



Ontario Energy Board

Commission de l'énergie de l'Ontario

**Electricity Initiatives:
An OEB Road Map for Electricity Distributors**

Presented by:

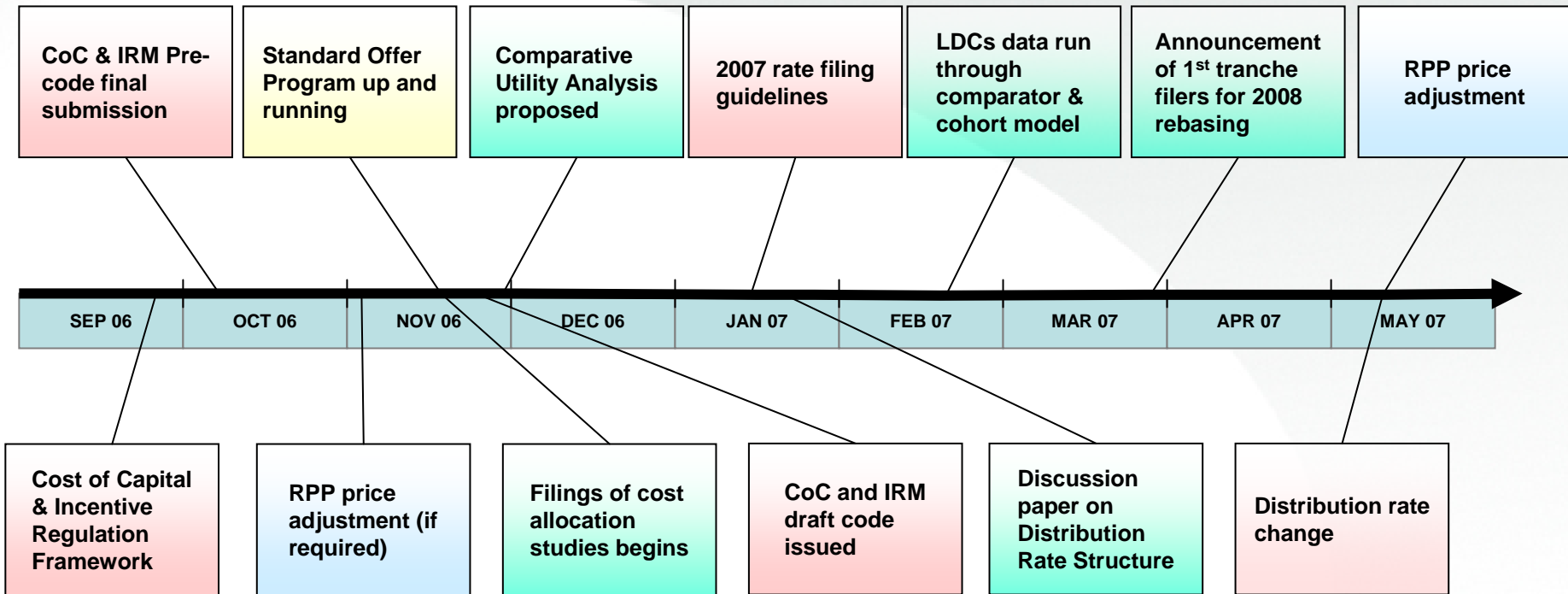
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September 2006

EDA District Meetings

Electricity Initiatives Timeline



- Preparing for May 2007 rates
- Regulated Price Plan
- Standard Offer Program
- Preparing for 2008





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Cost of Capital and Incentive Regulation

2007 Rate Setting

- Licence amendment proposed to allow for code to mechanically change rates
- Substantive issues dealt with in CoC and IRM processes
- No individual hearings for 2007
- DX/TX filing guidelines communication vehicle
- Transmission/distribution filing guidelines in three modules -
 - 2007 code implementation filings
 - 2007 comparator – filing information
 - 2008 re-basing information (COS)



Guiding Objectives to Staff's Review

- Protect customers in relation to prices
- Predictability and stability
- Promote economic efficiency by providing the appropriate pricing signals and a system of incentives for distributors to maintain an appropriate level of a reliability and quality of service
- Ability to raise the financing necessary to invest in distribution infrastructure to enhance service quality and reliability
- Minimize the time and cost of administering the framework
- Establishing a common capital structure and incentive framework for all distributors



Staff Proposal for Setting Cost of Capital

	% of Rate Base	Return
Debt		
Long Term Debt	Actual percent of rate base (52%)	New third party – market rates New affiliate - riskless rate plus bond market spread Existing affiliate and third party as approved
Short-term Debt	Match to working capital allowance (8%)	Board approved short-term rate for variance and deferral accounts (1 year)
Tot Debt	60% rate base	Weighted average of LT and ST debt rates
Equity		
Tot Equity	40% rate base (including max 4% preferred shares)	For common, riskless rate plus ERP updated annually For preferred, as approved
Total	100%	Weighted average of debt and equity rates



Staff Proposal for Setting Cost of Capital

Reflect risk in regulated ROE by determining riskless rate and adding a premium (the ERP) that reflects the riskiness of the regulated business:

- Riskless rate based on zero-coupon bond yields
- CAPM to set ERP:
 - Two elements of CAPM: (1) the average market return; and (2) the “beta”
 - Three main factors to consider:
 - sample firms to estimate average market return
 - sample firms to estimate the beta
 - the relevant time frames for each
- Updates to the cost of capital:
 - inputs updated annually to minimize uncertainty about changing formulae or parameters



Scenarios in Setting Equity Risk Premium

To assist deliberations on these factors, staff developed four scenarios for the ERP:

	SHORT-TERM		LONG-TERM	
	Electric	Rate Regulated	Electric	Rate Regulated
Average market return period	60 months	60 months	120 months	120 months
β period	52 weeks	52 weeks	60 months	60 months
Riskless period	1 year	1 year	15 years	15 years
Resultant ROE (including 50 bps for floatation and x-action costs)	6.61%	6.65%	7.50%	8.37%



Companies Included in Arriving at “Beta”

All Rate-Regulated

ATCO

Canadian Utilities

Coast Mountain Power Corp

Enbridge Inc*

Maxim Power Corp

Pacific Northern Gas*

TCPL

Fortis

TransAlta Power

Canadian Hydro Developers

Manitoba Telecom Services Inc*

TELUS Corp*

** not included in Electricity regulated group of companies*



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Setting 2007 Rates: Staff's Proposed Formula

$$\% \Delta P = K + \% \Delta \text{GDPIPI} - X + Z$$

Where:

- ΔP is the annual percentage change in price
- K is the adjustment for cost of capital in 2007 (ROE) and in 2008 (structure)
- ΔGDPIPI is the percentage change in the Canada GDP-IPI for final domestic demand
- X is the 1% adjustment with implicit input price differential, productivity differential, and stretch factor
- Z may allow for adjustment due to unusual events and additional Board-approved costs outside of the formula

The index would be applied uniformly across all customer classes and to both the monthly fixed and volumetric charges, including taxes.



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Staff's Proposal for the Incentive Regulation Methodology

Mechanism Element	2 nd Generation
Adjustment for cost of capital (K-factor)	% based on change in ROE (2007) and cost of capital (2008)
Base	2006 Rates
Form	Price Cap
Term	<i>Up to 3 years (per Rate Plan)</i>
Price Escalator	Canada GDP-IPI (Final Domestic Demand)
Input price and productivity differential, and stretch factor (X-factor)	1%
Contingencies (off ramps, Z-factors)	Z-factors limited
Earnings Sharing	None
Service Quality Requirements	To be enforceable as a condition of licence
Smart Meter Funding	Adder to the fixed rate
Conservation & Demand Management	On application





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**Standard Offer Program Up and
Running**

Standard Offer Program Up and Running

- **Milestones & Responsibilities**
- **Proposed Code Changes**



Standard Offer Program Up and Running

August 2005	Minister's Letter
November 2005	OEB & OPA Discussion Papers
December 2005	Draft Joint Report to Ministry
March 2006	Joint Report to Ministry
March 2006	Province Announces SOP
Spring & Summer 2006	Program Development
September 2006	SOP Rules
October 2006	Proposed Code Amendments
November 2006	SOP Roll Out



Standard Offer Program Up and Running

OPA

- Eligibility
- Pricing
- Contract Terms and Conditions
- Program Implementation

OEB

- Connection to Distribution System
- Amendments to Codes, web site, licensing process



Standard Offer Program Up and Running

- **Retail Settlement Code**

- Allow generation connected behind the meter to be billed and settled as if connected directly to the distribution system

- **Distribution System Code**

- Standardized connection agreements for small and mid-sized generation
- Distributors to make available additional distribution system information



Standard Offer Program Up and Running

Distribution System Code, cont'd

- First-come-first-served queuing for available capacity
- Applicants bumped to the end of the queue if Connection Agreement not signed within specified interval
- Type of meter driven by data requirements for settlement and technical reasons





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RPP Price Adjustment
(if required)

RPP Price Adjustment (if required)

- Determine if RPP prices should change and announce by October 12th
- New RPP prices go into effect November 1st (if change required)
- *Residential* tier threshold changes November 1st (600 kWh to 1000 kWh)
- Semi-annual RPP price reviews (and potential change) to continue May 1/07 (targeting April 12/07 announcement)



RPP Price Adjustment (if required)

Factors reviewed in the forecast

- Amount of electricity produced by generators paid regulated, contracted or capped prices
- Market prices for electricity paid to other generators
- Natural gas prices
- Weather
- Net variance account balance (held by OPA)

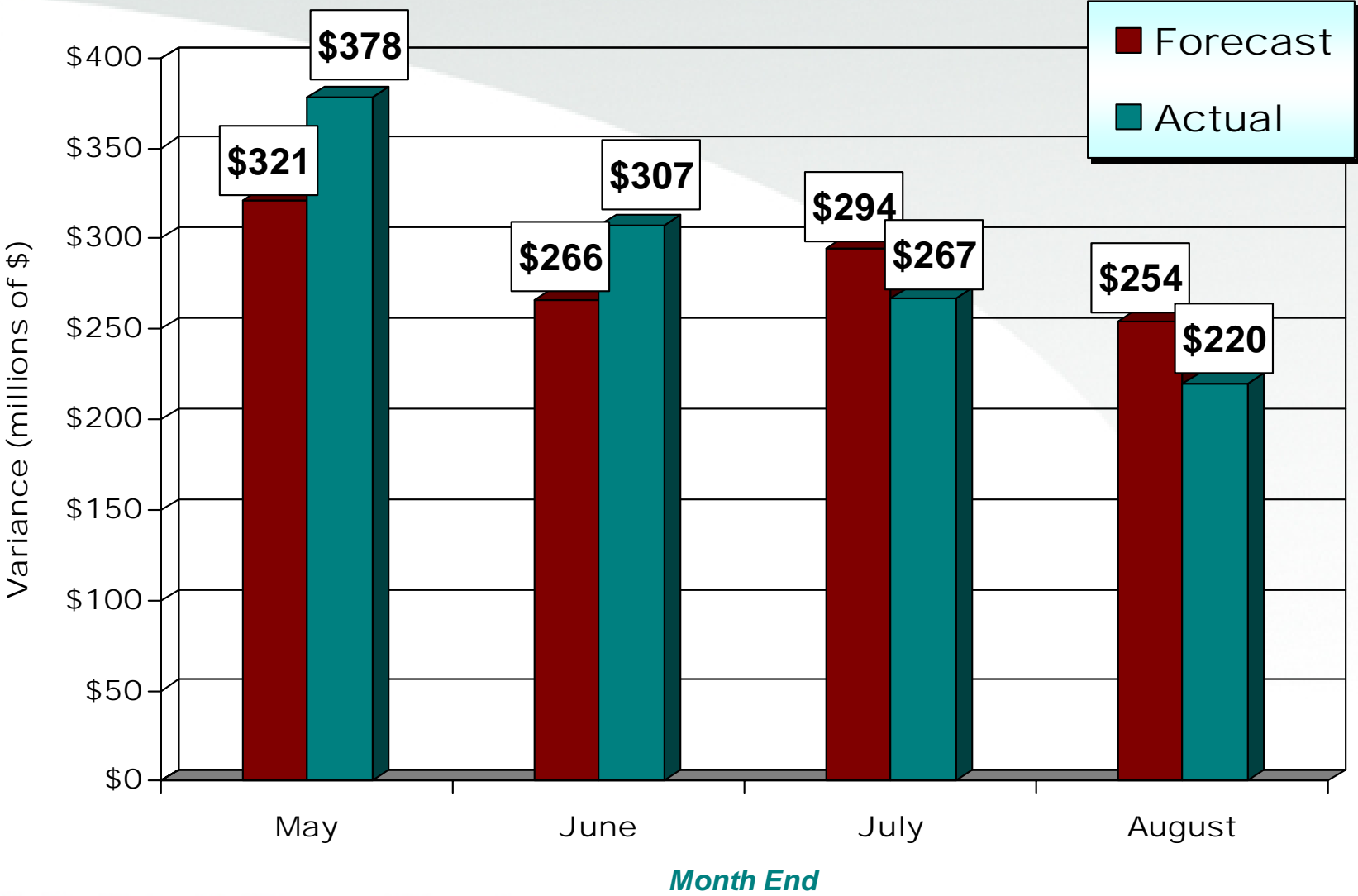


RPP Price Adjustment (if required)

- Net variance balance as of May 2006 peaked at \$417.2 million
- For August, net variance declined for 4th consecutive month (by \$47.3 million)
- Since May, net variance reduced by about \$200 million to \$219.5 million
- RPP Settlement Amount for average consumer (1,000 kWh/month) down to \$35.32 -- from \$66.16 in May



RPP Price Adjustment (if required)





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**Filing of Cost Allocation Studies
Begins**

Filing of Cost Allocation Studies Begins

- March 2005, the Board indicated the Review of Cost Allocation Principles and Methodology would proceed
- Technical consultations: September 2005 to June 2006
- Five technical workshops held over that time period to update all stakeholders on project progress
- Board staff proposal to all stakeholders for comment in May 2006
- Final Board report to be issued by mid-September



Filing of Cost Allocation Studies Begins

- Board Filing Model under development beginning in Spring 2006
- Based on 2006 EDR Model
- Testing underway by numerous distributors
- Model planned for release by end September 2006
- Training will be provided by Board staff
- Distributor informational filings due in 4 groups starting November 30, 2006
- All filings complete by March 31, 2007
- Board staff will analyse filings and report to Board
- We will share these findings
- 2008 earliest results could be considered in rates



Filing of Cost Allocation Studies Begins

Cost Allocation Filings:

First Tranche, November 30, 2006

Atikokan Hydro Inc.

Chatham-Kent Energy Inc.

Collus Power Corp.

E.L.K. Energy Inc.

Enersource Hydro Mississauga Inc.

Grand Valley Energy Inc.

Hearst Power Distribution Co. Ltd.

Hydro 2000 Inc.

Hydro One Brampton Networks

Innisfil Hydro Distribution Systems Ltd.

Kingston Electricity Distribution Ltd.

Lakefront Utilities Inc.

Lakeland Power Distribution Ltd.

Milton Hydro Distribution Inc.

Newmarket Hydro Ltd.

Niagara-on-the-Lake Hydro Inc.

North Bay Hydro Distribution Ltd.

Orangeville Hydro Limited

Orillia Power Distribution Corporation

Oshawa PUC Networks Inc.

Tay Hydro Electric Distribution Co. Inc.

Tillsonburg Hydro Inc.

Toronto Hydro-Electric System Limited

Wasaga Distribution Inc.

West Perth Power Inc.



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Filing of Cost Allocation Studies Begins

Cost Allocation Filings:

Second Tranche, January 15, 2007

Barrie Hydro Distribution Inc.

Bluewater Power Distribution Corp.

Brantford Power Inc.

Burlington Hydro Inc.

Canadian Niagara Power Inc.

Chapleau Public Utilities Corporation

ENWIN Powerlines Ltd.

Greater Sudbury Utilities Inc.

Halton Hills Hydro Inc.

Horizon Utilities Corp.

Hydro One Networks Inc.

Hydro Ottawa Limited

Kenora HE Corp. Ltd.

Northern Ontario Wires Inc.

Power Stream Inc.

PUC Distribution Inc.

St. Thomas Energy Inc.

Thunder Bay Hydro Electricity Distrib. Inc.

West Coast Huron Energy

Whitby Hydro Electric Corp.

Woodstock Hydro Services Inc.



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Filing of Cost Allocation Studies Begins

Cost Allocation Filings:

Third Tranche, February 28, 2007

Brant County Power Inc.

Cambridge & N. Dumfries Hydro Inc.

Erie Thames Powerlines Corporation

Essex Power Lines Corporation

Festival Hydro Inc.

Grimsby Power Inc.

Guelph Hydro Electric Systems Inc.

Haldimand County Hydro Inc.

Kitchener-Wilmot Hydro Inc.

Midland Power Utility Corporation

Niagara Falls Hydro Inc.

Norfolk Power Distribution Inc.

Oakville HE Distribution Inc.

Parry Sound Power Corporation

Peninsula West Utilities Limited

Peterborough Distribution Inc.

Veridian Connections Inc.

Waterloo North Hydro Inc.

Welland Hydro Electric System Corp.



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Filing of Cost Allocation Studies Begins

Cost Allocation Filings:

Fourth Tranche, March 31, 2007

Centre Wellington Hydro Inc.

Clinton Power Corp.

Cooperative Hydro Embrun Inc.

Dutton Hydro Limited

Espanola Regional Hydro Distribution Corp.

Fort Albany Power Corporation

Fort Francis Power Corporation

Great Lakes Power Limited

Hydro Hawkesbury Inc.

Hydro One Remote Communities Inc.

Newbury Power Inc.

Ottawa River Power Corp.

Renfrew Hydro Inc.

Rideau St. Lawrence Distribution Inc.

Sioux Lookout Hydro Inc.

Terrace Bay Superior Wires Inc.

Wellington North Power Inc.

Westario Power Inc.



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**Comparative Utility Analysis Model
Proposed**

Comparative Utility Analysis Model Proposed

- 2006 EDR started comparator & cohort
- Learning from first study
 - Identifiable drivers allow grouping of utilities, eg., number of customers, km of line
 - LDCs not as “unique” as some suggest
 - Cost driver groupings can be used to identify cost outliers
- Questions still unanswered:
 - Are there cost of service differences between utilities?
 - Why are there distribution rate differences?
 - How should such differences inform rebasing and 3rd generation incentive rates?



Comparative Utility Analysis Model Proposed

- Post a staff strawman comparative utility analysis model
- Seek comment on deficiencies/benefits
- A third party consultant to review original comparator & cohort (Camfield) work, staff model, comments of parties
- Staff will work with consultant to develop revised model
- Board will review and decide on model in January 2007
- Comparative utility analysis study of LDC will be published in February 2007





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2007 Rate Filing Guidelines

2007 Rate Filing Guidelines

Bringing all the pieces together

- Technical Conference on CoC & IRM – September 18-22
- Post-conference submissions – October 6
- Draft Code and Notice for Comments – November 2006
- Final Code (if no substantive changes/issues) – December 2006
- Amended distribution licences – November-December
- Chapter 3 of DX/TX guidelines implementing CoC/IRM issued late January
- 2007 Distribution Rate filings – February 2007 (for May 1, 2007 implementation)





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Discussion Paper on Distribution
Rate Structure

Discussion on Distribution Rate Structure

- **Phase 1: Discussion paper to be issued in January 2007**
 - History of distribution rates in Ontario
 - Jurisdictional comparison
 - Discussion of issues
 - Allow for stakeholder thought and comments
- **Phase 2: Develop alternative models**
 - Consultation and testing
- **Phase 3: Implementation**
 - Implementation informed by industry changes
 - 2008 rates: some changes possible
 - 2011 rebasing a logical milestone



Discussion on Distribution Rate Structure

1. “Practical”: simple, accepted and feasible
2. Easily interpreted
3. Effective in providing revenue requirement
4. Provides revenue stability from year to year
5. Stability of the rates, minimum of changes
6. Fairness for cost allocation
7. Avoids “undue discrimination”
8. Efficiency for use of system: discourage waste, encourage justified use



Why Are We Reviewing the Rate Structure?

- Recover revenue requirement
 - Patches are affecting stability and simplicity
 - E.g. LRAM, standby rates, administrative charges
- Cost causality
 - Load profile proxies because of metering
 - Proliferation of rate categories
- Efficient use of resource
 - DG decision-making
 - Rational expansion of system
 - Load management



Potential Issues to be Reviewed

- What costs and prices should rates be based on?
 - Long range marginal vs. accounting costs
 - Postage stamp vs. locational
 - Individual LDC rates vs. regional pooling
- How much “policy” should go into setting rates?
 - Economic and social drivers
 - Mechanisms like RRRP
 - Promoting economic development



Potential Issues to be Reviewed

- What are the +/- of various structures?
 - Ongoing rates vs. one-time fees
 - What's the best ratio for fixed and variable rates?
 - How should customers be grouped for rate classes?
 - Homogeneous end-use groups
 - What about issues around the boundaries of rate classes?
 - What are the best charge determinants?
 - kWh, kW, name plate ratings, time-of-use, etc.
- How should distributed generation be charged?
 - Connection charges vs. use-of-system charges
 - Transmission credits
 - Avoided loss credits
- Other issues?



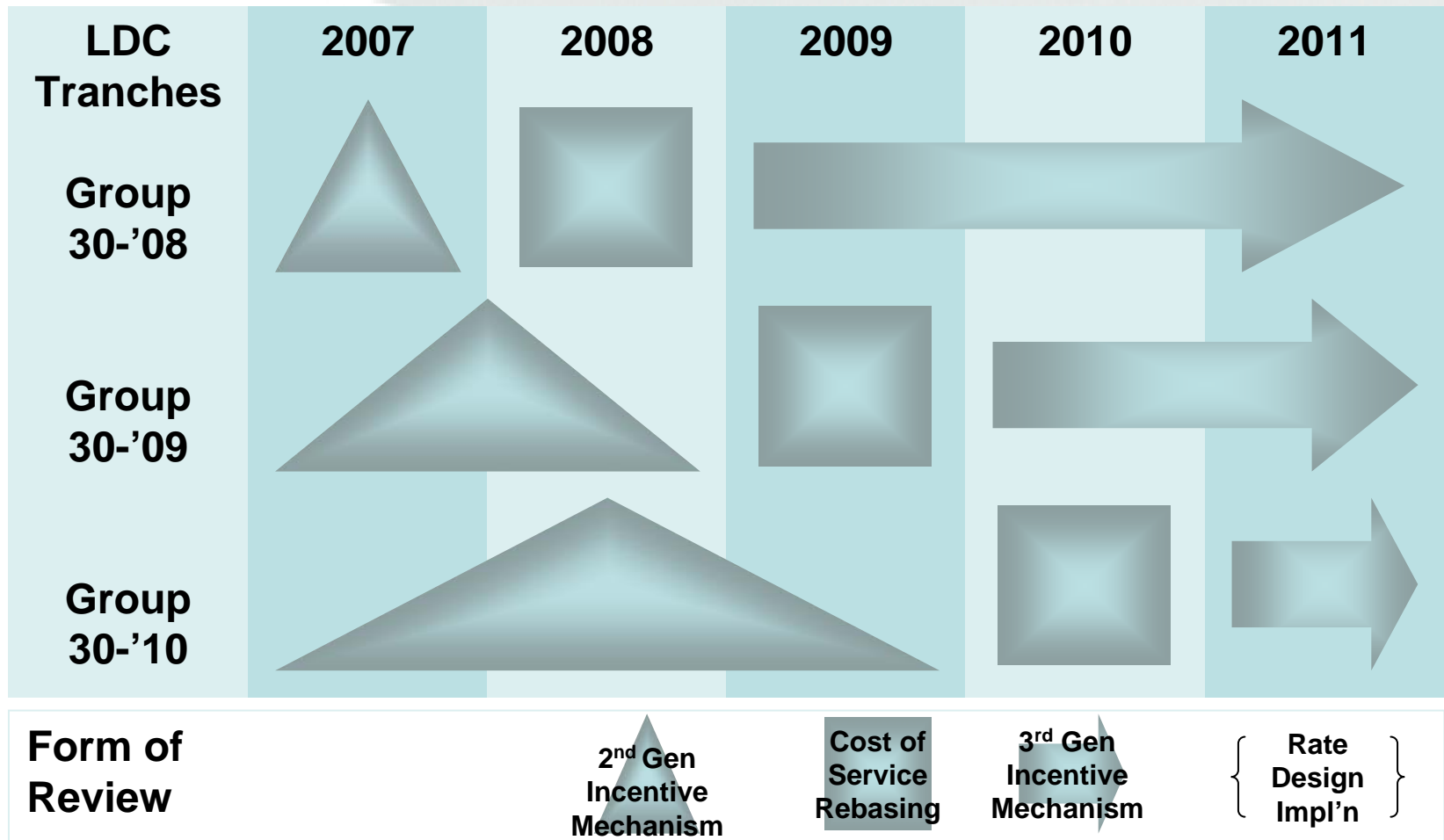


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Announcement of 1st Tranche Filers
for 2008 Rebasing

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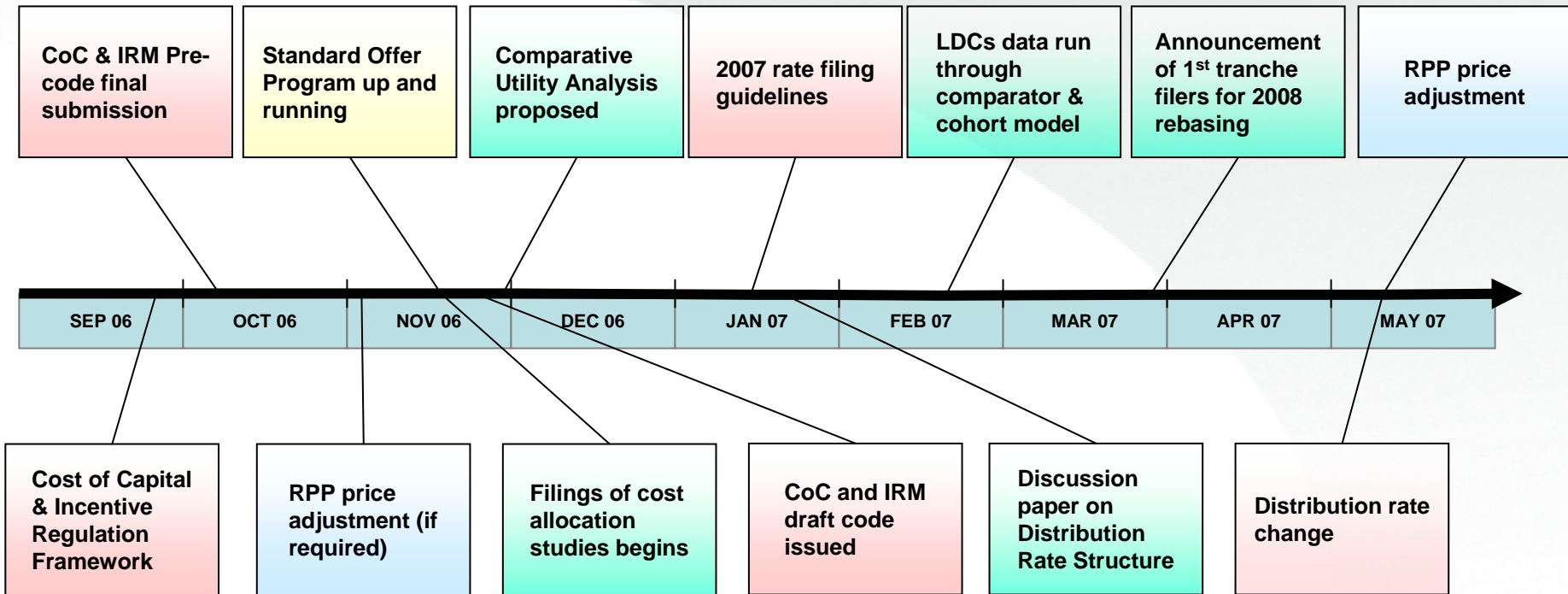


Announcement of 1st Tranche Filers for 2008 Rebasing

- Rate setting plan calls for a phase-in approach
- 3 tranches of filers for rebasing – 2008, 2009, 2010
- Project includes developing selection criteria for mapping LDCs to years in which their costs will be rebased. Criteria will include:
 - prior direction in a Board decision
 - urgency to sort out cost allocation issues
 - urgency related to financial condition
 - need to implement new rate design
 - degree of cost urgency, i.e., apparent high cost relative to peers
- Includes obtaining stakeholder input regarding proposed criteria (November)
- Will result in the Board selecting LDCs for 2008 rebasing
- Expected filing date of September 2007



Electricity Initiatives Timeline



- Preparing for May 2007 rates
- Regulated Price Plan
- Standard Offer Program
- Preparing for 2008



Project Contacts

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Distribution Rate Structure – Laurie Reid laurie.reid@oeb.gov.on.ca

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