illustrative Industry-Specific Input Price Index

$$\text{IPI} = (w_k * P_k) + (w_l * P_l) + (w_m * P_m) \quad [1]$$

$$\text{PK}_t = (r_t + d) * \text{CAP}_t \quad [2]$$

Government of Canada marketable bonds - average yield over 10 years (Bank of Canada in <http://www.bankofcanada.ca/en/rates/bond-look.html>, Statistics Canada CANSIM reference number v122487)

5.56%

The Electric Utility Construction Price Index (EUCPI) – Distribution Systems (Statistics Canada CANSIM reference number v735224 - 327-001)

Base year is 1992

Average of last 12 months
(January to December)



Illustrative Industry-Specific Input Price Index

$$IPI = (w_k * P_k) + (w_l * P_l) + (w_m * P_m) \quad [1]$$

Effective wage increase in base rates (or Wage Adjustment) for Utilities in Canada (Source: Strategic Policy, Analysis, and Workplace Information Directorate, Labour Program, HRSDC

http://www.hrsdc.gc.ca/en/lp/wid/dj/01wage_adj.shtml)

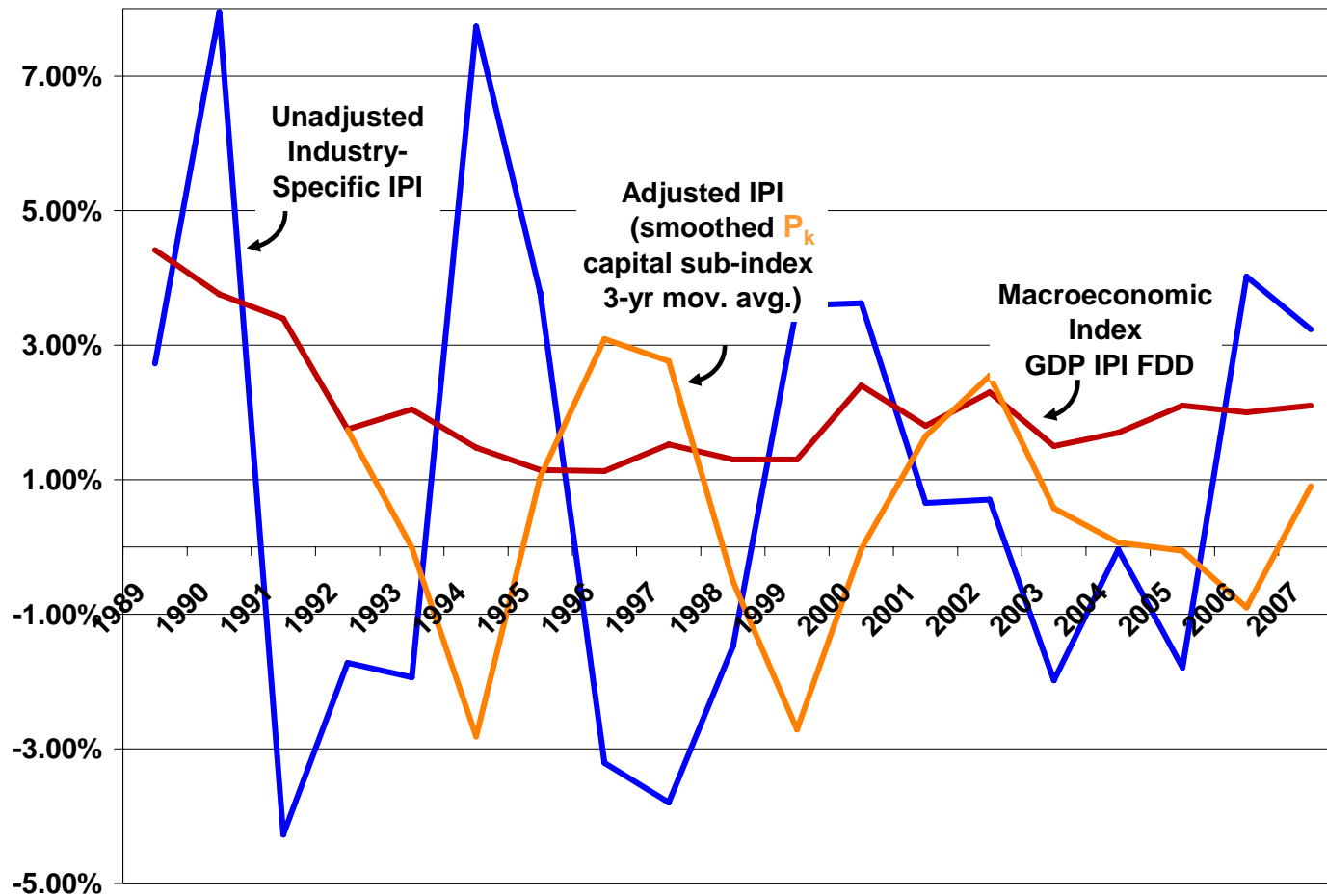
Last available year. Annual index (base 1992=100) calculated from annual changes

The All Finished Goods Industrial Producer Price Index (Statistics Canada CANSIM reference number v1574476 - 329-0039)

Annual index (base 1992=100) calculated from annual changes in the index as of December of each year (December to December variation)



Comparative Growth Rates (based on Table 3)



Topics for Discussion

- On the industry-specific IPI
 - Alternative methods;
 - Choice of sub-indexes and implementation requirements (annualizing, series alternatives, dealing with revisions and rebasings); and
 - Should volatility of industry-specific IPI be limited and, if so, how.
- If a macroeconomic inflation factor, like the GDP-IPI FDD, should an IPD be derived and if so, how?



Illustrative “I-X” Combinations (2007)

			X-factor Options					2nd Gen
			X-factors based on 0.88% Estimated Industry TFP Trend					
			Group I (0.00%)	Group II (0.15%)	Group III (0.30%)	Group IV (0.45%)	Group V (0.60%)	
			0.88%	1.03%	1.18%	1.33%	1.48%	1.00%
Inflation Factor Options	Industry-Specific Input Price Index							
	Unadjusted IPI	3.23%	2.35%	2.20%	2.05%	1.90%	1.75%	2.23%
	Cap Sub							
	Smoothed IPI	0.90%	0.02%	(0.13%)	(0.28%)	(0.43%)	(0.58%)	(0.10%)
	Macroeconomic Index							
(i) GDP FDD CAN	2.10%	1.22%	1.07%	0.92%	0.77%	0.62%	1.10%	
(ii) less: an estimated IPD		<i>How might an IPD be derived?</i>						





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Thank you!