
Distribution Rates & Cost Mitigation

January 2017

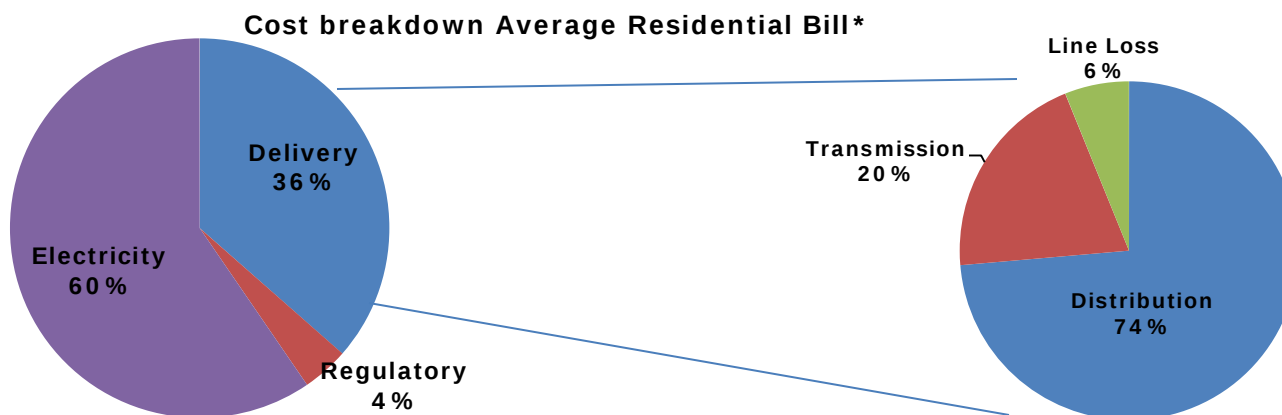
Presentation Overview

- The delivery charge covers the cost of delivering electricity from generating stations across the province to end users.
 - o It includes charges to allow Local Distribution Companies (LDCs) to recover the distribution costs associated with delivering electricity across low-voltage networks;
 - o costs to cover transporting electricity over the high-voltage transmission network; and
 - o costs to pay for any electricity that was lost during the delivery process.
- This presentation provides an overview of the delivery charge, including distribution & transmission rates; how distribution rates are set, who sets them and opportunities to contain those costs.
- The deck is divided into three main sections:
 1. Overview of Delivery Line Costs
 2. Existing Rate Mitigation Measures
 3. Further Rate Mitigation Options

Overview of Delivery Line Costs

Typical Consumer Bill – Delivery Line

- The “**Delivery**” line on a typical consumer bill accounts for roughly 25-35% of the total bill before taxes.
- Delivery covers the costs of getting electricity from generating stations across the province to homes and businesses and encompasses the sum** of three cost components of the electricity sector into one line item charge:
 - o **Transmission:** The costs of moving electricity across high voltage lines from generating stations to the distribution system.
 - This cost is recovered through a variable charge that is approved by the OEB.
 - o **Distribution:** The costs of moving electricity from the transmission system to homes and businesses.
 - This cost is currently recovered through both a variable charge and fixed charge, approved by the OEB. Distribution rates are moving to a fully-fixed charge over next 5 years.
 - o **Line Loss:** The costs to recover electricity that is lost as heat when it is delivered over a power line.
 - Each LDC is assigned by the OEB a specific line-loss adjustment factor to reflect their losses particular to their assets. This factor is multiplied against the monthly electricity cost to determine the monthly cost.



** The combination of these charges into “Delivery” and their appearance on the bill are prescribed by O. Reg 275/04

Delivery Line: Distribution Costs

- **Distribution costs** are the costs needed for LDCs to deliver electricity to local consumers over the lower-voltage networks operating at below 50 kV. Costs cover activities such as
 - o Designing, building and maintaining overhead and underground distribution lines, poles, stations and local transformers,
 - o Operating local systems (including reading meters, providing customer service, and emergency response)
 - o Delivering electricity from the transmission system to homes and businesses, and
 - o Regulated profit
- The cost to deliver electricity is not uniform and varies from LDC to LDC depending on a number of different cost drivers including:
 - o Differences in business conditions and service territory among LDCs e.g. costs to service an urban service territory vs a rural service territory, ratio of overhead vs. underground wires, expanding customer base vs. stagnating or declining customers, relative age of assets; i.e. new system vs. old system;
 - o Short-term rate impacts (both up and down) due to temporary additional charges known as “rate riders”; and
 - o Management decisions with respect to investment and expenditure.
- In order to recover the costs to deliver electricity to its customer base LDCs charge customers distribution rates for the services that they provide.
 - o These rates are regulated by the Ontario Energy Board.
 - o As a result of investment requirements and other planning/policy decisions, distribution rates have been rising in recent years (see appendix).

Delivery Line: Transmission & Line Loss Costs

- **Transmission Costs** represent the costs associated with delivering electricity to LDCs through the high voltage transmission networks operating at 50 kV and above. Costs cover activities such as:
 - o Designing, building and maintaining the high voltage transmission lines and towers, transformer stations, transmission corridors, and vegetation management,
 - o Providing services and emergency response to maintain transmission system reliability,
 - o Delivering electricity at high voltages to LDCs from generation sources,
 - o Regulated profit.
 - o Transmission rates charged to recover transmission costs from LDC residential customers are not uniform across the province. They vary based on how individual LDCs use the transmission system.
 - o LDCs do not earn any profit or markup on transmission costs. These costs are simply passed through to customers distribution customers
- **Line Loss Costs** represent costs associated with distribution system losses. These losses occur during the distribution of energy through conductors and transformers. Losses can also occur through theft and metering errors, etc.
 - o Distribution systems that operate at lower voltages and lower customer density have higher distribution losses. Therefore, line losses vary throughout the province.

Role of the Ontario Energy Board

- LDCs are licensed and regulated by the Ontario Energy Board (OEB), a quasi-judicial body responsible for regulating the electricity and natural gas sectors in the public interest.
- The OEB currently sets the rates for 69 LDCs across the province.
 - LDCs recover their costs (revenue requirement) through the distribution rates approved by the OEB.
- Costs to provide distribution services are unique to each LDC, which is why the OEB, through its rate-setting processes, undertakes comprehensive reviews of each utility's specific costs in order to set just and reasonable rates for each LDC.
- In addition to approving the amount of allowable costs LDCs can pass on to customers through rates, the OEB must also approve how those costs are allocated to the different customers of an LDC (i.e. residential, commercial, industrial), as well as the specific rates to recover those approved costs.
- The OEB uses an adjudicative process to set rates – see the slide “Setting Distribution Rates” in the appendix for more details on the process.

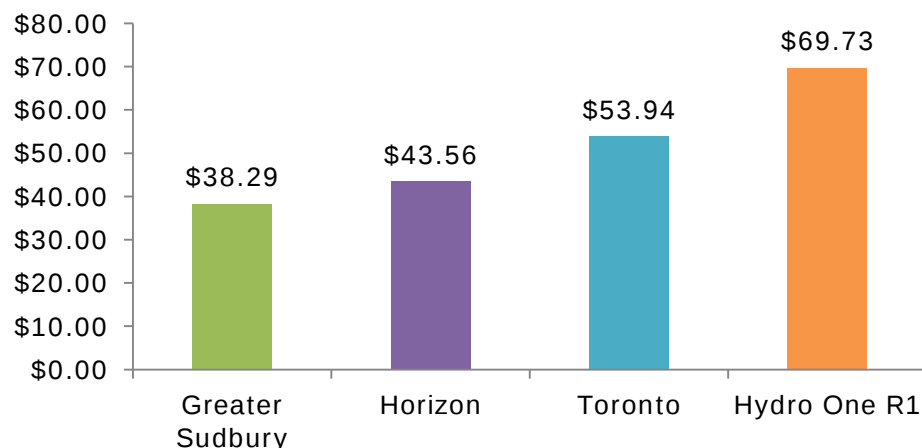
Variation of Delivery Costs Across and Within LDCs

Hydro One Medium Density Residential (R1) - Delivery
2016 Rates at 500, 750 & 1000 kWh per month



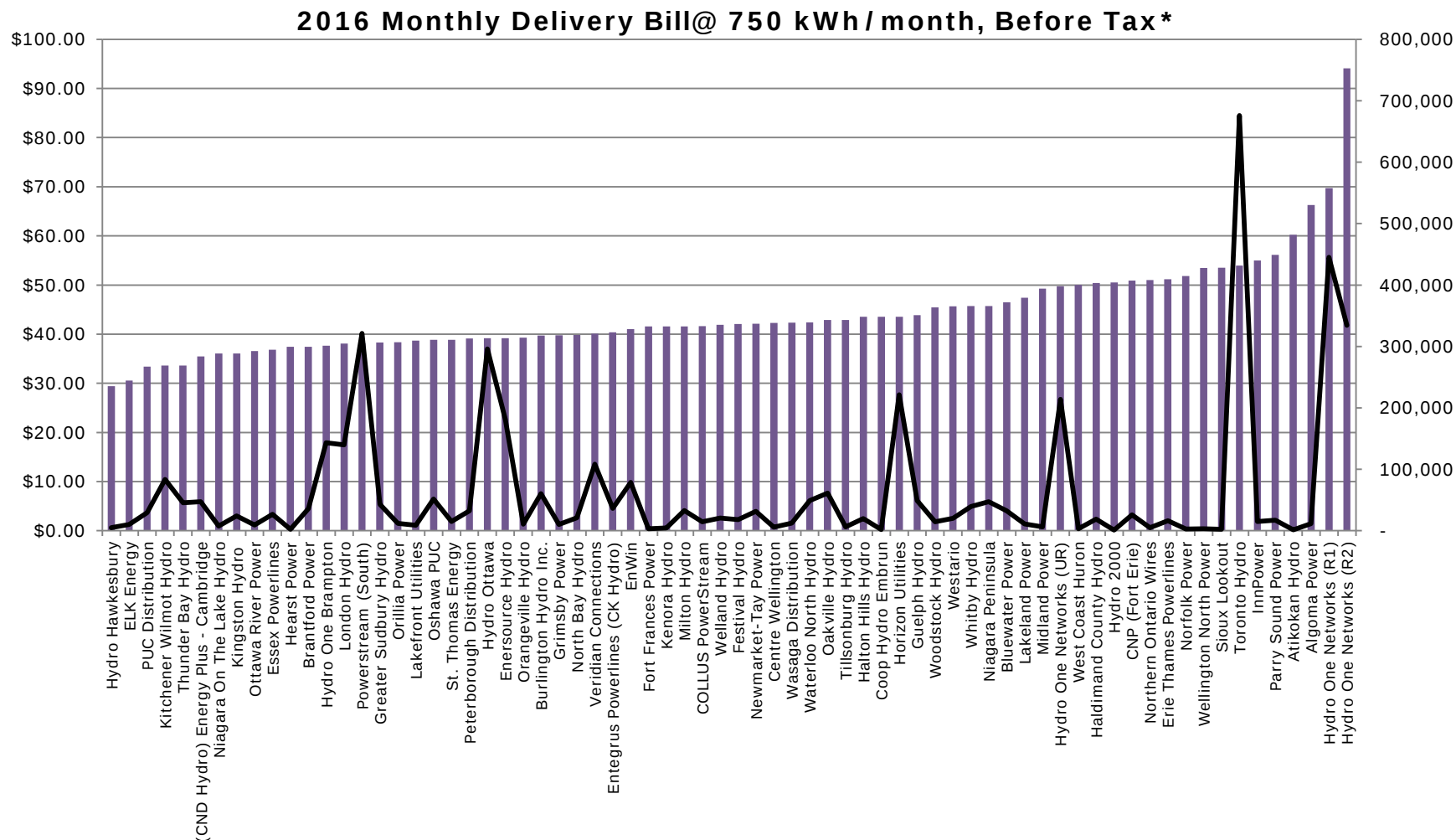
- Consumers within same LDC pay different monthly delivery charges:
 - The delivery charge includes costs that are both fixed and volumetric.
 - Delivery will vary for different customers depending on the total amount of kWhs consumed in a billing period.

Monthly Delivery
2016 Rates at 750 kWh per month



- Consumers with the same monthly consumption but served by different LDCs pay different delivery charges
 - The delivery charge can vary substantively for different LDCs, mostly due to the distribution cost component.
 - Approved revenue requirement for distribution rates, transmission rates and line loss factors are unique to each LDC.

Wide Variation in Delivery Rates Across the Province



* Hydro One customer numbers are for 2016 and divided by rate class. Reflects RRRP as set for 2016 (\$31.50)

LDC Distribution Rate Changes (2006 vs 2016)

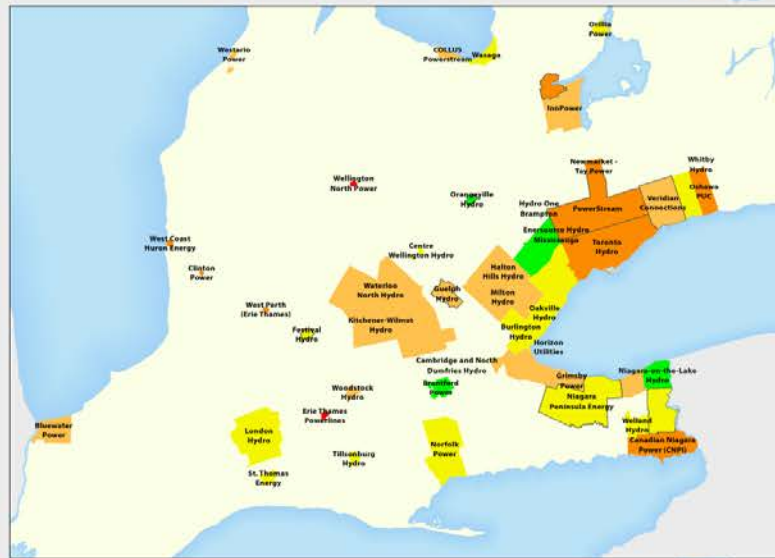
KEY FINDINGS

- In summary, distribution rates (including rate riders) have increased by about 24.5% across the Province, with significant variation between regions and LDCs (-17% to 148%).
- There is generally no correlation between LDC size or location and distribution rate increase in absolute or percentage terms.
- The current analysis shows no clear relationship between the percentage rate increase and the absolute rate level (that is, high rate increase LDCs may still have among the lowest rates, and low rate increases may have higher rates).
- No clear relationship between amalgamation and rates.
- The analysis does suggest that Hydro One has the highest rates, and some of their customers have seen higher than average rate increases.

NOTES

- Rate Calculation:** Monthly residential distribution bill rates, before taxes, are based on consumption of 750 kWh. Distribution charges account for approximately 23% of the average 2016 residential bill. All figures calculated by ENERGY staff without input from OEB.
- Colours:** Colour coding of the map only depicts the change in LDC rate amounts (i.e. LDCs in red don't necessarily have the highest total rates).
- Mergers:** Rates for customers in merged LDCs have experienced different levels of change. For merged entities, the largest LDC in 2006 was used. An accompanying map focuses on merged entities.
- Points in Time:** Current analysis compares 2016 and 2006 only. Rates could have had an uneven trajectory, especially considering regulatory decisions such as time limited charges/rebates with temporary impacts.

Only LDCs with distribution rates of 2006 and 2016 are shown. Only the largest distribution areas are shown and smaller satellite areas are not all shown.



Legend

LDC Rate Comparison 2006 vs 2016

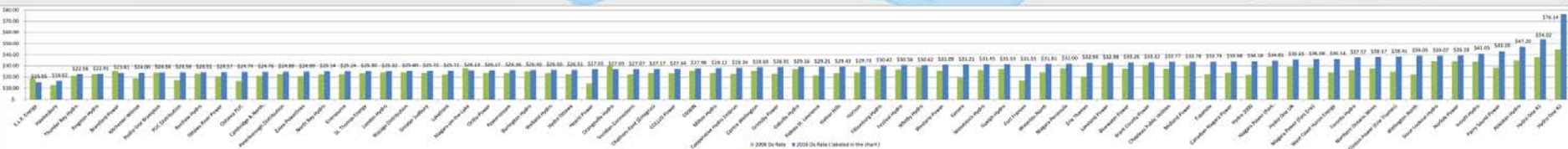
% Total Rate Change (# of LDCs)

- 17.3% to 0% (5)
- 0.1% to 15% (25)
- 15.1% to 30% (21)
- 30.1% to 60% (16)
- 60.1% to 89.3% (4)
- Merged LDCs

Below LDCs had either acquired or merged: (# of merged LDCs)

- Powerstream Inc. (5)
- Chatham-Kent Hydro Inc. (13)
- Veridian Connections Inc. (4)
- Guelp Hydro Electric Systems Inc. (2)
- Festival Hydro Inc. (2)
- Orangeville Hydro Limited (2)
- Niagara Peninsula Energy Inc. (3)
- Peterborough Distribution Incorporated (3)

Data source: Rate database, Rate orders and OEB yearbook
Produced by Strategic Policy and Analytics Branch,
Strategic Network and Agency Policy Division,
Ministry of Energy
Published December 2016



OEB Mandating Move to Fixed Distribution Rates

- By 2019, the variation of delivery costs across customers within the same LDC will level off, as the distribution charge (which makes up ~3/4 of the delivery charge) is moving to a fully fixed charge.
 - o Currently, electricity distributors recover their costs through a combination of a fixed monthly charge and a volumetric charge based on kilowatt hours used, but the OEB is phasing in fully-fixed distribution rates. Most LDCs will have fully fixed rates within four years, with some variation to mitigate significant rate impacts for some customers.
- According to the OEB, fully fixed distribution rates will help achieve three main objectives:
 - o It will enable residential customers to leverage new technologies, manage costs through conservation, and better understand the value of distribution services.
 - o It is a fairer way to recover the costs of providing distribution service.
 - o It will provide greater revenue stability for distributors, which will position them for technological change in the sector, remove any disincentive to promote conservation, and help with their investment planning.
- As LDCs transition to a single fixed charge to access the system, customers with the lowest consumption will pay more for distribution, while customers with high consumption will pay less.
- For customers of Hydro One Networks, the OEB approved a five-year transition to fixed distribution rates for its high density urban residential rate class (UR), and an eight-year transition for medium- and low-density residential (R1 and R2) and seasonal residential rate class customers.
 - o This is to allow the impact of the change to be held at less than 10% for low volume customers at the 10th percentile of consumption.
- The OEB is currently working on an initiative to look at the rate design of Commercial and Industrial Customers as well.

Existing rate mitigation measures

Rural or Remote Electricity Rate Protection (RRRP)

- There are existing rate-payer funded mechanisms in place to provide delivery charge protection to consumers who live in areas that are very costly to serve.
- The Rural or Remote Electricity Rate Protection (RRRP) is a rate subsidy intended to moderate charges for electricity distribution in lower density rural and remote areas where costs to serve customers are higher than for urban/more densely populated areas.
 - o RRRP is provided to rural grid-connected residential customers served by Hydro One (R2 rate class) and to customers of Algoma Power.
 - o RRRP also supports costs to provide electricity service to off-grid remote communities served by Hydro One Remote Communities, and three James bay communities connected to the grid (Fort Albany, Attawapiskat and Kashechewan).
- RRRP is governed by S.79 (2) of the Ontario Energy Board Act, 1998 (OEBA) which requires rate protection for prescribed rural and remote customers.
 - o It also allows the government to determine cost protection, recovery, and rate classes through regulation (O.Reg 442/01).
- In the September 2016 Speech from the Throne*, the government announced an enhancement to RRRP to increase the amount of rate protection for Hydro One R2 customers. The cost of RRRP, including this enhancement, is expected to be about \$290M annually.
 - o As of January 1 2017, the RRRP subsidy supporting approximately 330,000 Hydro One R2 customers increased from \$31.50/month to \$60.50/month.
 - o Hydro One customers classified as R2 have the highest distribution costs across the province.
- Costs to support the program are recovered through a regulated charge on all customers approved by the OEB and collected by the Independent Electricity System Operator (IESO) on all electricity used in the Province.
 - o For 2017, an average residential consumer (750kWh/month) pays \$1.58/month to contribute to RRRP.

Other Rate Mitigation Programs

Ontario Electricity Support Program (OESP)

- The Ontario Energy Board (OEB) has developed the OESP, which provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements.
 - o The OESP credit amount qualified customers receive is based on household income and household size.
 - o OESP monthly credits range from \$30-\$50.

The Low-Income Energy Assistance Program (LEAP)

- LEAP, introduced by the OEB in January 2011, is a comprehensive province-wide strategy designed to help qualifying low-income consumers. The program includes:
 - o Emergency financial assistance: A one-time grant towards your electricity or natural gas bill if you are temporarily unable to make ends meet in an emergency situation.
 - o Special rules – Utilities have to follow special rules when dealing with customers with limited finances; for example, waiving security deposits, allowing longer payment times and more.

Ontario Energy and Property Tax Credit (OEPTC)

- OEPTC provides low- to moderate-income individuals and families with relief on the sales tax they pay on energy and with their property taxes. Since July 2012, the OEPTC is paid monthly as part of the Ontario Trillium Benefit delivered through the income tax system. For the 2016 benefit year, qualifying individuals and families could receive a maximum benefit of \$1,008 per year, and qualifying seniors could receive a maximum benefit of up to \$1,148.

Northern Ontario Energy Credit (NOEC)

- NOEC provides targeted assistance to low- to moderate- income individuals and families living in northern Ontario who can be exposed to higher energy costs due to more severe winters and heavier reliance on more expensive home heating fuels. NOEC is paid monthly as part of the Ontario Trillium Benefit and is delivered through the income tax system. For the 2016 benefit year, qualifying individuals received up to \$146 annually and families (including single parents), received up to \$224 annually.

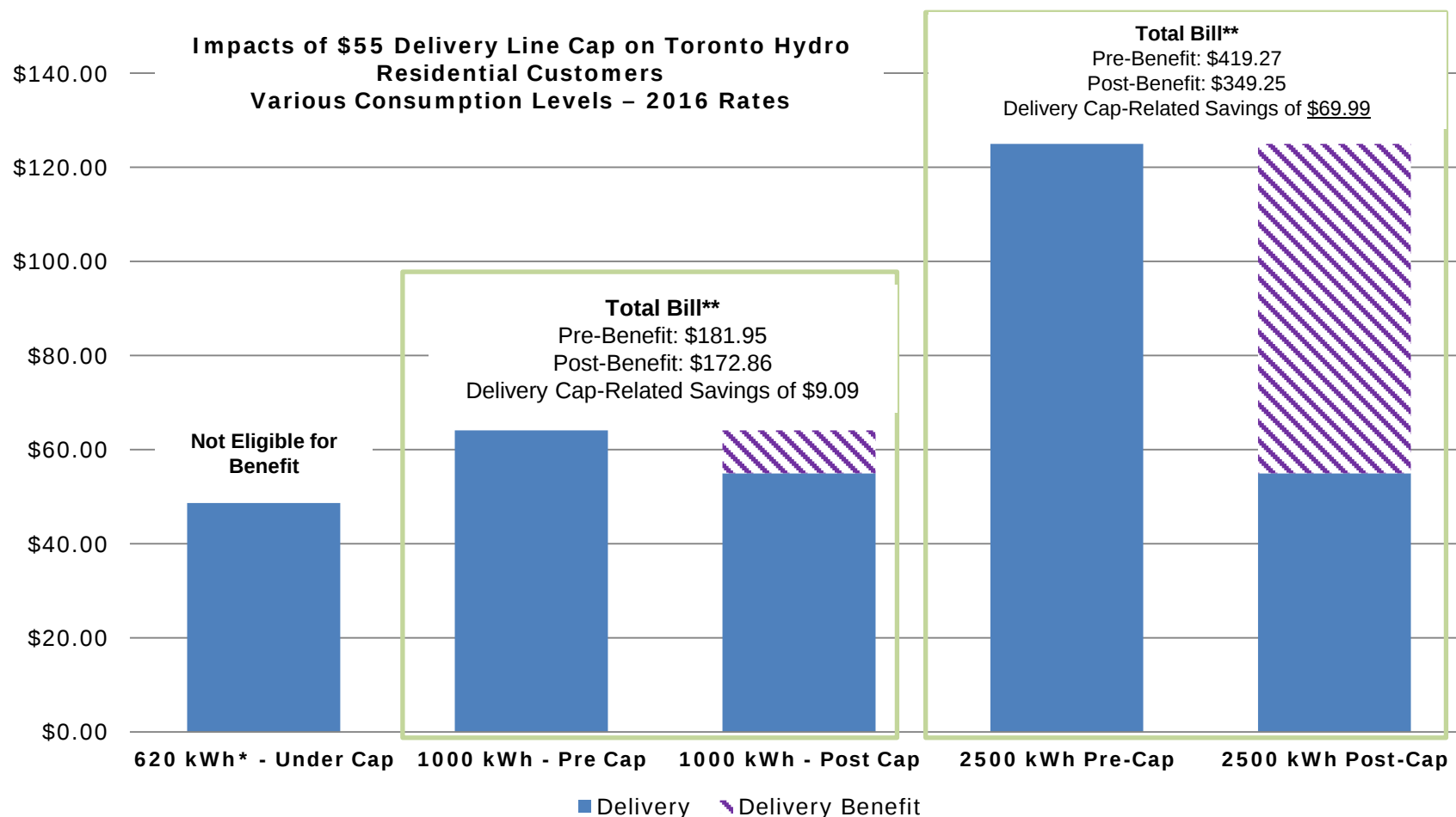
Further Rate Mitigation Options

Program Proposal: Delivery Charge Relief

- To provide further relief for customers across the province, the province could create a 'customer-specific' program that would cap the delivery line cost.
- The proposed program would limit the amount an LDC can bill consumers for Delivery at a to-be-determined reasonable cost. Delivery costs that exceed the cap would be covered by support from the fiscal plan.
- The proposed program would target customers within the LDC territory based on their Delivery cost.
 - Delivery costs vary month to month and LDCs will need to keep track of the customers who will receive the receive the additional support.
- Eligibility for increased protection would be based solely on delivery charges above the established threshold and therefore would not be specific to any one LDC. All LDCs must be prepared to offer the program to some of their customers
 - A delivery line item cap of **\$55-\$60** would align with what a Toronto Hydro customer consuming between 750-1000kWhs would pay in delivery costs (2016 rates).
- Additional information on fiscal projections and ratepayer impacts to be provided.

Delivery Charge Relief: Ratepayer Impacts

- Below is an example of a Toronto Hydro customer at different consumption levels and the level of subsidy they would receive.



Delivery Charge Relief: Fiscal Considerations

- Setting a cap or threshold for maximum delivery charges is a more equitable approach to providing increased rate relief, as it is not specific to any one LDC and it targets rate protection for those with the highest delivery costs.
 - Eligibility for increased protection would be based solely on delivery charges above the established threshold and therefore would not be specific to any one LDC. All LDCs must be prepared to offer the program to some of their customers.
 - This program would be in addition to the existing RRRP program, which should remain as rate-payer funded protection for costs specifically driven by low-density.

Risks

- Costs and ratepayer impacts depend on the number of customers within each LDC whose delivery charges exceed the cap.
 - Costs to the tax base will fluctuate seasonally and will have year-over-year changes, creating uncertainty in forecasting. Ministry is preparing case study analysis.
 - Costs for LDCs to implement is likely material for many distributors to upgrade customer billing systems. Those costs would ultimately be passed back to the customers of those LDCs.
- There is a high risk of entrenching external subsidies, as there is no clear path to transition away from subsidies and toward a more sustainable, cost-based rate framework.

Delivery Charge Relief: Implementation Considerations

- LDCs would track credit variances in a variance account and settle amounts with the IESO, which receives taxpayer funding from ENERGY/MoF in the same manner as the 8% rebate happens today.
 - While this new program would build on exiting transfer payment protocols in use under the ORECA, it would be complex for LDCs to implement, as CIS upgrades are likely needed.
 - OEB estimates that the implementation would take at least 6 months or more, following finalized regulations, given need to change customer billing systems and determine settlement procedures.
- This program structure could be temporary until the completion of the OEB-mandated move to completely fixed distribution costs, scheduled for 2019 (2020-2022 for Hydro One), as there would no longer be distribution cost variance between customers of the same LDC.

Risks

- New legislation would be required to establish this program. Legal and regulatory risks (particularly with regards to legal authority and to the Ontario Energy Board's role in setting rates and incenting efficiencies) require further analysis.
 - Capping delivery charges may impact OEB rate-setting processes and create disincentives towards utility productivity and performance improvements.
- Carrying costs for LDCs may also be a challenge for some LDCs with cash-flow constraints, and may affect debt-to-equity ratios.
- Providing a tax-based subsidy outside of exiting rate setting mechanism reduces incentives for customers and distributors to engage on operating costs and capital planning.

Delivery Charge Relief: Options for Setting a Cap

- When implementing the program, setting the cap by linking with a specific LDC's delivery costs may be viewed as arbitrary.
- It could also create difficulties over time as the chosen LDC's rates (ex: Toronto Hydro) may change in unpredictable ways due to cost pressures unique to that LDC.
- A more robust effort to set a cap would be to link it to a specific rate level, relative to the spread of other rates in the province. Option include:
 - Setting the cap at the average of approved delivery charges for 1000kWh: **\$53.46**
 - Setting the cap at a level where 75% of all approved delivery charges fall below for 1000kWh: **\$58.17**
 - Setting the cap at a level equal to the lowest service territory currently receiving RRRP support for 750kWh: **\$66.29**
- Various options and methods can be designed using simple or weighted rate averages and consumption thresholds.
- Selecting a level similar to Toronto Hydro's rates could satisfy the near-term policy intent while providing a reliable measure for adjusting the cap moving forward.
 - The OEB could be given authority to adjust the cap year-over-year based on the desired marker.

Additional Option: Move RRRP to Tax-base

- RRRP is targeted at all customers who face the highest delivery costs in the province. Given that this program attempts to address a perceived inequity between rural and urban consumers, it could be funded by the tax-base rather than the rate-base.
- Bringing the current RRRP program to the taxbase would represent ~\$290M/year in costs, with the OEB authorized to increase funding year-over-year in relation to the average distribution rate increase in Ontario.

Year	RRRP(\$M) (Assuming 2.6% annual increase)
2017	\$292
2018	\$300
2019	\$306
2020	\$315
2021	\$322
2022	\$329

- Doing so would save the average residential consumer (750kWh) \$1.58/month in Regulatory charges.
- ENERGY recommends that the RRRP program *remain on the rate-base* to address the specific costs related to low density, with additional support coming from the tax-base through the proposed Delivery Charge Relief program.
 - RRRP provides funding to support off-grid communities serviced by Hydro One Remotes. Placing these costs on the tax-base may lead to an extensive re-evaluation of the funding framework for these communities, as well as other remote communities not serviced by Hydro One Remotes.

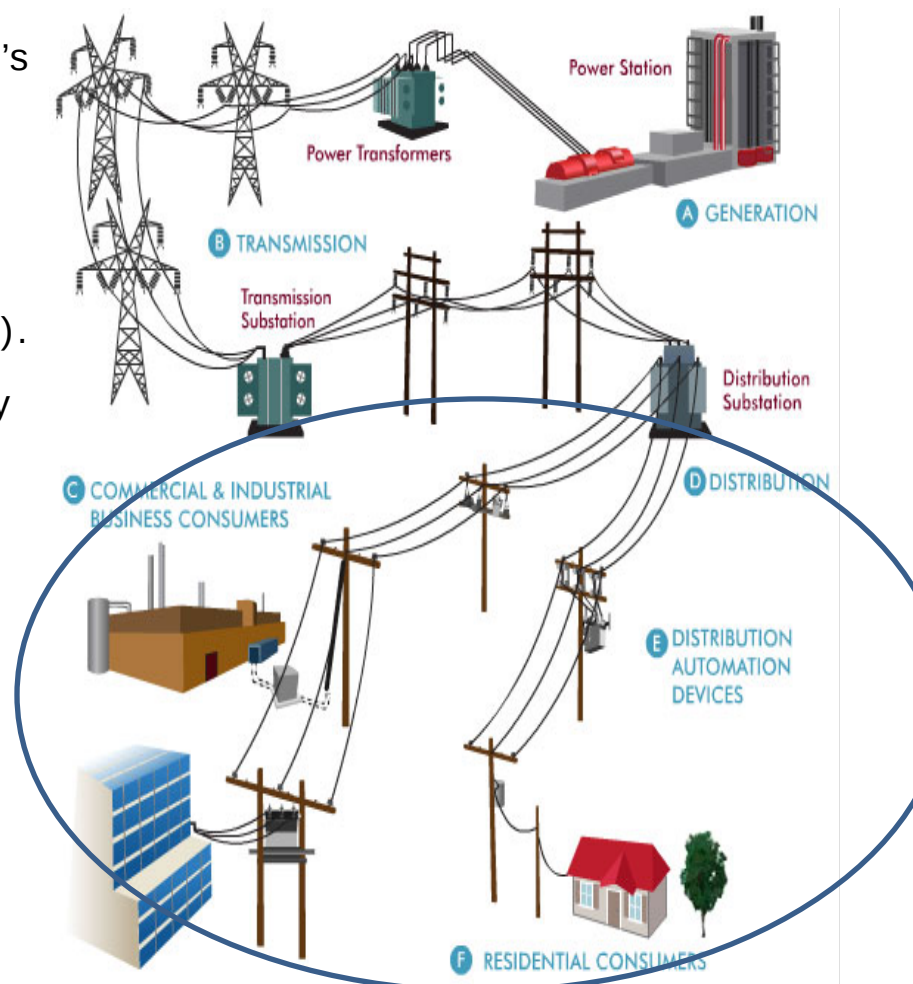
Next Steps

- Complete fiscal and ratepayer impact analysis for delivery relief program
- Return with recommendation on a cap-setting mechanism and analysis of implementation considerations.
- Receive direction and prepare for Cabinet submission and legislation.

Appendix A: General Information

Ontario's Electricity Grid

- Ontario's transmission and distribution networks form the backbone of the province's electricity system, as they link electricity consumers with power generators.
- The **transmission system** is comprised of high voltage lines, towers, transformation and safety equipment used to transport electricity at voltages above 50 kilovolts (kV).
- The **distribution systems** deliver electricity to local consumers over the lower-voltage networks operating at 50 kV and below.
- Key elements in the distribution system:
 - Transformers to step power down from transmission to distribution voltage.
 - There are typically several voltage changes before the electricity reaches the consumer.
 - Overhead or underground lines.
- Electricity delivery to the customer is the responsibility of **Local Distribution Companies** (LDCs) e.g. Toronto Hydro.



Sample Electricity Bill

Electricity Charges:

This is the cost of electricity supplied during the billing period and can be purchased either through a local distribution company or through a licensed electricity retailer.

Regulatory Charge:

This charge covers costs such as market regulation, management of the system, and rural and remote rate protection. It also includes the Standard Supply Service administration charge of \$0.25 stated on a 30-day basis.

8 % Provincial Benefit:

Effective January 1, 2017, customers receive a an 8% rebate equivalent to the provincial portion of the HST.

SAMPLE MONTHLY BILL STATEMENT

Anytown Hydro-Electric Limited

Account Number:
000 000 000 000 0000

Meter Number:
00000000

Your Electricity Charges

Electricity

Off-Peak @ 8.700 ¢/kWh 41.20

Mid-Peak @ 13.200 ¢/kWh 16.35

On-Peak @ 18.00 ¢/kWh 23.60

Delivery 53.07

Regulatory Charges 4.79

Debt Retirement Charge 0.00

Total Electricity Charges \$139.00

HST 18.07

8% Provincial Rebate (11.12)

Total Amount \$145.95

Delivery Charges:

Customer Service Charge: A fixed charge for costs relating to meter reading, billing, customer service and account maintenance, and general utility operations.

Distribution Charge: A variable charge for costs of building and maintaining the distribution system, including overhead and underground power lines, poles, and transformer stations. .

Transmission Charge: A variable charge for the costs of transmitters to operate and maintain the high-voltage transmission system that carries electricity from generating stations to your utility.

Loss Adjustment

When electricity is delivered over a power line some is lost as heat. In calculating your electricity costs for the billing period, LDCs multiply the electricity cost by an OEB-approved adjustment factor to accounts for those losses.

Local Distribution Companies – Key Facts

- There are currently 69 LDCs in Ontario that are rate-regulated by the OEB. 3 LDCs (Cat Lake Power, Dubreuil Lumber and Cornwall Street Railway Light) are licensed by the OEB, but are not rate-regulated.
- LDCs vary significantly in size:
 - o Range from roughly 1,200 to 1.2 million customers (Hydro 2000 and Hydro One respectively)
 - o The smallest 29 LDCs (36%) account for less than 4% of Ontario's customers (<13,000 customers).
- The distribution sector:
 - o Serves 5 million customers (residential, industry, commercial / MUSH),
 - o Has \$48.7 billion in assets, and
 - o Generates \$3.6 billion in revenues.
- In addition to distributing electricity to customers through their 199,456 km of distribution lines, LDCs provide services such as: billing, outage management, overall customer contact, and conservation programs.

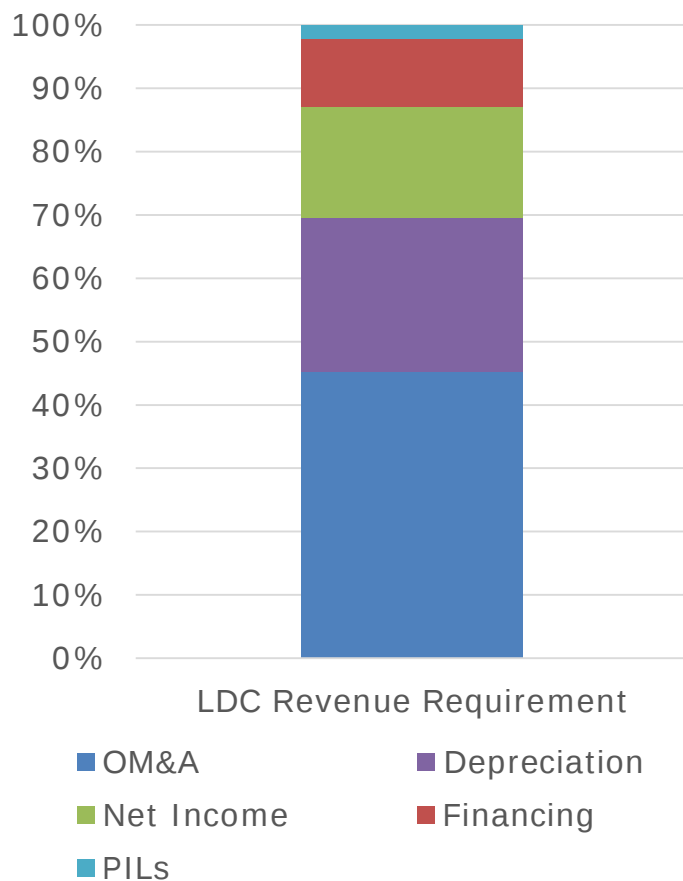
Distribution Sector Cost & Performance Trends

- Like other components of Ontario's electricity system, distribution sector costs have risen as investments have been made to update and modernize system infrastructure.
 - o Overall distribution sector revenues collected from customers have risen from \$577.66 per customer annually in 2006 to \$703.36 per customer annually in 2015 (21.8% increase).
 - o For the typical residential customer* (750kwh/month), monthly distribution costs have risen from \$24.49 in 2006 to \$30.75 in 2016. Distribution costs represent 23% of the total average pre-tax residential bill.
- Over the same time period, distribution sector productivity and cost efficiency have decreased. This trend raises concern that customers are not realizing a net benefit from sector cost increases, as customers receive less value from the distribution portion of their bill.
 - o OM&A costs per customer have increased on average from \$235 in 2006 to \$319 in 2015.
 - o For the period 2002-2012, sector productivity has decreased by an annual average of -0.93% when including Hydro One and Toronto Hydro, the worst performers.
 - o When compared to other utility services and neighbouring jurisdictional studies, Ontario's electricity distribution sector is the only one to realize a negative productivity rate.
- Over this time period, LDC consolidation has been the driving force behind sector restructuring and the search for efficiencies. However, the historical consolidation process has not appeared to deliver cost savings/efficiencies for consumers.
 - o Customers of LDCs acquired by Hydro One in the first wave of consolidation (1999-2003) have seen distribution costs rise by up to 268% (Arkona, Ontario) when comparing 2006 rates to 2016.
- Policy direction on investments, including smart meters, have also contributed to increasing sector costs while driving broader system and social benefits.

*Simple average of monthly 750 kWh distribution bill, exclusive of taxes using OEB rates database, including H1 residential classes, but excluding 88 acquired LDCs.

LDC Revenue Breakdown

Sector LDC Revenue Components (2015)



- While there is considerable variation in this breakdown, on average LDC revenue components can be explained as follows:
 - OM&A (46 %)**: Includes system operation & maintenance, customer service, billing/collections, regulatory expenses, salaries.
 - Depreciation (24 %)**: Reflects accounting treatment of investments in system infrastructure (property, plant and equipment) and other assets. In proposing new investment, LDCs must justify the need and usefulness to the OEB.
 - Net Income (17 %)**: Reflects income after PILs/taxes.
 - Financing (11 %)**: Reflects interest expense.
 - PILs or income tax (2 %)**: PILs expense or income tax expense for privately owned utilities.
- These costs do not include costs associated with operating unregulated affiliates. Any OM&A service costs shared between LDC and affiliate are prorated for inclusion in the ratebase.

Previously Considered Cost Mitigation Options

- The Ministry has considered distribution sector cost reduction options in the past which stemmed from determinations that certain aspects of the sector status quo were not appropriate or in the public interest.
- Ministry staff recommend not pursuing these options due to their contentious nature and the availability of more comprehensive solutions that can drive both cost reductions and system performance improvements.
 1. **Direct Consolidation Policy:** The Ministry could mandate LDC consolidation or provide additional incentives for voluntary consolidation in an attempt to reduce OM&A costs, leading to rate reductions for consumers.
 - o Historical analysis reveals that, in general, consolidation has not led to the expected efficiency gains or cost reductions for affected customers. Hydro One, which has led the bulk of consolidation activity, is recognized by the OEB as one of the most inefficient LDCs in the province. Without appropriate regulatory incentives, consolidation transactions may not result in OM&A reductions to the benefit of customers.
 2. **ROE Reduction:** The Ministry could instruct the OEB to review its ROE policy in light of LDCs monopoly position and fixed distribution rates.
 - o ROE is an established requirement of utility regulation and has been upheld by judicial review. Attempts to reduce ROE could be challenged in court. As well, as ROE is used by municipal shareholders to fund municipal services, this could lead to broader communication and stakeholder management issues.
 3. **Payments-in-Lieu of Taxes Policy:** The Ministry of Finance could restructure or eliminate the PILs regime to reduce the tax burden on LDCs, which would lead to cost savings for ratepayers.
 - o PILs are a vital component of OEFC's debt retirement outlook. With the departure of Hydro One from the PILs regime and the ending of the debt retirement charge on residential bills, restructuring the PILs regime would impact OEFC's ability to service the debt and could impact Ontario's credit outlook.
- Performance-based options have the potential to indirectly incent consolidation (in a manner that returns benefits to consumers) and potentially reduce ROE in an equitable manner in the event performance expectations are not met.

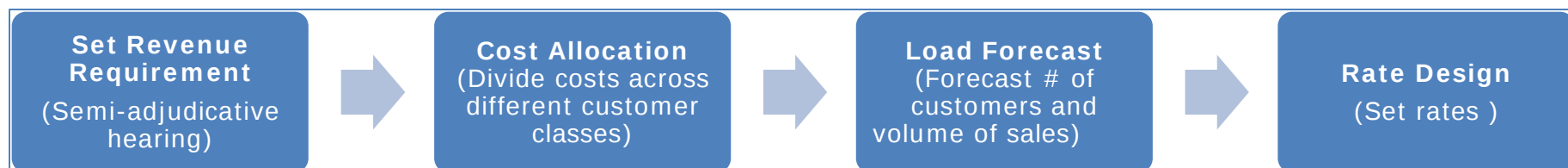
RRRP Administrative Roles

 Ontario Ministry of Energy	• The Province sets out the parameters of the program through legislation (s.79, OEB Act) and regulations (O. Reg. 442/01, O. Reg. 445/07). • These set out, among other things: • Eligible customers • Amounts available to Hydro One Networks and James Bay First Nations.
 Ontario Energy Board	• The OEB determines annually the charge levied on all electricity consumption.
 hydro one	• Hydro One Networks determines the monthly RRRP subsidy available to each of its customers based on amount of RRRP made available to it through Regulation, the number of R2 customers, and accounting for any surplus or deficit in its variance account.
 ieso	• The IESO collects the charge from distributors across the Province and re-distributes to those distributors whose customers are eligible to receive the subsidy.

Appendix B: Distribution Rate-Setting

Setting Distribution Rates

- Electricity distributors apply to the OEB to determine which costs they can pass on to their customers through rates (revenue requirement). The OEB has a mandate to set just and reasonable rates for LDCs that protect the interests of consumers while facilitating the maintenance of a financially-viable electricity industry.
- The OEB's "Renewed Regulatory Framework" is continuing to evolve how LDC's apply for rates to drive increased productivity. Principally there are two streams of electricity rate applications.
 - Cost-based applications (Cost of Service or Custom)– where the OEB sets rates based on an LDC's forecast of their costs and volumes, including a return on capital. Typically these are set for a 5 year term, with the 1st year establishing the base rates for the term.
 - Mechanistic Incentive Rates (IRM) that are based on the current approved rates plus inflation and any productivity improvement requirements. This methodology is used annually following a cost-based application until the end of the term.
- When establishing distribution rates, the OEB must evaluate a number of costs to establish the approved revenue requirement that is the basis for the rates charged by the LDC.
- Once the revenue requirement is established, the OEB must approve a fair allocation of those costs to the various customer classes (residential, commercial, industrial etc.)
- From that the OEB approves the specific rates charged to each customer class, which can include some fixed charges as well as ones based on volume.



Application Review Process

- The OEB reviews each rate application independently through a public process.
- The process begins with an LDC submitting an application and includes a number of activities at each stage.
- The process includes opportunities for various representatives (intervenors) to make arguments about the facts of the application.
- The application review process can vary from a few months to up to a year depending on complexity of the application.
 - Cost-based applications tend to take a longer review timeline than IRMs.
 - More complex applications will also typically have an oral hearing.

LDC Rate Application Stages



Cost of Service Rate Application Schematic

