# 2022 APPLICATION REVIEW

# CUSTOMER CONSULTATION WORKBOOK

# About Lakefront Utilities Inc.

Lakefront Utilities Inc. (LUI) is an electricity distributor which serves the Town of Cobourg and the Village of Colborne. LUI is responsible for maintaining distribution and infrastructure assets over 30 square kilometers within the Cobourg and Colborne service areas. LUI currently serves approximately 10,000 residential and commercial customers across two service areas.

In 2000, LUI was incorporated under the Ontario Business Corporations Act, transforming the company into a business corporation and ensuring a significant departure from the past, when public utility commissions (PUCs) were the norm. LUI is a subsidiary of the Town of Cobourg Holdings Inc., which is owned by the Town of Cobourg and the Township of Cramahe. The Town of Cobourg is the majority shareholder at 99.99% and the Township of Cramahe is the minority shareholder at 0.01%.

Lakefront Utilities Inc. publishes its annual audited financial statements on its website, <u>https://www.lakefrontutilities.com/financial/</u>, as well as an annual report through Town of Cobourg Holdings Inc., <u>https://www.lakefrontutilities.com/annual-report/</u>

## What's This Consultation About?

The purpose of the customer consultations is to collect feedback on Lakefront Utilities Inc.'s (LUI/Lakefront) investment and spending plan for 2022 to 2026.

Lakefront Utilities Inc.'s goal is to deliver safe and reliable electricity to homes and local businesses as efficiently as possible and at an affordable price. In working to achieve that goal there is a balancing act that all utilities must consider when planning for the future: system reliability vs. the cost to consumers. Generally, the more reliable the system, the more expensive the system is to build and maintain.

This customer consultation is designed to collect your feedback on the reliability of the electricity distribution system and the spending decisions LUI will need to make over the next five years. Ultimately, this consultation will help LUI ensure alignment between its operational and capital investment plans and customers' needs and preferences.

As a LUI customer, this is an opportunity for you to tell your local distribution company what you think about its plan and the cost implications of the plan on you or the group you represent. This is also an opportunity for LUI to explain to its customers the challenges in operating and maintaining the local electricity distribution system, and more importantly how LUI intends to meet those challenges.

# To participate in this review, you do <u>not</u> need to be an expert on electrical distribution systems.

This workbook explains key parts of the electrical distribution system and is a framework for potential issues. Further details will be provided throughout the consultation process.

LUI does not expect you to make electrical engineering decisions. LUI wants to hear about the electricity issues that matter most to you and whether or not you feel the utility's spending and investing priorities seem reasonable.

This workbook is designed to give you enough background about these issues for you to develop an informed opinion about customers' needs, expectations, and preferences with the respect to Lakefront's operations.

### What is the process that Lakefront Utilities must follow?

The electricity industry in Ontario is regulated by the Ontario Energy Board (OEB), which requires electricity distributors, such as LUI, to identify customer needs and preferences related to its distribution system plan and follow a specific rate application process:

- 1. LUI assesses system needs
- 2. Collect customer feedback on Distribution System Plan
- 3. Refine Plan (where necessary)
- 4. Report on how plan responds to customer input

- 5. File plan with Ontario Energy Board
- 6. Interrogatories, technical conference, and rate hearing
- 7. Ontario Energy Board sets LUI's distribution rates

### HOW ARE ELECTRICITY RATES DETERMINED?

LUI is funded by the distribution rates paid by its customers. Periodically, LUI is required to file an application with the OEB to determine the funding available to operate and maintain the distribution system. LUI must submit evidence to justify the amount of funding it needs to safely and reliably distribute electricity to its customers.

### AS A CUSTOMER, HOW ARE MY INTERESTS PROTECTED?

LUI's rationale for a customer rate adjustment is assessed in an open and transparent public process known as a rate hearing. Any individual or group may intervene on LUI's application to ask questions or challenge LUI's plans and assumptions. At the end of the process, the OEB weighs the evidence and decides on the rates LUI can charge for distribution.

### WHY IS MY FEEDBACK IMPORTANT?

Your feedback will inform LUI's application for 2022 rates, which in turn will form the new base rates on which annual inflation adjustments will be applied in the 2023 to 2026 period.<sup>1</sup> Customer feedback will be presented to the OEB and public intervenors (who represent various ratepayer groups) when LUI files its application for 2022 rates. As part of the rate hearing process, the OEB will be reviewing how LUI acquired and responded to customer feedback in its planning process.

<sup>&</sup>lt;sup>1</sup> The OEB's current regulatory process for electricity distribution companies generally covers a 5 year period, wherein rates for year 1 of the period (in this case 2022) are determined after a comprehensive application is filed involving evidence covering all aspects of the distributor's operations and a full hearing process; rates in years 2-5 of the cycle involve a more simplified, mostly mechanical rate making mechanism based largely on rate changes that reflect annual inflationary increases plus or minus certain OEB determined adjustments.

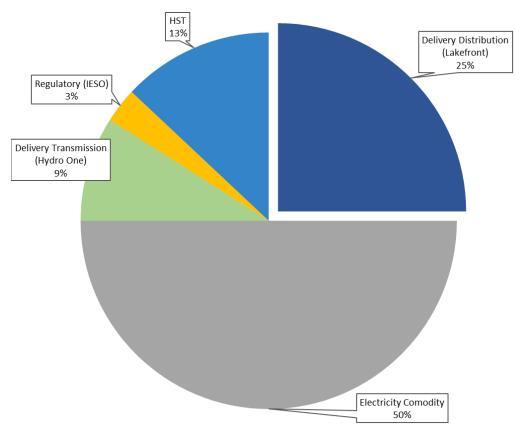
### **Electricity Bills: Understanding where your money goes**

As the electricity sector continues to transform at an unprecedented pace, it will be Lakefront's job to guide customers and businesses through these changes, and to prepare our electricity system for the future.

Every item and charge on your bill is mandated by the Provincial government and regulated by the Ontario Energy Board. There are two distinct cost areas that make up the "Delivery" charge on your bill: distribution and transmission. While LUI collects both, the transmission charge is remitted to Hydro One. The distribution charges include the portion of your bill that fund LUI's operation and maintenance of its distribution system, as well as some "pass through" charges, most of which are remitted to the Independent Electricity System Operator (IESO).

LUI's distribution charges make up about 25% of the typical residential customer's (750 kWh per month) total electricity bill; the other 75% of the total electricity bill goes mostly towards Hydro One's transmission charges and the cost of actual electricity you consume.

LUI's distribution rates are subject to the review and approval of the OEB. The distribution fees collected from customers cover the cost of LUI's capital investments and operating expenses.



# What Does it Cost to Run LUI's Distribution System?

Like most businesses, LUI manages its spending in two budgets – an operating budget and a capital budget.

LUI's operating budget covers regularly recurring expenses such as payroll for employees, maintenance tools, equipment, and assets. LUI's capital budget covers items that, when purchased, do not need to be repurchased for some time and which have lasting benefits over many years. This includes much of the equipment that is part of the distribution system, such as poles, wires, cables, transformers, computer equipment, vehicles, and facilities. As a result of this, sometimes capital expenses fluctuate year over year and should be considered as an average over a set term. The average capital expenditures per year for LUI over the last five-year period is approximately \$1.6M per year.



Managing the distribution system requires millions of dollars for maintenance, system renewal, and running the day-to-day operations. In its last fiscal year (2019), LUI's operating expenses and capital expenditures totalled \$3,802,823.

As part of the consultation, Lakefront will detail the capital spending throughout 2017 to 2020 and 2022 to 2026. Once the Distribution System Plan is completed, Lakefront will provide additional information related to specific capital projects.

# How does Lakefront Utilities set its budgets?

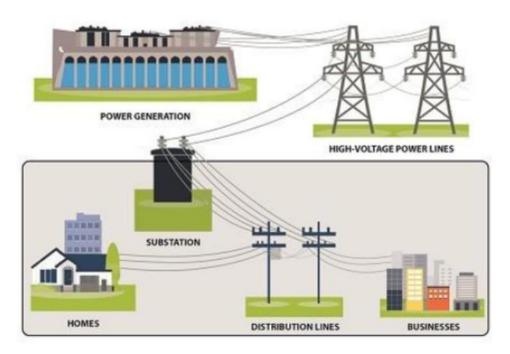
Utilities have assigned municipally-based service territories and do not operate in competitive markets like most private businesses. Consumers cannot choose who delivers power to their homes and businesses; LUI is the only electricity delivery choice in Cobourg and Colborne. Due to their market structure, utilities are highly regulated to ensure that they are offering their customers reliable services at a reasonable price.

Regular businesses have their net income determined by the market price for their services or goods, minus their actual expenses. Whereas regulated utilities have their price determined by the OEB based on an assessment by the OEB of their reasonable expenses and investment in capital including a reasonable return on investment.

Top Down Approach	Bottom Up Approach
Private Business	Regulated Ontario Utility
Revenue	= Revenue Requirements
- Cost of Goods Sold	+ Taxes
- Operating Expenses	+ Interest
- Depreciation	+ Depreciation
- Interest	- Other Revenue
- Taxes	+ Operating Expenses
= Net Income	Net Income (Return on Equity)

# **Capital Plan**

The energy sector is undergoing rapid transformations involving all aspects of the industry including environmental issues, shifts in public perception, workforce requirements and labour issues, Ontario Energy Board challenges, and technological developments. Every distribution system is unique with its own history and challenges. In order to better understand LUI's distribution system, we first have to understand all of the different components and how they impact the way in which you receive electricity when you need it.



**High Voltage Transmission:** Hydro One's high voltage transmission lines connect LUI's distribution system to electricity generating stations across the province.

**Transmission Stations:** Transmission stations reduce high voltage electricity from transmission lines to medium voltage which is fed into LUI's distribution feeder system.

**Overhead System:** The overhead system includes the wires, poles and pole top transformers that are commonly seen across LUI's service territory.

**Underground System:** The underground system is directly buried and/or installed in ducts. At certain intervals, underground service chambers (with manholes) are required to permit cables to be spliced together and to allow underground equipment such as switches to be housed.

LUI adheres to the Ontario Energy Board's Distribution System Code that sets out good utility practices, minimum performance standards, and minimum inspection requirements for distribution equipment.

LUI maintains and regularly updates an asset management plan, which is an evolving blueprint for maintaining the utility's infrastructure and other assets to deliver an agreed standard of service. The asset management plan documents the health of thousands of individual pieces of infrastructure, equipment, and assets that must work seamlessly together to deliver reliable electricity to customers.

Historically, maintaining and upgrading infrastructure equipment has been achieved with only a moderate increase in customers' bills. The asset management plan takes into consideration both current and future system reliability needs as well as the cost implications of these upgrades. Despite best practices there are several assets within LUI's distributions system that are nearing the end of their useful life and, as such, have been identified as candidates for replacement. For example, Lakefront's 2022 capital budget includes:

- The replacement of overhead infrastructure on Elgin St. in Cobourg over a five-year period.
- Replacement of 27 poles and transformers on Parliament St. in Colborne.
- Replacement of 16 poles and transformers on Victoria St. in Colborne.

# How does Lakefront determine the appropriate amount of capital spending related to existing infrastructure?

Lakefront maintains a full schedule of distribution asset inspection and maintenance programs operating on a three-year rotation required by the OEB's Distribution System Code. Inspection, maintenance, and operational data that is collected and recorded by the company and is used to maintain and update the asset source data and support Lakefront's operating and capital expenditure plans.

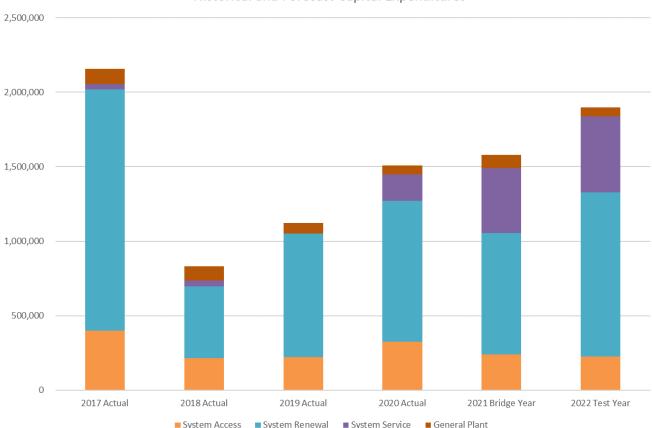
### What are the major issues Lakefront Utilities needs to address?

Over the years, LUI has worked hard to keep its equipment working well beyond its originally expected life, to get maximum value for money. However, LUI's key challenge still comes from the need to continue investing in system assets to keep up with growth, in addition to replacing aging equipment.

Between 2022 and 2026, the capital expenditures required to address system renewal, maintain system reliability, and invest in other infrastructure priorities are estimated by LUI to be \$1,900,000 per year.

To assist in prioritizing what needs to be replaced and by when, LUI uses an Asset Condition Assessment (ACA) and a Distribution System Plan (DSP) to drive replacement decisions; through the use of the assessment and planning processes LUI is able to strategically and proactively target the replacement of assets that are likely to fail in the near future in a cost efficient manner and planned manner, avoiding where possible the need to reactively (and, consequently, more expensively) replace equipment that has already failed.

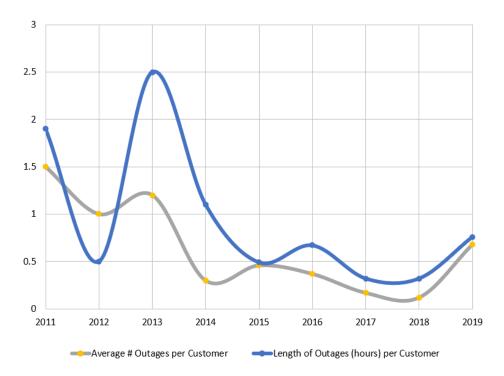
Overall, capital expenditures between 2022 and 2026 are expected to remain consistent at approximately \$1.9 million annually. As part of the consultation process, Lakefront will provide additional information once the ACA and DSP are complete and will detail the drivers behind the costs. Throughout this period, much of LUI's capital expenditure budget will be spent on system renewal projects in the Cobourg and Colborne service areas. For example, the ACA identified poles to be replaced so Lakefront has increased its annual pole replacement spending to ensure the integrity of the system. The major capital additions in 2022 include the replacement of existing overhead infrastructure that has reached its end of life, and the voltage conversion program.



#### Historical and Forecast Capital Expenditures

## **System Reliability**

No distribution system can deliver 100% reliable electrical service. From time-to-time, customers will experience a power service interruption. Generally, the more reliable the system, the more expensive the system is to build, operate, and maintain. As such, LUI faces a balancing act between maintaining and improving system reliability and controlling the cost to maintain and operate the distribution system.



For most customers, the key test of system reliability is "do the lights stay on"? LUI constantly tracks both the number of power service interruptions per customer and how long those outages last and analyzes that data on a year-to-year basis. The reliability indices produced by the collected reliability data indicate that (aside from loss of supply from Hydro One) equipment failure, tree contact, and foreign interference are three of the key contributors to customer outages.

Outages caused by equipment failure is one of the main reasons LUI is compelled to reinvest in its capital infrastructure.

As illustrated in the table below, LUI's reliability statistics compare favourably among similar sized utilities.

Utility	Number of Customers	Length of Outages (hours)	Average # Outages per Customer
Lakefront Utilities Inc.	10,546	0.76	0.68
Algoma Power Inc.	11,732	7.33	3.39
Grimsby Power Inc.	11,631	5.00	3.44
Ottawa River Power Corporation	11,320	7.53	1.35
Niagara-on-the-Lake Hydro Inc.	9,558	0.50	0.38
Tillsonburg Hydron Inc.	7,129	0.96	0.56

### Source: 2019 OEB Scorecard

Benchmarking does not explain all the information and nuances for each LDC. The outage analysis and system performance measures provide a general overview of Lakefront's distribution system during 2019.

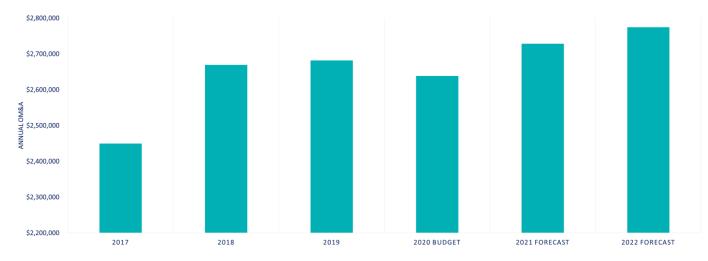
# **Operations, Maintenance and Administration (OM&A) Expenses**

In addition to its capital budget, Lakefront Utilities needs to consider its operating budget which also impacts customers' bills.

Cost drivers contributing to the operating budget can largely be attributed to ongoing maintenance and management of the distribution system. An example of this type of cost driver is LUI's vegetation program, including tree trimming, designed to lessen the impact of falling tree branches on power lines.

During the last five years, Lakefront Utilities has demonstrated its ability to minimize annual cost increases. In fact, in 2019 LUI had the 4<sup>th</sup> lowest OM&A cost per customer out of 60 utilities in the province.

Lakefront Utilities is continually looking for ways to improve its business processes in order to comply with the increasing responsibilities and obligations being established for local distribution companies, without negatively impacting overall costs to customers.



LUI's planning, prioritization, and investment processes follow good utility practices that are executed through the Distribution System Plan. Good utility practices have inherent cost savings through sound decision making, thoughtful compromises, right timing, and optimum expenditure levels.

# What Will Lakefront Utilities' Plan Cost Customers?

### **Rate Implementation**

LUI's last Cost of Service application was filed for rates effective January 1, 2017. During the years between Cost of Service applications, the OEB approves marginal increases to distribution rates (based on an allowance for inflation less an adjustment for expected efficiency gains) without reviewing any of the specific cost pressures experienced by the company outside of a few predetermined exceptional cases.<sup>2</sup> While LUI does its best to keep its rates low, sometimes the rates charged to customers are lower than required to adequately maintain the distribution system.

This rate setting method often results in a revenue shortfall because investments made in the years between COS applications are not recognized and thus do not allow for any rate adjustment to address the scope of the investments made by the company to meet needs of its customers. As a result, when utilities apply for new distribution rates, there is often a material increase in rates in the rebased rate year to rebalance revenue requirements to reflect the actual costs associated with operating and maintaining the distribution system.

### **Bill Impact**

In 2022, LUI estimates that an additional \$1.66 per month will be required of the average residential customer (monthly consumption of 750 kWh) to operate, maintain, and modernize LUI's electricity distribution system.

Rate Class	Current Total Bill	Proposed Total Bill	\$ Difference	% Difference
Residential - RPP	111.75	113.41	\$1.66	1.49%
Residential - non-RPP	139.67	141.96	\$2.29	1.64%
Residential - RPP - 10th percentile	48.09	48.94	\$0.85	1.77%
Residential - non-RPP - 10th percentile	62.03	63.26	\$1.23	1.99%
GS <50 kW - RPP	278.50	283.09	\$4.59	1.65%
GS <50 kW - non-RPP	345.33	351.65	\$6.32	1.83%
GS 50-2999 kW	11,658.80	11,835.48	\$176.68	1.52%
GS 3000-4999 kW	198,786.38	201,846.37	\$3,060.00	1.54%
Unmetered Scattered Load	92.99	93.88	\$0.89	0.96%
Sentinel Lighting	46.27	47.53	\$1.26	2.73%

<sup>&</sup>lt;sup>2</sup> Utilities can apply for special rate increases to account for unusual, large capital projects (the OEB's Incremental Capital Module) or unforeseen events (through the OEB's Z-Factor process). Between 2017 and 2019 LUI did not apply for any such special relief.

# Benchmarking

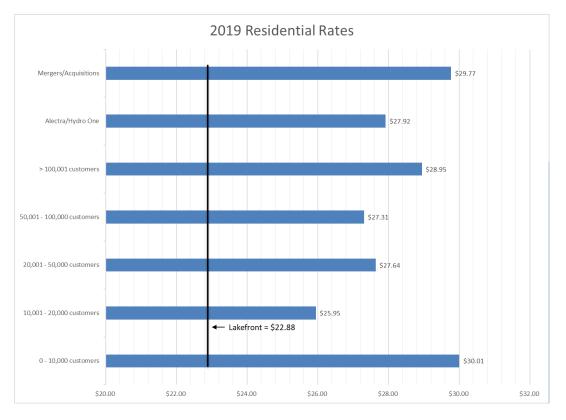
Electric utilities do not operate in markets where they are free to set the price at which they sell their product and service. The process serves to represent the interest of the ratepayer, to ensure utilities provide a reasonable level of reliability in service at a reasonable price.

It is not uncommon for utility regulators to compare performance between similar utilities. It is assumed such comparisons will serve to monitor progress in efficiency or provide meaningful information to regulators, ratepayers, and shareholders. The use of benchmarking by utilities to identify industry trends, practices, and common or emerging issues for the purposes of continuous improvement is a valid application.

Customer needs and expectations, the pacing and prioritization of investment, utility performance and comparison among other utilities are all factors that Lakefront considers and are intended to drive effectiveness and continuous improvement.

### **Residential Distribution Rates**

Lakefront is one link in the complex chain that brings electricity from the generation plant to homes and businesses. LUI's strong financial base continues to guide long-term investment in the grid, and provides value to customers and shareholders. Customers understand the value in fair and reasonable rates for the services that LUI provides.



The above analysis compares Lakefront's 2019 residential rate among utilities based on customer size.

Based on 2019 residential rates, Lakefront has the 9th lowest residential rate in the province. Further, the analysis indicates that the average LDC size for the 10 LDCs with the lowest rates is 26,850 customers, whereas Lakefront's customer size is approximately 10,800.

### **Operating, Maintenance, and Administration Costs**

Operating, Maintenance, and Administrative expenditures (OM&A) are highly diverse and reflect all aspects of the electricity distribution business. They are driven by a multitude of factors, including distribution project expenditures that cannot be capitalized and hence must be treated as period expenses: expenditures on training and workforce renewal, costs of customer service and billing, expenditures on information technology, distribution support, and administrative and general costs including finance, legal, human resources, regulatory and communications expenses.

Lakefront's OM&A cost per customer in 2019 was \$501 per customer and the average increase from 2015 to 2019 was \$54 per customer or 2.42%.

Lakefront's \$501 per customer compares favourably with the rates of other LDCs in the Province.

2019 OM&A Cost per Customer				
1	Hydro Hawkesbury Inc.	\$289		
2	E.L.K. Energy Inc.	\$418		
3	Wasaga Distribution Inc.	\$468		
4	Lakefront Utilities Inc.	\$501		
5	Cooperative Hydro Embrun Inc.	\$511		
6	Welland Hydro-Electric System Corp.	\$512		
7	Kitchener-Wilmot Hydro Inc.	\$524		
8	Hydro 2000 Inc.	\$530		
9	Ottawa River Power Corporation	\$530		
10	Hearst Power Distribution Company Limit	\$539		
51	Hydro One Networks Inc.	\$1,051		

Source: 2019 OEB Scorecard

Most distributors in the province have experienced increases in total costs required to deliver quality and reliable services to customers. The above benchmarking is a strong indication that Lakefront's previous plans are working, and our performance is consistently meeting expectations.