Ontario

Ontario Energy Board
Commission de l'énergie de l'Ontario

The Ontario Energy Board

January 11, 2018

Overview of Presentation

- Who We Are and What We Do
- Engaging, Empowering and Protecting Customers
- Electricity: Breaking down the Bill
- Natural Gas: Breaking down the Bill
- The Rate-setting Process
- Renewed Regulatory Framework (RRF)
- Adjudicative Model Review

Who we are and what we do

Ontario Energy Board - Who We Are

The OEB is an independent, quasi-judicial tribunal whose mandate is set out in legislation including:

Ontario Energy Board Act, 1998, *Electricity Act, 1998* and *Energy Consumer Protection Act, 2010.*

Adjudication must comply with the *Statutory Powers Procedures Act*

Legislated objectives:

- Protect the interests of consumers with respect to prices, and the reliability and quality of service
- Promote the education of consumers
- Facilitate the maintenance of financially viable electricity and natural gas industries
- Promote conservation
- In electricity we are also to promote renewable energy; promote economic efficiency and cost effectiveness; conservation and facilitate implementation of a smart grid
- In natural gas we are also to facilitate rational expansion of transmission and storage and facilitate competition in the sale of gas

Regulating electricity since 1999 and natural gas since 1960

Our operations are funded by regulated entities through cost assessments

Ontario Energy Board - Who We Are

The OEB's vision, as set out in our Strategic Blueprint, is to support and guide the continuing evolution of the Ontario energy sector by promoting outcomes and innovation that deliver value for all Ontario energy consumers.

We perform our mandate in three ways:

- Adjudication: Decision made following a hearing based on evidence filed in an application. Administrative law principles of natural justice and fairness apply.
  - Rates are approved through adjudicative process informed by policies
- Policy development: Consultations aimed at establishing regulatory policy for sector (gas or electricity or both). The process used can be more flexible than a hearing, and varies depending on whether the policy is intended to be binding on regulated entities.
  - Major policies impacting rates include Renewed Regulatory Framework, Cost of Capital, RPP Roadmap, Cap & Trade Framework, DSM Framework, Rate Design
- Advice to government: Expert independent advice to inform and support government energy policy.
  - Recent mandates include retail transportation fuel pricing; electricity rate assistance for low-income and on-reserve First Nations customers; and consumer protection in retail electricity and natural gas markets

OEB Regulatory Oversight of Electricity

Set Rates and Prices:

- Payments for most of OPG's nuclear and hydro-electric assets
  - *OEB Act,* section 78.1 and O. Reg. 53/05
- Rates for transmission
  - *OEB Act,* section 78
- Rates for distribution
  - *OEB Act,* section 78 (distribution rates payable by certain customers are affected by government-mandated and OEB-administered programs like Rural or Remote Electricity Rate Protection (RRRP) (*OEB Act,* section 79 and O. Reg. 442/01)), Distribution Rate Protection (*OEB Act*, section 79.3 and O. Reg. 198/17) and First Nations Delivery Credit (*OEB Act,* section 79.4 and O. Reg. 197/17))
- IESO fees (administrative costs)
  - *Electricity Act, 1988,* section 25
- Regulated Price Plan commodity price for residential and small business consumers
  - Based on forecasts of market price and Global Adjustment
  - Historically under *OEB Act,* section 79.16 and O. Reg. 95/05
  - Currently under *Ontario Fair Hydro Plan Act, 2017* and O. Reg. 195/17
- Charges by unit sub-meter providers (effective April 2018)
  - *OEB Act*, Section 78

OEB Regulatory Oversight of Electricity

Other Responsibilities:

- Licence IESO, Smart Metering Entity, generators, transmitters, distributors, retailers, unit sub-meter providers, wholesalers
  - *OEB Act,* section 57
- Construction of transmission lines larger than 2km
  - *OEB Act,* section *92*
- Mergers and acquisitions of transmitters and distributors
  - *OEB Act*, section 86
- Conduct in retail electricity markets
  - *Energy Consumer Protection Act, 2010*
- Wholesale electricity market oversight
  - Market Surveillance Panel monitors, investigates and reports on activities in the wholesale markets and the conduct of market participants (*OEB Act,* section 4.3.1 and *Electricity Act, 1998,* section 37)
  - Review of Market Rule amendments and international reliability standards (*Electricity Act, 1998,* sections 33-35, 36.2 and 36.3)
  - Appellate body from certain IESO decisions (*Electricity Act, 1998,* sections 36 and 36.1)
- Compliance and enforcement
  - *OEB Act,* Part VII.1
  - Also enforce compliance with *Ontario Rebate for Electricity Consumers Act, 2016* and *Ontario Fair Hydro Plan Act, 2017* by certain electricity licensees

OEB Regulatory Oversight of Natural Gas

Set Rates:

- For pass-through of costs for gas commodity and transportation (QRAM)
  - *OEB Act,* section 36
- For distribution of natural gas
  - *OEB Act,* section 36

Other Responsibilities:

- Demand side management (DSM)
  - *OEB Act,* section 36 (DSM is a rate-funded activity)
- Cost consequences of cap and trade activities
  - *OEB Act,* section 36 (cost consequences of utility Compliance Plans is addressed through the rate-setting process)
- Certificate of public convenience and necessity establishing service territory for gas utilities
  - *Municipal Franchises Act*
- Franchise Agreements with municipalities
  - *Municipal Franchises Act*
- Construction of pipelines larger than 20km, $2M or above a minimum pipe size or operating pressure
  - *OEB Act,* section 90

OEB Regulatory Oversight of Natural Gas

Other Responsibilities: (continued)

- Designate natural gas storage areas
  - *OEB Act,* section 36.1
- Well licence applications
  - *OEB Act,* section 40
- Mergers and acquisitions of transmitters, distributors or storage companies
  - *OEB Act*, section 43
- Licence natural gas marketers and regulate conduct in the retail gas market (marketing to residential and small business customers only)
  - *OEB Act,* Part IV and *Energy Consumer Protection Act, 2010*
- Compliance and enforcement
  - *OEB Act,* Part VII.1

Examples of Major Policy Work: Electricity

- Renewed Regulatory Framework
  - Performance-based approach to regulation that is more responsive to customer preferences and expectations, better aligns customer and utility interests and supports the achievement of important public policy objectives. It does this by emphasizing results rather than activities, incenting productivity and efficiency through a focus on performance outcomes, promoting innovation and taking a long-term approach to network investment planning.
  - Originally designed for electricity distributors - core concepts now being extended to all rate-regulated entities.
- Regulated Price Plan Roadmap
  - A comprehensive 5-year plan for revamping the Regulated Price Plan to better respond to policy objectives, improve system efficiency and give consumers greater control.
  - A number of pilot projects are currently being implemented by selected electricity distributors to test existing and new pricing structures and new technologies and systems that can provide consumers with more and better information and a greater ability to control their usage.
- Smarter Electricity Rates
  - New distribution rate design for residential electricity customers was completed in 2015. The policy requires a transition to fully fixed distribution rates for residential customers, which will help to: enable customers to leverage new technologies and manage costs; provide greater fairness across customers; and provide greater revenue stability for distributors, which will position them for technological change in the sector.
  - New distribution rate design for commercial and industrial customers is currently under development.
- Handbook to Electricity Distributor and Transmitter Consolidations
  - Provides guidance to applicants and other interested stakeholders on applications for OEB approval of consolidation transactions (mergers, amalgamations and divestitures, or “MAADs”) and subsequent rate applications. The Handbook, which brings together OEB policies developed largely through adjudicative decisions over a decade or so – like the “no harm” test – is responsive to third-party policy reports that endorse consolidation in the electricity distribution sector. Among other things, consolidation can enable distributors to better address challenges in an evolving electricity sector, such as new technology requirements to meet customer expectations and changing dynamics with the growth of distributed energy resources.

Examples of Major Policy Work: Natural Gas

- Demand Side Management (DSM) Framework for Natural Gas Utilities
  - The OEB has been promoting DSM and approving DSM plans for Enbridge and Union Gas since 1993. Unlike electricity conservation, which today is funded largely through the Global Adjustment and is a mandatory requirement for electricity distributors, DSM remains voluntary and is funded through gas distribution rates.
  - The OEB's Framework for 2015-2020 was informed by best practices in other jurisdictions, and is designed to ensure that resource savings are achieved in an efficient manner and that customers receive the greatest and most meaningful opportunities to lower their bill by reducing consumption.
- Framework for Assessing the Costs of Natural Gas Utility Cap and Trade Activities
  - To support the implementation of the Cap and Trade regime, the OEB developed a policy framework that will enable cost recovery for cost-effective measures to achieve reductions in GHG emissions. The Framework provides guidance to gas utilities on the development of their Compliance Plans, to promote consistency in the implementation of the regime for consumers across the Province and greater regulatory predictability. The Framework also sets out the OEB's approach to evaluating gas utility Compliance Plans, including the procurement of emissions credits. The Framework protects consumers by ensuring that Compliance Plans are cost-effective, rates are predictable and gas utility strategies are adaptable and demonstrate continuous improvement.

Market Surveillance Panel

- Mandate as set out in *Electricity Act, 1998* and OEB By-law #3 is to monitor, investigate and report on activities related to the wholesale electricity markets and the conduct of market participants, with a view to identifying:
  - inappropriate market conduct, including possible abuses of market power and gaming
  - design flaws and inefficiencies in market structure and rules and procedures that govern the wholesale markets
- Reports semi-annually on its monitoring activities
- Reports on investigations upon completion
- Supported by OEB staff and by IESO staff as per OEB-IESO "Protocol"

Engaging, Empowering and Protecting Consumers

Engaging, Empowering and Protecting Consumers

Protecting Consumers:

- Consumer Charter
  - Plain language description of key rights and responsibilities of residential energy consumers
- Customer service rules for electricity distributors and unit sub-meter providers (USMP)
  - Security deposits, payment arrangements, disconnection (including ban on disconnection of homes during the winter), etc.
  - Currently undertaking comprehensive review of customer service rules for electricity, gas and USMPs
- OEB rules to protect consumers in retail markets
  - Fair marketing practices
  - Disclosure statements and price comparisons
  - Plain language contracts
  - Verification and renewal scripts
- Support programs
  - Low-income Energy Assistance Program (LEAP)
    - Emergency financial assistance for low-income electricity and gas customers
    - In 2016 this program supported 14,330 electricity customers and 5,354 natural gas customers
  - Ontario Electricity Support Program (OESP)
    - Monthly on-bill credits
    - Online or in-person application
    - Designed and implemented by OEB
    - As of November 30, 2017 this program was supporting 206,333 households
  - Special customer service rules for low-income consumers

Engaging, Empowering and Protecting Consumers

Engaging and Empowering Consumers:

- Consumer Panel
  - Large and diverse group of residential and small business consumers from across the province, create as a forum to engage directly with consumers to:
    - Discuss issues that are important to consumers
    - Gather ideas and provide feedback on solutions and tools we are developing
    - Help assess the effectiveness of our outreach and communications activities
- Facilitating consumer input/participation in hearings
  - Community meetings for major electricity distribution rate applications
  - Online comment form
  - Process counsel
- Project-specific consumer outreach
  - Surveys, online workbook
- Consumer tools
  - Electricity distributor scorecards and dashboard allow consumers to see how well their utility is operating and how it compares with others
  - Bill calculator explains different line items on bills and allows comparison with offer from an energy retailer
- Community events
- Re-designed consumer website
  - Includes brochures, video clips, tip sheets, features on topical issues
- Compliance and enforcement
  - Mediating and investigating consumer complaints (can be submitted online)
  - Enforcement action where appropriate

Engaging with Stakeholders

- Chair's Advisory Roundtable
  - Brings together 20 energy sector leaders, including representatives of industrial, commercial and residential consumers, environmental and public policy groups, and the financial community.
  - Forum for discussing emerging issues and opportunities, and helps us to plan and manage issues as they evolve.
- Innovation Task Force (new)
  - To help assist the OEB better understand and respond to the need to modernize Ontario's regulatory framework and provide an environment conducive to innovation that continues to enhance customer value.
  - Will assist the OEB in its determination of regulatory change needed to effectively deliver on the OEB's Strategic Blueprint.
- Regulatory Affairs Standing Committee
  - Representatives of industry and consumer groups that provide advice, input and feedback to our Executive Leadership on matters related to the Rules of Practice and Procedure, Filing Requirements, Guidelines, operational policies and other matters relating to the Board's applications process.
- Industry Affairs Standing Committee
  - Representatives of industry that provide advice, input and feedback to our Executive Leadership on issues related to OEB codes and rules that govern the sector.
- Regional Planning Process Advisory Group
  - Representatives of industry and consumer groups charged with sustaining and improving the regional planning process under OEB stewardship.
- Ontario Pipeline Coordinating Committee:
  - Comprised of government ministries and agencies that have a role in reviewing natural gas transmission and distribution facility projects and chaired by a staff member from the OEB.
  - Coordinates the review of natural gas projects in Ontario that require OEB approval, such as pipeline construction and projects related to the storage of natural gas in geological formations.

Electricity: Breaking down the Bill

Elements of Residential and Small Business Electricity Bill

Electricity – cost of power

- Most residential and small business customers pay time-of-use Regulated Price Plan (RPP) prices. RPP is based on a forecast of both market electricity costs (Hourly Ontario Electricity Price (HOEP)) and costs recovered through Global Adjustment (GA) (OPG payment amounts, generation supply contracts with IESO and electricity distributor Conservation Demand Management)
  - OEB sets only the OPG payment amounts component
  - RPP pricing currently governed by *Ontario Fair Hydro Plan Act, 2017*

Delivery – cost of getting power to homes and businesses

- Distribution
  - OEB sets distribution rates, but rates payable by certain consumers are affected by government programs
- Transmission
  - OEB sets transmission rates
- Losses
  - OEB approves loss adjustment factor for each distributor

Elements of Residential and Small Business Electricity Bill

Regulatory Charges – cost of running the system

- Includes IESO cost of operating the wholesale market and maintaining reliability of the high voltage grid, and the cost of programs such as OESP and RRRP
  - OEB sets wholesale market service charge but does not set or approve all of the costs recovered through that charge
  - OEB sets RRRP amounts in accordance with regulation
  - Responsibility for setting OESP credits and program funding transitioning to government

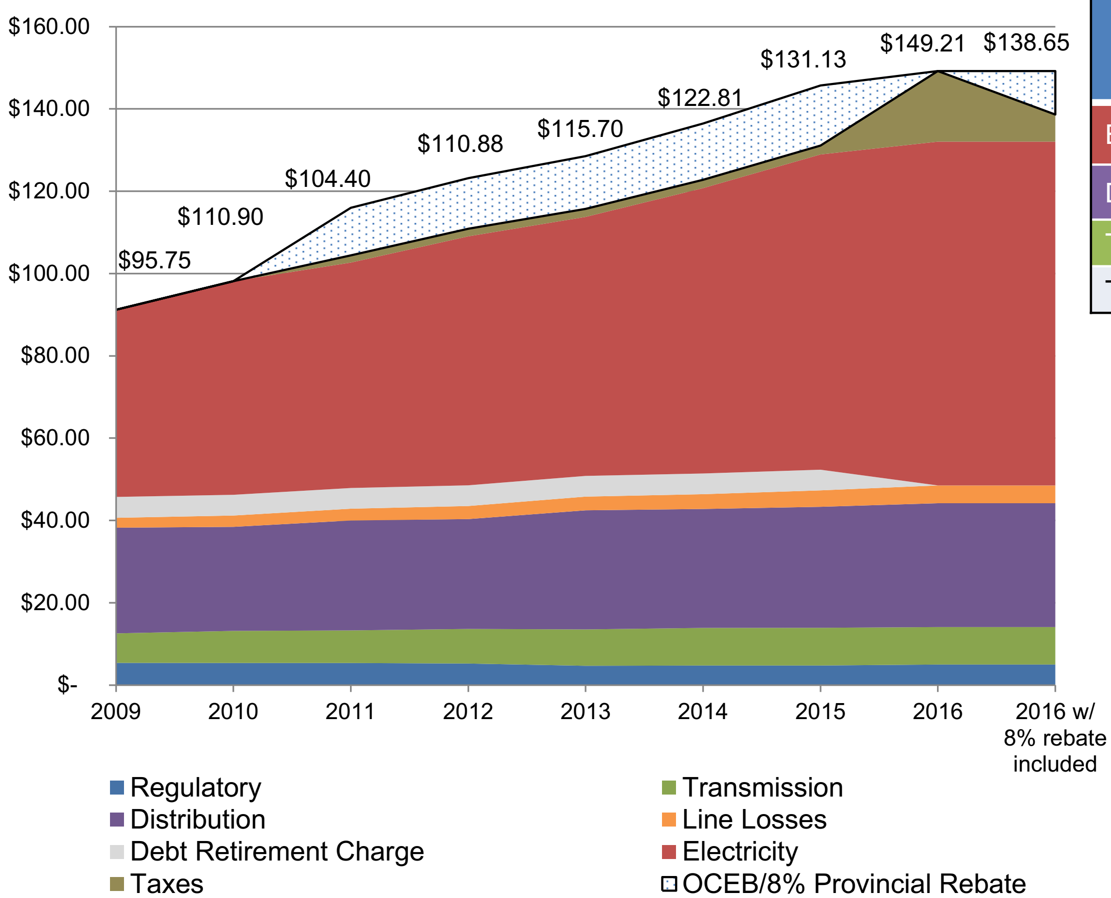
Debt retirement charge

- Removed from residential bills December 2015
- Expected to be eliminated from all other bills in April 2018

Provincial rebate

- 8% rebate on pre-tax electricity bill, established by government

Average Ontario Residential Electricity Bill - Trends



	Total Change 2009-16 ($)	Average Increase (%/Year)
Electricity	$ 38.06	12%
Distribution	$ 4.42	2%
Transmission	$ 1.93	4%
Total Bill Increase	$ 53.46	8%

- Ontario Clean Energy Benefit (OCEB) a 10% rebate on total electricity charges in place from January 1, 2011 until Dec. 31, 2015
- 8% Provincial Rebate in effect Jan. 1, 2017

Costs reflective of 750kWh typical residential consumption

Natural Gas: Breaking down the Bill

Elements of Ontario Residential Natural Gas Bill

Elements of the residential bill.

Gas Supply – Commodity cost of gas procured by gas companies and passed through at cost through Quarterly Rate Adjustment Mechanism.

Customer Charge – Fixed delivery costs by gas distributors (minimum system costs, administration, metering, billing & collecting)

Delivery - recovers gas distributor costs that vary with volume of gas delivered (includes the utility's Cap and Trade compliance costs)

Transportation – costs to move gas from purchase hubs to the distributor's system (will depend on where the gas is procured)

The Rate-setting Process

Fundamentals of Rate Regulation

- Rates are set to recover prudently incurred costs, including an opportunity to earn an appropriate return to finance investment
- The test set out in the *OEB Act* is "just and reasonable" rates
- The OEB has adopted incentive-based regulation that promotes increased efficiency which in turn can lower costs and provide for more predictable rates.
  - This is achieved using a pre-defined formula that includes components for inflation and the OEB's expectations of efficiency and productivity gains, and monitoring performance on defined outcomes.

OEB Rate-Setting Process: Major Rate Cases

1. Application
Customer Notification

2. Customer Input

3. OEB Reviews all Information (Discovery Phase)

4. OEB holds a hearing (Written or Oral)

5. Decision

Number of activities at each stage

Various Representatives (Intervenors)

Timeline: From a few months to up to a year depending on complexity

Utilities typically file major applications on a 5 year cycle

10 major rate applications by electricity distributors (FY 2016-2017)

OEB Sets Rates For 76 Entities

Electricity Distributors	Electricity Transmitters	Natural Gas Distributors	OPG	IESO
67 rate-regulated distributors • serve 5.1 million electricity customers (5 million residential) • 9 distributors with more than 100,000 customers Cornwall not rate-regulated by OEB	4 transmitters that form the provincial uniform transmission rates (UTR) OEB sets revenue requirement, not rates, for: • Hydro One 95% • Canadian Niagara Power • Five Nations • B2M	3 rate-regulated distributors • serve 3.5 million gas customers Enbridge Distribution* Union Gas* EPCOR Natural Gas Limited Partnership Kingston and Kitchener gas utilities not rate-regulated by OEB *Enbridge and Union have filed a merger application with the OEB	Nuclear and hydroelectric facilities Pickering Darlington 54 hydroelectric generating stations	Set the admin fee Not regulated by OEB: Supply contracts Most conservation

Rate Regulation

- Different kinds of Rate Applications

Major Rate Cases

- Rates set based on a utility's forecast of their costs and volumes
- Utilities earn a return on their capital
- Sometimes called "rebasing" because rates take into consideration a utility's forecast of costs
- OEB decides an avg of 15 of these applications per year with 5-year term

Incentive Rate Setting (IRM)

- Based on current rates plus inflation less an expectation for productivity improvements
- Incorporates incentives for efficiency improvements
  - Allows a utility to earn more if efficiency better than expected
  - But a utility may earn less if efficiency falls short
- OEB typically decides in excess of 50 of these applications per year

Setting Rates to Recover Revenue Requirement

Set Total Revenue Requirement	Total costs for a utility to provide energy service. Utility forecasts cost based on business and system plans and files details in rate application.
Revenues from sources other than rates (Other Revenue)	This can be miscellaneous rates and charges like late payment fees or change of occupancy charges, or other revenues like property rental.
Base Revenue Requirement (Total – Other Revenue)	This is the revenue to be generated through rates to cover the utility's costs.
Divide the costs amongst different classes of customers (Cost Allocation)	Classes typically include residential, small commercial, large users, etc. Hydro One further divides residential into urban, low density (R2 which get rural assistance) and medium density (R1).
Forecast # of customers and sales volumes or production forecasts (Load Forecast)	Forecasts are based on historical growth, economic forecasts and other known factors.
Calculate Rates (Rate Design)	Costs per class divided by customer and load forecast. Review bill impacts to consider if rate mitigation required.

Renewed Regulatory Framework (RRF)

RRF – Roadmap for Regulatory Reform

- Began in 2012 to shift focus from utility cost to utility performance and value for consumers
- Performance-based approach to regulation that is responsive to customer preferences
- Better align utility reliability and quality of service levels with customer expectations
- Institutionalize continuous improvement and innovation
- Provide for a comprehensive approach to network investments to achieve optimum results
- Better align timing and pattern of expenditure with cost recovery
- Provide a sustainable, predicable, efficient and effective regulatory framework

RRF – Expected Outcomes

- Financially sustainable regulated utilities
- Robust, reliable networks
- Value for customers
- Supporting innovation
- Rewarding performance

Performance

Flexible rate-setting method

- Custom IR, Price Cap IR and Annual IR

Access to capital between re-basing

- Mechanisms developed to pace investments and manage impact on customers
- Incremental Capital Module
- Advanced Capital Module

Return on equity

- Opportunity to earn reasonable returns to finance investment

Performance and Value

Robust, Reliable Networks

Asset management & Distribution System Plans

- To pace, prioritize and optimize renewal investments
- To support modernization of the network and adoption of smart grid and conservation

Regional Planning

- To optimize network investments recognizing integrated transmission and distribution grids

Cost rules to facilitate regional planning (in process)

- To facilitate regional planning through removing barriers to sharing the costs of network investments

Performance and Value

Reliability standards

- Developing customer specific reliability metrics

Outage reporting and monitoring (in process)

- Reporting to understand distributors' response to major events, i.e. storms

Cyber security (in process)

- Establishing a framework to support best practice in protecting customer data and system security

Value for Customers

Transparent performance reporting for distributors (scorecards)

- To allow customers to assess value and performance of their utility year over year, and across distributors

Customer engagement in utility investment and service planning

- To help inform utility investment and service plans and provide helpful information to customers

OEB community meetings for major electricity rate hearings

- To give customers direct access and a voice in regulatory decisions

Consumer Charter

- To provide accessible and transparent information for residential energy customers on their key rights and responsibilities

Value and Innovation

Smarter Rates Enabling:

- fairer billing
- grid innovation
- customer uptake of new technologies

Residential Fixed Distribution Rates

- Moving from demand-based to a fee to connect
- Provides greater certainty of revenues to support investment and reliable operations
- Support net metering and conservation

Commercial and Industrial Distribution Rates (in process)

- To support innovation for customers given the evolution of supply
  - Customers' ability to leverage new technology;
  - Customers' ability to manage their bill through conservation
  - Customers' understanding of the value of connection
- To increase efficiency
  - Maximize use of the current system
  - Optimize investment for long-term cost containment
- To stabilize distribution revenue
  - Enable technology changes
  - Support conservation
  - Facilitate investment planning

Value and Innovation

Scope and Scale:

Policies to facilitate mergers and acquisitions

- Deferred rebasing for 10 years while maintaining the savings
- Handbook describes approach to MAADs review

RPP pilots

- Pricing pilots designed to inform redesign of RPP to give customers more control

Adjudicative Model Review

Adjudicative Process Review - What did we do?

- Listened to stakeholders
  - Regulatory process should be more flexible
  - More focus on outcomes than on details of proposals
- Mapped and reviewed our current processes, metrics and results
- Researched and assessed various regulatory models

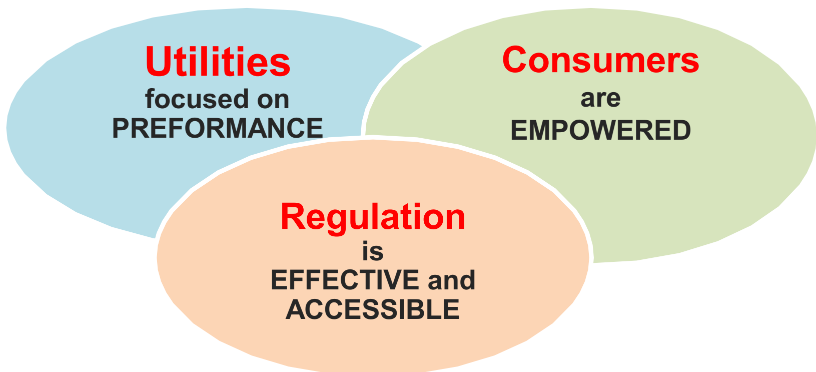
OEB's Approach to Process Review

- Enhanced Adjudicative Process
- Designed to:
  - Align regulatory review with performance-based regulation (RRF)
    - Focus regulatory oversight on utility performance
  - Reward utility efficiency, good governance and customer focus through reduced regulatory process
  - Optimize time and resources to focus regulatory attention on utilities and issues that require more detailed review
  - Ensure regulatory flexibility to adapt to a rapidly changing sector

Proportionate Review Rewards Performance

Performance

- Financial
- Operational
- Organizational
- Quality of service

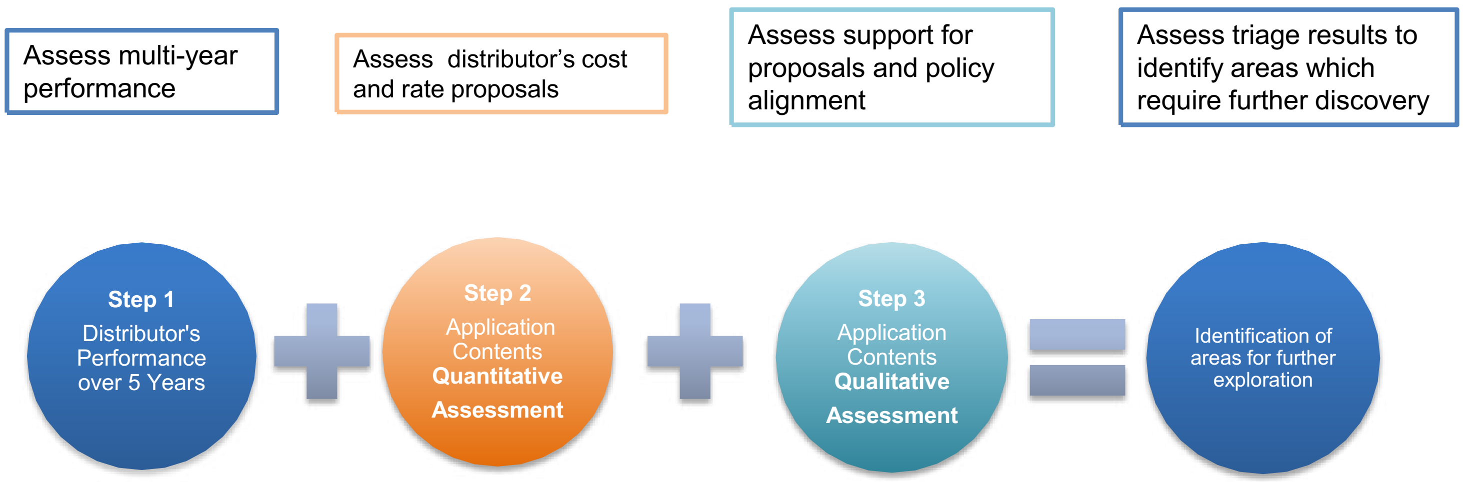


Enablers

- Robust benchmarking
- Performance reporting and monitoring
- Good corporate governance
- Customer engagement

Level of performance → Level of review

Initial Triage for Proportionate Review



Proportionate Review: Looking Ahead

- More emphasis on:
  - past performance
  - corporate governance
  - benchmarking
  - continuous improvement
- More effective use of monitoring
- Ongoing refinement of review process to incorporate continuous learning and greater proportionality