EXHIBIT 4

OPERATING EXPENSES

PUC Distribution Inc • EB-2022-0059 • Filed: August 31,2022

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EXHIBIT 4: OPERATING EXPENSES

4.1. OVERVIEW

Operating costs for PUC Distribution Inc. ("PUC") consists of the required expenditures necessary to maintain and operate its distribution system assets, provide customer service activities, meter, bill and collect payment from customers, and ensure the safety of all stakeholders (public, employees, etc.). These costs enable PUC to maintain distribution service quality and reliability standards that are in compliance with the Distribution System Code and the requirements of other regulatory bodies (OEB, IESO, ESA, and the Ministry of Energy, Northern Development and Mines), while continuing to maintain the level of reliability and service that our community and customers expect from PUC.

PUC determines its Operating, Maintenance and Administration ("OM&A") costs through an analysis of the costs it incurs to operate and maintain the distribution system while remaining responsive to regulatory changes. PUC, through its affiliate PUC Services Inc. ("PUCS") operates using an 'at cost' shared services model. PUC has no employees but rather relies on PUCS to provide the necessary resources to operate the distribution utility. The model allows resources to be allocated to PUC as required especially during times when special or non-recurring projects are undertaken. In general, expenses may fluctuate between categories as more attention is required for a specific category due to a specific need, emergency or a change to regulated/mandated services to be provided. Also, in general, inflationary increases put upward pressure on costs.

4.1.1. OM&A Test Year Levels

PUC's total OM&A expenses from the OEB 2018 approved to the 2023 Test Year are summarized in Table 4-1 below. Total OM&A Expenses in the 2023 Test Year are $13,533,701. PUC proposes to recover total OM&A expenses in distribution rates. In this Exhibit, information is provided on key initiatives, trends, and material year-over-year variances. As well, details on staffing and compensation costs, and details on shared services are provided.

Table 4-1: 2023 Test Year OM&A Expenses

Description	Last Rebasing Year 2018 OEB Approved	2023 Test Year
OM&A	$ 11,176,156	$ 13,533,701

OM&A consists of the required expenditures necessary to maintain and operate PUC's distribution system assets and serve customers. These include the costs associated with metering, billing, collecting from customers, the costs associated with ensuring stakeholders safety (public, employees, etc.) and costs to maintain the distribution business service quality and reliability standards in compliance with the Distribution System Code and other regulatory bodies (IESO, ESA etc.).

PUC believes that the level of planned OM&A expenditures is appropriate, reasonable and takes into consideration customer feedback and preferences, optimal productivity, and improved reliability and service quality. Aligned with historical spend, this level of OM&A ensures PUC will meet government mandated obligations and be able to respond to OEB directives in a timely and responsible fashion.

4.1.2. OM&A Budget Process

The OM&A operating budget is prepared annually by management and is reviewed and approved by the Board of Directors. The budget is prepared prior to the start of each fiscal year and provides a plan against which actual results may be evaluated. Once approved, the budget is only revised if a material change to the plan is required. Capital and operating budgets are formulated to achieve PUC's business objectives in a prudent and sustainable manner while considering customer rate impacts.

The following directives and processes are used to prepare the annual budgets:

- Non-Labour expenses for all department budgets are built using previous year actuals, current year forecast and current year budgets as the base. For example, when compiling the 2022 budget, the previous year actual (2020), the current year forecast (2021), and the current year budget (2021) would be used;
- Significant variances in spending from prior years must be explained;
- Review headcount of each department for accuracy and outline any changes;
- Prepare a total labour budget by department using projected wage and benefit costs. Overtime and account distribution are based on previous years actual plus any identified changes for the future year;
- The Finance department completes an initial consolidation of all departments to develop draft budgets. Finance works with each department to identity variances and other issues for consideration;
- Senior management reviews the draft budgets and makes changes to balance cost control with achieving core objectives. In an effort to contain costs, explore efficiencies and still provide an acceptable level of reliability and customer service, the team looks

in detail for discretionary costs and identifies cost areas that can be delayed or addressed with alternative approaches; and

- Senior management makes a submission to the Board of Directors on the proposed budgets for formal approval.

4.1.3. Associated Cost Drivers and Significant Changes

PUC's OM&A plan is developed to ensure that it continues to provide reliable, efficient and safe energy solutions to the community by achieving its core strategic objectives. The plan was formed by a number of factors, including operational needs (e.g., requirements relating to capital investment; operations and maintenance; and staffing), legislative and regulatory obligations and ongoing engagement with customers.

As shown in Table 4-2, PUC's increase in OM&A spending from the 2018 OEB Approved to the 2023 Test Year amounts to $2,357,545 or 21.1 % over the last 5 years or a compound annual growth rate of 3.9% per year. The OM&A costs in the 2023 Test Year reflect the resourcing mix and work activities required to meet customer expectations, growth and broader public policy requirements.

Table 4-2: 2023 Test Year vs. 2018 Board Approved

Test Year vs 2018 Board Approved	2018 Board Approved	2023 Test Year	Variance
Operations	$4,029,899	$4,434,334	$404,435
Maintenance	$2,106,659	$2,901,131	$794,472
Customer Service	$2,037,039	$2,043,800	$6,762
Administration	$3,002,559	$4,154,436	$1,151,876
Total OM&A	**$11,176,156**	**$13,533,701**	**$2,357,545**
Percentage change			**21.1%**

The increase can be categorized by additional spend in Operations of $404,435, Maintenance of $794,472 and Administration of $1,151,876. In general, other than inflation, the increases are primarily due to the following:

- 2 FTEs as a result of the ongoing OM&A associated with Sault Smart Grid ("SSG"), estimated at $260,000 [ICM SSG EB-2018-0219/2020-0249];
- Updates to the PUC Services Shared Cost Allocation Model, filed as Appendix B in Exhibit 4, outlining an increase of $160,000; and
- Increased Cyber Security, Regulatory and IT resources (i.e., Green Button and APB Benchmarking) resulting in increased costs of $123,000.

This will be discussed in detail further in this Exhibit.

4.1.4. Inflation and Overall Trends

PUC provides a reliable supply of electricity to customers in a safe and efficient manor while accommodating and complying with many stakeholders, codes and regulations. The ongoing trend to improve business standards and processes results in the development of better techniques. PUC makes use of these improvements to ensure that it is taking advantage of "best practice" information shared throughout the industry.

Activities at PUC are fundamentally driven by the direction of the OEB and its mandates and vision. The OEB continues to focus on increasing customer value and prudent system planning as provided in the Renewed Regulatory Framework for Electricity Distributors ("RRFE"). In general, PUC has maintained costs while accommodating higher standards, best practice, and ongoing change within the inflationary parameters since the last COS application.

For 2022 and 2023 budgeted OM&A expenses, PUC incorporated inflationary increases for unionized labour per collective agreements of 2%, Executive and Management labour increases per PUC's management compensation policy and other non labour items at a general inflation rate of 3%. Other than these inflationary items, additional OM&A expenses include costs for SSG, increased IT and regulatory expenses, increases in maintenance of equipment, and increases due to updates to the Shared Services Cost Allocation Model.

PUC recognizes that the Input Price Index ("IPI") effective for a rate application in 2022 is 3.3%. PUC expects the IPI to increase further in 2023 to above 7.7%[1] (CPI May 2021 to May 2022). Given the uncertainty surrounding the impact of rising inflation rates, PUC notes this will require further assessment during the proceeding as the situation evolves.

Table 4-3 below shows the historical inflationary OM&A increases using OEB approved inflation less PUC's productivity factor of 0.30%. The total increase from 2022 to 2023 Test Year due to inflation is $447,630.

Table 4-3: OM&A Inflation Trend Comparison

	2018 Board Approved	2019 inflationary	2020 inflationary	2021 inflationary	2022 inflatonary	2023 inflationary
OM&A	$11,176,156	$11,293,505	$11,468,555	$11,686,457	$12,037,051	$12,927,793
OEB Inflation (Less Productivity)		1.05%	1.55%	1.90%	3.00%	7.40%
2023 Revenue at Existing Rates Allocation in Proportion to 2018 Approved						$12,480,163
		Increase in OM&A due to inflation				**$447,630**

As shown in Table 4-4, OM&A expenses have increased from the 2018 Approved amount of $11,176,156 to the request of $13,533,701 in the 2023 Test year. This equates to a compound

[1] Consumer Price Index, monthly, not seasonally adjusted (statcan.gc.ca) as of July 2022

annual growth rate ("CAGR") of 3.9%. Despite business environment pressures, PUC's OM&A expenses have tracked to inflation increases from 2019 to 2022. A number of new costs over the cost-of-service period have increased costs in the 2023 Test Year request approximately 1.30% above inflation (IPI less productivity factor). The new OM&A costs are discussed further in this Exhibit.

Table 4-4: Actual/Forecast OM&A

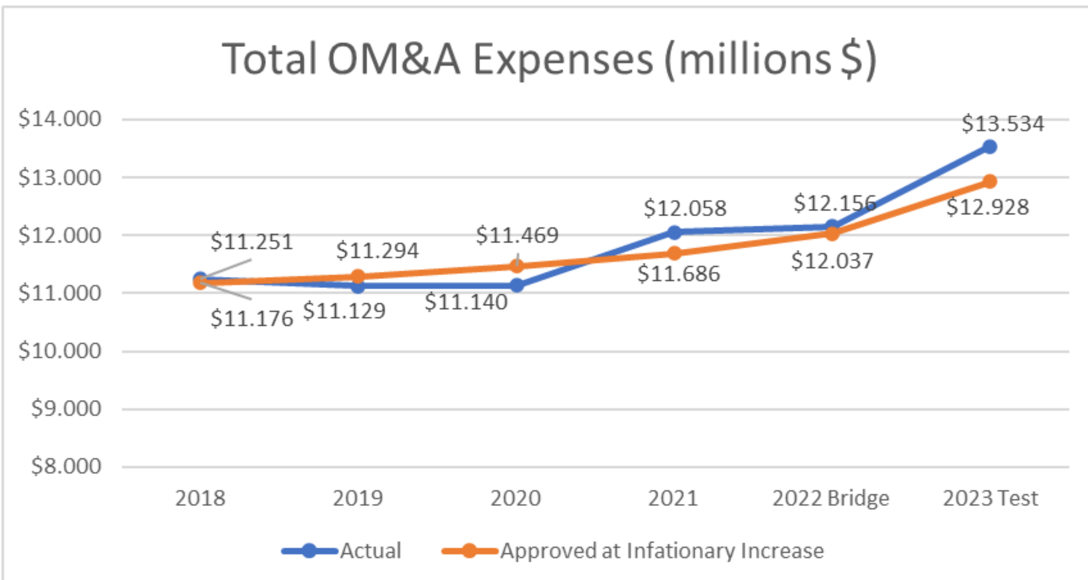
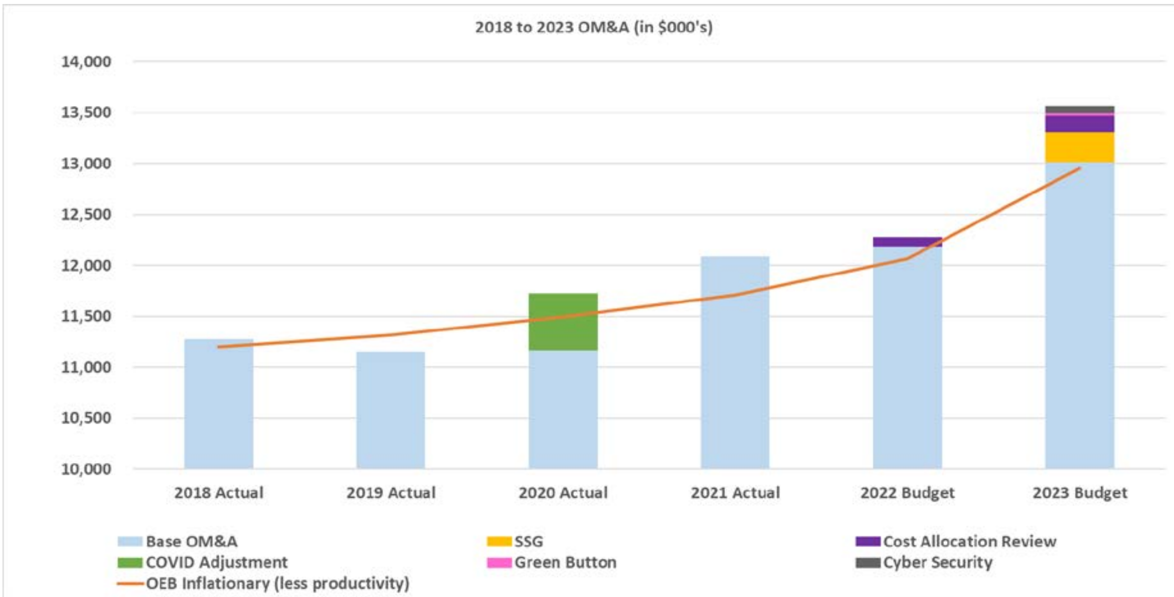


Table 4-5 shows PUC's trend in actual OM&A costs with the 2022 Bridge year and 2023 Test year as compared to OEB's IRM formula (inflation less productivity factor).

Table 4-5: 2018 Actual to 2023 Test Year Inflation Comparison



Overall PUC's OM&A has remained close to the OEB's IRM increases while navigating the COVID-19 pandemic impacts in 2020 and 2021. The slight increase in 2020 is due to COVID related costs that PUC is not seeking recovery for as it was reversed in 2021.

In the 2022 Bridge year, there is an increase in costs due to reallocation of shared costs following a tendered, detailed, independent, third-party cost allocation review completed by BDR North America ("BDR"). This review, lead by Paula Zarnett at BDR, was an update to the report from RDI Consulting Inc. that was filed with PUC's 2018 COS rate application. Overall, BDR's review supported the historical methodology used by PUC with updates to current payroll data for time studies and direct charges. This resulted in a slight increase in costs being allocated to PUC. The full cost allocation review report is discussed further below.

For the 2023 Test year, PUC included the increased costs from the cost allocation review, as well as incremental OM&A arising from the SSG. In addition, PUC is managing incremental costs and resources arising from other priority requirements including its Green Button implementation, Cyber Security and additional performance benchmarking activities. Green Button incremental initiative costs for 2022 have been recorded in the generic Account 1508 Deferral Account, however, PUC has included costs in OM&A for the 2023 Test year. The result is 2023 OM&A costs that are slightly above the IRM formula.

PUC continues to prudently manage OM&A costs and in 2020 PUC moved from the Group IV to the Group III cohort in the Pacific Economics Group Research ("PEG") report. The distributors in lower cohorts get rate reduction adjustments to recognize cost efficiency improvements, which in turn leads to lower distribution costs and rates. PUC assumed it would remain in the Group III cohort for purposes of this Application.

The OM&A per customer is provided in table 4-14. It breaks down the O&M per customer and Admin per customer. The following Table 4-6 shows the trend in changes to OM&A per component from the 2018 Board Approved through 2023 Test Year.

Table 4-6 Trend in OM&A per customer

OM&A cost per customer	2018 Actuval vs 2018 Board Approved	2018 Actual vs 2019 Actual	2019 Actual vs 2020 Actual	2020 Actual vs 2021 Actual	2021 Actual Vs 2022 Bridge Year	2022 Bridge Year vs 2023 Test Year		5 Year Change	CAGR
O&M per customer	(2.1%)	2.6%	1.8%	(0.8%)	4.4%	8.7%		17.5%	3.3%
Admin per customer	4.0%	(4.4%)	(2.8%)	19.7%	(3.0%)	13.9%		22.9%	4.2%
Total OM&A per customer	0.6%	(0.6%)	(0.2%)	7.9%	0.9%	11.0%		19.9%	3.7%

Overall PUC is trending at a CAGR of 3.3% for O&M per customer and 4.2% for Admin per customer. This averages out to be a CAGR of 3.7% per customer which is below the inflationary CAGR of 3.9%.

4.1.5. Business Environment Changes

Since PUC's last rebasing in 2018, there have been a number of significant business environment changes impacting PUC's operating expenses. These changes include the COVID-19 pandemic, an aging workforce, and new rules and requirements implemented by the OEB and Ontario Government. The following are some of the impactful regulatory changes since 2018:

- Changes to the Customer Service Rules impacting the processes for collection of overdue accounts (EB-2017-0183, the OEB's "Review of Customer Service Rules" initiative);
- The implementation of the OEB's Cybersecurity Framework;
- The implementation of the Ontario Rebate for Electricity Consumers;
- The implementation of the Customer Choice initiative which allows smart metered Regulated Price Plan ("RPP") customers to select between Time of Use ("TOU") and Tiered pricing;
- Wind-down of the Conservation First Framework; and
- The administration of the COVID-19 Energy Assistance Program ("CEAP").

The COVID-19 pandemic created significant challenges in PUC's business environment, but PUC reacted quickly and took measures to ensure continued public and employee safety as well as continued excellent service to its customers. Some of these impacts and actions are summarized below:

- Where possible, PUC deployed staff in applicable roles to working from home. For those positions where this was not possible, PUC ensured appropriate safety equipment, facilities and protocols were in place. PUC introduced separate employee working pods to prevent cross departmental exposure and extended sick days to prevent the spread of COVID-19;

- Consistent with Ontario-wide trends summarized by IESO, PUC saw an increase in residential consumption in 2020, as many workers and families were home during school/business hours at certain points throughout the year. Changes to the consumption patterns and consumption levels of business customers were also impacted, particularly for smaller businesses by lock down orders throughout the pandemic; and
- Although PUC worked through the COVID-19 pandemic without stoppage, the pandemic and the ensuing lockdowns did result in some cost reductions in fiscal 2020. Examples include discretionary spending for items such as training and travel due to restrictions and safety protocols. These savings would have been offset by additional resources in other areas, such as splitting workers into separate vehicles on jobs and increases in billing time to adjust for government programs. PUC did track and allocate the costs related to COVID additional activities in the approved COVID-10 Deferral and Variance account in 2020 and subsequently reversed these costs in 2021 based the guidance issued by the OEB in June 2021. In this respect, PUC acknowledges that the COVID-19 pandemic had to be taken into consideration while reviewing historical actual results presented in this Exhibit for the 2020 and 2021 fiscal years as they are not typical years.

With respect to an aging workforce, PUC has seen a number of retirements in key roles over the past several years. Since 2018, there have been 43 retirements in PUCS relative to the typical headcount of 171 positions, with an estimated 48% or 21 FTEs related directly to PUC.

As a strategic initiative, PUC is working to prepare a gap analysis which will identify the skillsets required to fill key roles within its organization. Once complete, a talent strategy will be developed and implemented which will focus on innovative opportunities to address future gaps through internal and external resources. A leadership development program is also being implemented to address the skills sets identified through the gap analysis so PUC can find opportunities to mentor and train internal resources for potential future promotion opportunities.

4.2. OM&A SUMMARY AND COST DRIVER TABLES

PUC follows the OEB's Accounting Procedures Handbook ("APH") in categorizing work performed between operations and maintenance. A summary of PUC's OM&A expenses for the 2018 Board Approved, 2018 Actual, 2019 Actual, 2020 Actual, 2021 Actual, 2022 Bridge Year and 2023 Test Year is provided in Table 4-7 – OM&A Summary (Board Appendix 2-JA) below, which is OEB's model live excel file, "PUC_2023_Filing_Requirements_Chapter 2, Appendices, Tab App.2.JA_OM&A_Summary Analysis". PUC notes, with respect to Appendix 2-JA, when it reviewed the prepopulated historical actual costs in the OEB Chapter 2 Appendices model that was made available to the 2023 Cost of Service filers, PUC identified a difference between the total aggregate OM&A costs filed in its annual 2.1.7 RRR Trial Balance each year as compared to the pre-populated aggregate OM&A in the model. PUC made adjustments to align to allocations between specific general ledger accounts to make them consistent with the allocations being used for the 2022 Bridge Year and the 2023 Test Year. These variances were due to the exclusion of Account 4815 – Station Buildings and Fixture expenses included in RRR and inclusion of LEAP amounts in RRR. The total variances are not material at +/- $20,000.

Table 4-7: Summary of Recoverable OM&A Expenses (Board Appendix 2-JA)

	2018 Last Rebasing Year OEB Approved	2018 Last Rebasing Year Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year
Operations	$ 4,029,899	$ 3,679,895	$ 4,151,756	$ 4,074,970	$ 3,935,625	$ 4,028,374	$ 4,434,334
Maintenance	$ 2,106,659	$ 2,329,918	$ 2,150,490	$ 2,359,394	$ 2,471,213	$ 2,652,070	$ 2,846,131
SubTotal	**$ 6,136,558**	**$ 6,009,813**	**$ 6,302,246**	**$ 6,434,364**	**$ 6,406,837**	**$ 6,680,445**	**$ 7,280,465**
%Change (year over year)		-2.1%	4.9%	2.1%	-0.4%	4.3%	9.0%
%Change (Test Year vs Last Rebasing Year - Actual)							21.1%
Billing and Collecting	$ 1,416,684	$ 1,381,283	$ 1,354,435	$ 1,333,216	$ 1,370,350	$ 1,237,795	$ 1,290,441
Community Relations	$ 620,355	$ 595,226	$ 640,859	$ 574,049	$ 635,277	$ 697,054	$ 753,359
Administrative and General	$ 3,002,559	$ 3,264,474	$ 2,831,111	$ 2,798,172	$ 3,645,134	$ 3,540,744	$ 4,209,436
SubTotal	**$ 5,039,598**	**$ 5,240,984**	**$ 4,826,405**	**$ 4,705,436**	**$ 5,650,761**	**$ 5,475,593**	**$ 6,253,236**
%Change (year over year)		4.0%	-7.9%	-2.5%	20.1%	-3.1%	14.2%
%Change (Test Year vs Last Rebasing Year - Actual)							19.3%
Total	**$ 11,176,156**	**$ 11,250,796**	**$ 11,128,652**	**$ 11,139,800**	**$ 12,057,598**	**$ 12,156,038**	**$ 13,533,701**
%Change (year over year)		0.7%	-1.1%	0.1%	8.2%	0.8%	11.3%

	2018 Last Rebasing Year OEB Approved	2018 Last Rebasing Year Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year	Variance 2022 Brdige Approved vs. 2023 Test Year	Variance %
Operations	$ 4,029,899	$ 3,679,895	$ 4,151,756	$ 4,074,970	$ 3,935,625	$ 4,028,374	$ 4,434,334	$ 405,960	10.1%
Maintenance	$ 2,106,659	$ 2,329,918	$ 2,150,490	$ 2,359,394	$ 2,471,213	$ 2,652,070	$ 2,846,131	$ 194,060	7.3%
Billing and Collecting	$ 1,416,684	$ 1,381,283	$ 1,354,435	$ 1,333,216	$ 1,370,350	$ 1,237,795	$ 1,290,441	$ 52,646	4.3%
Community Relations	$ 620,355	$ 595,226	$ 640,859	$ 574,049	$ 635,277	$ 697,054	$ 753,359	$ 56,305	8.1%
Administrative and General	$ 3,002,559	$ 3,264,474	$ 2,831,111	$ 2,798,172	$ 3,645,134	$ 3,540,744	$ 4,209,436	$ 668,692	18.9%
Total	**$ 11,176,156**	**$ 11,250,796**	**$ 11,128,652**	**$ 11,139,800**	**$ 12,057,598**	**$ 12,156,038**	**$ 13,533,701**	**$ 1,377,663**	**11.3%**
%Change (year over year)		0.7%	-1.1%	0.1%	8.2%	0.8%	11.3%	$ 2,357,545	**21.1%**

	Last Rebasing Year 2018 OEB Approved	Last Rebasing Year 2018 Actuals	Variance 2018 OEB Approved - 2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	Variance 2022 Bridge vs. 2021 Actuals	2023 Test Year	Variance 2023 Test vs. 2022 Bridge
Operations	$ 4,029,899	$ 3,679,895	$ 350,004	$ 4,151,756	$ 4,074,970	$ 3,935,625	$ 4,028,374	$ 92,750	$ 4,434,334	**$ 405,960**
Maintenance	$ 2,106,659	$ 2,329,918	-$ 223,259	$ 2,150,490	$ 2,359,394	$ 2,471,213	$ 2,652,070	$ 180,858	$ 2,901,131	**$ 249,061**
Billing and Collecting	$ 1,416,684	$ 1,381,283	$ 35,401	$ 1,354,435	$ 1,333,216	$ 1,370,350	$ 1,237,795	-$ 132,555	$ 1,290,441	**$ 52,646**
Community Relations	$ 620,355	$ 595,226	$ 25,128	$ 640,859	$ 574,049	$ 635,277	$ 697,054	$ 61,777	$ 753,359	**$ 56,305**
Administrative and General	$ 3,002,559	$ 3,264,474	-$ 261,915	$ 2,831,111	$ 2,798,172	$ 3,645,134	$ 3,540,744	-$ 104,390	$ 4,154,436	**$ 613,692**
Total OM&A Expenses	**$ 11,176,156**	**$ 11,250,796**	**-$ 74,640**	**$ 11,128,652**	**$ 11,139,800**	**$ 12,057,598**	**$ 12,156,038**	**$ 98,440**	**$ 13,533,701**	**$ 1,377,663**
Adjustments for Total non-recoverable items3										
Total Recoverable OM&A Expenses	**$ 11,176,156**	**$ 11,250,796**	**-$ 74,640**	**$ 11,128,652**	**$ 11,139,800**	**$ 12,057,598**	**$ 12,156,038**	**$ 98,440**	**$ 13,533,701**	**$ 1,377,663**
Variance from previous year				-$ 122,145	$ 11,148	$ 917,798	$ 98,440		$ 1,377,663	
Percent change (year over year)				0.0%	0.1%	8.2%	0.8%		11.3%	
Percent Change: Test year vs. Most Current Actual									12.24%	
Simple average of % variance for all years									5.12%	
Compound Annual Growth Rate for all years										3.8%
Compound Growth Rate (2021 vs. 2018 Actuals)									2.34%	

2023 Test Year OM&A expenditures are 21.1% higher than 2018 OEB Approved levels. The primary reason for this increase is inflation impacts on labour and non-labour costs, as well as higher levels of general administration costs in support of work programs and increased costs in support of the expanding asset base. Also included are the costs of new initiatives in support of PUC's strategic direction, infrastructure development, staff resourcing, and new systems, most notably for Cybersecurity risk mitigation. More detailed explanations for the overall increases from 2018-2023, and material year-over-year increases in OM&A, are provided below.

Some initiatives are planned to start in 2023 and as such, the 2023 Test Year OM&A is $1,377,663 (11.30%) higher than the 2022 Bridge Year. This increase is mainly due to operational staffing in support of the SSG, a Regulatory Analyst position to assist with increasing regulatory requirements such as Green Button and Activity Performance Based Benchmarking, an IT Analyst position to meet increasing information and cyber security requirements, and increased costs resulting from the updated Shared Services Cost Allocation Review.

Excluding the new incremental items noted above, the increase from 2022 to 2023 in OM&A expenses requested is comparable to the projected inflationary increase.

Consistent with the Board's Appendix 2-JB, Table 4-8 provides a list of the cost drivers that affected year-over-year OM&A spending or, where the cost driver is common or recurring, expenditures that have an impact across multiple years. Refer to the provided OEB model live excel file, "PUC_2023_Filing_Requirements_Chapter 2, Appendices, Tab App.2.JB_OM&A_Cost_Drivers".

Table 4-8: Recoverable OM&A Cost Driver Table (Board Appendix 2-JB)

OM&A	Last Rebasing Year (2018 Actuals)	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year
Reporting Basis	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Opening Balance	$ 11,474,633	$ 11,250,796	$ 11,128,652	$ 11,139,800	$ 12,057,598	$ 12,156,038
Property taxes moved from Acct 5675 to Acct 6105	($298,477)					
Adjusted Opening Balance	$ 11,176,156					
PCB Program (5010)			$ 293,015	$ (245,640)		
Load Dispatching (5035)						$ 116,742
General Admin Salary/Hourly Labour (5615)			$ 748,251		$ (700,711)	$ 131,507
Covid Allocation			$ (805,463)	$ 805,463		
Distribution Station Equip (5114)					$ 144,762	
ROW Tree Trim (5135)				$ 234,011		
Management Salaries & Expenses (5610)					$ 267,400	$ 144,913
Admn Off Alloc Com Mt SW (5620)					$ 140,794	
Regulatory expenses (5655)						$ 252,254
Includes general Inflationary increase and Items below materiality	$ 74,640	$ (122,145)	$ (224,655)	$ 123,964	$ 246,195	$ 732,248
Closing Balance	$ 11,250,796	$ 11,128,652	$ 11,139,800	$ 12,057,598	$ 12,156,038	$ 13,533,701

2023 Test Year OM&A costs of $13,533,701 are $2,357,545 (21.1%) higher than the 2018 OEB Approved amount. In general, for each driver, cost increases and decreases on a year-over-year basis throughout the 2018 to 2023 period are due to inflationary and/or below the materiality threshold. The primary drivers identified relate to timing differences on the execution of work,

changing priorities, new initiatives and general escalations. The following discusses the material changes in the 2023 Test Year compared to the 2018 OEB Approved levels by primary driver.
The following explanations detail the primary cost drivers that have influenced the increase in PUC's OM&A Expenditures since the last Cost of Service Application, up to and including the 2023 Test Year. Each cost driver is summarized by its net change year-over-year. PUC has provided comments on variances greater than its materiality level of $135,000.

<u>2019 Actual to 2020 Actual</u>

- PCB program – *increase of $293,015*

  Environment and Climate Change Canada issued the PCB Regulations (SOR/2008-273) which came into force on September 5, 2008. Regulation strictly states deadlines as to when specific assets containing PCB's exceeding specific concentration limits must be removed and properly disposed of. Pole-top electrical transformers containing PCBs in a concentration of 50 mg/kg, or more are to be removed from service before December 31, 2025. PUC's original estimate required 1,845 transformers to be tested. In 2020, a substantial portion (89%) of PCB transformer testing was completed, with the remaining testing to occur in 2021 (603) and 2022 (204).

- General Admin Salary and Hourly Labour – *increase of $748,251*

  The increase in 2020 was due to COVID related activities requiring more time to ensure the safety of customers and employees while maintaining stable operations. In 2020, this combined with a COVID allocation of $805,463 that was recorded to the COVID Deferral/Variance Account ("COVID DVA"), resulting in a net change of *$57,212*.

- COVID Allocation – *decrease of $805,463*

  In its March 25, 2020 letter[2] ("Accounting Order"), the OEB acknowledged that electricity distributors may incur incremental costs as a result of the ongoing COVID-19 pandemic. The Accounting Order established a new COVID DVA, together with three sub-accounts, for electricity distributors to use to track incremental costs and lost revenues related to the pandemic. On May 14, 2020, the OEB issued a letter initiating the Consultation on the Deferral Account – Impacts Arising from the COVID-19 Emergency (the "Consultation") under OEB file number EB-2020-0133. As outlined in this letter, the objective of the Consultation was to assist the OEB in the development of new accounting guidance related to the COVID DVA and filing requirements, where appropriate, for the review and disposition of the account, giving due regard to bill impacts on customers. As a result of the documentation provided by the OEB, PUC Distribution recorded $805,463 of incremental COVID costs to the new COVID DVA.

<u>2020 Actual to 2021 Actual</u>

- PCB program – *decrease of $245,640*

  This decrease is a result of a large portion of PCB transformer testing occurring in 2020. The variance between 2020 and 2021 is not material.

- COVID Allocation – *increase of $805,463*

[2] OEB Letter, March 25, 2020, Accounting Order for the Establishment of Deferral Accounts to Record Impacts Arising from the COVID-19 Emergency

On June 17, 2021[3], the OEB released the outcome of the Consultation titled "Regulatory Treatment of Impacts Arising from the COVID-19 Emergency" (the "Report") which provided further guidance on use of the COVID DVA. Based on the guidance provided in the Report, some of PUC's costs in the COVID DVA account were deemed ineligible for recovery and $805,463 was recognized as an expense in 2021.

- Right of Way – Tree Trimming – *increase of $234,011*

Line clearing costs in 2021 were $234,011 higher than the 2020 spending. The 2020 actual costs were at a lower level due to the reduced area cleared in 2020. In addition, extra unplanned work in rural areas and rear lot clearing was completed in response to forced outages that occurred early in the year.

2021 Actual to 2022 Bridge

- General Admin Salary and Hourly Labour – *decrease of $700,711*

The decrease in 2021 was due to the COVID reversal adjustment recorded to the DVA account in 2020.

- Distribution Station Equipment – *increase of $144,762*

PUCS added an additional Systems Operation Engineer position in support of the Sault Smart Grid project.

- Management Salary and Expenses – *increase of $267,400*

[3] OEB Report, June 17, 2021, Regulatory Treatment of Impacts Arising from the COVID-19 Emergency (EB-2020-0133)

PUCS added a shared resource position of Vice President of Corporate Services. In addition, there is a part-year impact of other shared resources including Director of Innovation and Technology and Information Security Analyst added as a result of increasing demands over information systems and cybersecurity requirements.

- Admin Software – *increase of $140,794*

  There are two drivers for the increase in admin software. As a result of the COVID-19 pandemic, PUC converted some manual processes over to electronic/digital processes, resulting in increased software maintenance costs. In addition, as a result of the newly created Information Security department, there are additional software costs.

<u>2022 Bridge to 2023 Test Year</u>

- Load Dispatching – *increase $116,742*

  PUCS has added an additional System Operator position in support of SSG.

- General & Admin Salaries and Expenses – *increase of $131,507*

  PUCS has added additional shared resource positions for a Technical Accountant, as well as an IT Analyst position described above.

- Management Salary and Expenses – *increase of $144,913*

  In 2022, PUCS added shared resource positions of Director of Innovation and Technology and Information Security Analyst as a result of increasing demands over information systems and cybersecurity requirements.

- Regulatory Expenses – *increase of $252,254*

PUC's estimated costs to prepare its 2023 COS application are $680,000, which amortized over 5 years for cost recovery is $136,000 per year. PUC's last COS totalled $578,788 in expenditures. PUC has put significant effort and attention towards minimizing the use of consultants and legal advisors to the greatest extent possible to limit the burden of costs on its ratepayers. The 2023 COS application cost estimates are provided below:

Table 4-9: 2023 COS Application Cost Estimates

Cost of Service Application Costs	Total COS	Amortized over 5 Years
Incremental operating expenses associated with staff resources allocated to this application.	$ 126,366	$ 25,273
Consultants' costs (legal, DSP, Shared Services, LRAM)	$ 430,634	$ 86,127
Intervenor costs (4)	$ 100,000	$ 20,000
OEB application costs	$ 20,000	$ 4,000
Settlement conference costs (virtual)	$ 3,000	$ 600
	$ 680,000	**$ 136,000**

In addition to the above COS costs, PUC has added an additional Regulatory Analyst. PUC currently has one dedicated Regulatory Analyst and assistance from PUCS is provided as required. Due to an increase in regulatory requirements, PUC has added an additional Analyst dedicated to ensuring reporting and compliance requirements are met.

- General inflation and items below materiality – *increase $732,248*

The general inflation and items below materiality include OM&A costs at the 2023 Test Year inflationary factors plus specific identified expense increases. Items that did not exceed the materiality threshold for explanations above include increased hardware/software maintenance fees, insurance, and building maintenance.

4.3. OM&A VARIANCE ANALYSIS

PUC has a variety of programs, activities and initiatives that are imperative to provide safe, reliable and affordable service to customers. In Table 4-10 below, PUC has identified its programs and major functions on a comparative basis from the 2018 Board Approved to the 2023 Test Year. The Uniform Standard of Accounts ("USoA") included in each program is defined as follows:

- Operations – UsoA accounts 5005, 5010, 5012, 5014, 5016, 5017, 5020, 5025, 5030, 5035, 5040, 5045, 5050, 5055, 5065, 5070, 5075, 5085, 5090, 5095, 5096
- Maintenance – UsoA accounts 5105, 5110, 5112 5114, 5120, 5125, 5130, 5135, 5145, 5150, 5155, 5160, 5175
- Customer Service – UsoA accounts 5305, 5310, 5315, 5320, 5325, 5335, 5405, 5410, 5420
- Administration – UsoA accounts 5605, 5610, 5620, 5630, 5635, 5655, 5665, 5675

Table 4-10 is consistent with the Boards Appendix 2-JC, refer to the provided OEB model live excel file, "PUC_2023_Filing_Requirements_Chapter 2, Appendices, Tab App.2.JC_OM&A_Programs". These programs contribute to achieving the RRFE performance outcomes of Customer Focus, Operational Effectiveness, and Public Policy Responsiveness. This shows the alignment of PUC's direct costs and the management of costs associated with the outcomes. An analysis is provided below on all material variances that exceed the materiality threshold for the 2023 Test Year versus the 2021 Actuals, and the 2023 Test Year versus the 2018 Board Approved amounts.

Table 4-10: OM&A Programs Table (Board Appendix 2-JC)

Programs	Last Rebasing Year (2018 OEB-Approved)	Last Rebasing Year (2018 Actuals)	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year	Variance (Test Year vs. 2021 Actuals)	Variance (Test Year vs. Last Rebasing Year (2018 OEB-Approved)
Operations									
Overhead Lines	$ 865,472	$ 905,827	$ 980,204	$ 1,211,054	$ 887,684	$ 877,981	$ 919,013	$ 31,329	$ 53,541
Underground Lines	$ 204,062	$ 244,518	$ 306,103	$ 211,298	$ 267,536	$ 258,944	$ 273,313	$ 5,778	$ 69,251
Operations Supervisory	$ 645,671	$ 513,871	$ 544,133	$ 467,519	$ 527,210	$ 572,525	$ 601,703	$ 74,492	$ (43,969)
Load Dispatching	$ 273,568	$ 246,072	$ 385,248	$ 299,920	$ 322,436	$ 255,743	$ 426,985	$ 104,549	$ 153,417
Stations	$ 789,639	$ 730,287	$ 770,038	$ 695,028	$ 703,762	$ 729,968	$ 815,449	$ 111,687	$ 25,810
Transformers	$ 8,240	$ 8,044	$ 11,541	$ 7,852	$ 9,797	$ 9,883	$ 10,343	$ 547	$ 2,103
Meters	$ 403,539	$ 303,712	$ 265,723	$ 240,866	$ 243,208	$ 281,143	$ 323,047	$ 79,839	$ (80,492)
Transmission	$ 83,575	$ 48,749	$ 10,814	$ 13,034	$ 13,138	$ 15,272	$ 43,095	$ 29,958	$ (40,479)
Customer Premises	$ 179,701	$ 162,557	$ 205,855	$ 257,028	$ 281,306	$ 281,252	$ 295,150	$ 13,844	$ 115,449
Miscellaneous Operating	$ 576,433	$ 516,257	$ 672,098	$ 671,369	$ 679,547	$ 745,664	$ 726,236	$ 46,689	$ 149,803
Sub-Total	**$ 4,029,899**	**$ 3,679,895**	**$ 4,151,756**	**$ 4,074,970**	**$ 3,935,625**	**$ 4,028,374**	**$ 4,434,334**	**$ 498,710**	**$ 404,435**
Maintenance									
Overhead Lines	$ 1,368,590	$ 1,458,744	$ 1,453,317	$ 1,508,988	$ 1,611,173	$ 1,638,828	$ 1,744,789	$ 133,616	$ 376,200
Underground Lines	$ 304,604	$ 369,510	$ 282,312	$ 265,172	$ 337,579	$ 302,287	$ 316,493	$ (21,086)	$ 11,889
Stations	$ 259,555	$ 400,136	$ 295,119	$ 471,194	$ 441,663	$ 606,200	$ 705,303	$ 263,640	$ 445,748
Transformers	$ 121,580	$ 38,617	$ 22,485	$ 35,790	$ 16,138	$ 62,673	$ 84,812	$ 68,674	$ (36,768)
Meters	$ 52,330	$ 62,912	$ 97,257	$ 78,250	$ 64,659	$ 42,082	$ 49,733	$ (14,926)	$ (2,597)
Sub-Total	**$ 2,106,659**	**$ 2,329,918**	**$ 2,150,490**	**$ 2,359,394**	**$ 2,471,213**	**$ 2,652,070**	**$ 2,901,131**	**$ 429,918**	**$ 794,472**
Customer Service									
Bad Debt Expense	$ 262,223	$ 249,235	$ 252,481	$ 354,697	$ 366,554	$ 300,000	$ 350,000	$ (16,554)	$ 87,777
Customer Billing	$ 877,623	$ 810,496	$ 857,977	$ 775,162	$ 828,810	$ 782,769	$ 779,893	$ (48,917)	$ (97,731)
Customer Collections	$ 276,838	$ 321,552	$ 243,977	$ 203,358	$ 174,986	$ 155,026	$ 160,548	$ (14,438)	$ (116,289)
Community Relations	$ 620,355	$ 595,226	$ 640,859	$ 574,049	$ 635,277	$ 697,054	$ 753,359	$ 118,083	$ 133,005
Sub-Total	**$ 2,037,039**	**$ 1,976,509**	**$ 1,995,295**	**$ 1,907,265**	**$ 2,005,626**	**$ 1,934,849**	**$ 2,043,800**	**$ 38,174**	**$ 6,762**
Administration									
Insurance	$ 100,220	$ 160,140	$ 155,870	$ 159,899	$ 160,592	$ 160,279	$ 177,653	$ 17,060	$ 77,433
Audit, Legal & Consulting	$ 209,877	$ 202,488	$ 184,269	$ 297,996	$ 175,828	$ 269,334	$ 238,891	$ 63,063	$ 29,014
Regulatory Affairs	$ 406,157	$ 804,051	$ 319,679	$ 279,079	$ 274,354	$ 349,944	$ 536,858	$ 262,504	$ 130,702
Building	$ 417,253	$ 337,731	$ 351,249	$ 319,987	$ 333,356	$ 388,823	$ 389,410	$ 56,055	$ (27,843)
Administrative	$ 1,869,053	$ 1,760,065	$ 1,820,044	$ 1,741,211	$ 2,701,004	$ 2,372,365	$ 2,811,623	$ 110,619	$ 942,571
Sub-Total	**$ 3,002,559**	**$ 3,264,474**	**$ 2,831,111**	**$ 2,798,172**	**$ 3,645,134**	**$ 3,540,744**	**$ 4,154,436**	**$ 509,301**	**$ 1,151,876**
Total	**$ 11,176,156**	**$ 11,250,796**	**$ 11,128,652**	**$ 11,139,800**	**$ 12,057,598**	**$ 12,156,038**	**$ 13,533,701**	**$ 1,476,103**	**$ 2,357,545**

In accordance with Chapter 2 Filing Requirements, an applicant must provide justification for changes from year-to-year to its rate base, capital expenditures and OM&A spending above a materiality threshold. PUC's materiality threshold is calculated as 0.5% of proposed base distribution revenue requirement for distributors with a revenue requirement greater than $10 million and less than or equal to $200 million. As such, PUC has calculated and used a threshold of $135,000 for variance analysis purposes.

PUC has provided explanations below for material variances for the Historical OEB-Approved vs Historical Actual (for the most recent Historical OEB-Approved year), the 2023 Test Year vs 2018 Board Approved levels and the 2023 Test Year vs the most historic year Actuals (2021) for program delivery costs. Variances, for the most part have been in PUC's control, e.g., increased due to the operation of SGG. Other costs outside of PUC's control are due to inflationary increases.

- Operations - Load Dispatching

  2023 Test Year vs 2018 Approved – *$153,417*

  PUC has added an additional System Operator position in support of SSG.

- Operations - Miscellaneous Operating

  2023 Test Year vs 2018 Approved – *$149,803*

  Increases in miscellaneous operating costs from 2018 Approved to the 2023 Test year include:

  - Increase in labour costs as a result of an additional Electrical Engineer in support of SSG.
  - Increased GIS costs.
  - Inflationary increases for wages and external expenses.

- Maintenance Overhead Lines

  2023 Test Year vs 2018 Approved – *$376,200*

  PUC experienced a shift in the amount of expenses in maintenance overhead line from 2018 Board Approved to 2023 Test Year. The increase is a result of additional labour, materials, trucking, and external contractor costs allocated to these OM&A accounts, in 2023, as compared to the 2018 Board Approved amounts.

- Maintenance - Stations

  2023 Test Year vs 2021 Actuals - $263,640

  Increases in station maintenance costs from 2021 Actuals to the 2023 Test year include:

  - The addition of a System Operations Engineer position in support of SSG.

  - The shift of labour from capital to maintenance. In 2021, extensive resources were directed to capital work for the Substation 16 re-build which decreased the allocation of labour charged to station operations and maintenance accounts.
  - To plan for the retirement of 2 substations, an additional $40,000 was added for environmental remediation work.
  - Inflationary increases for wages and external expenses.

  2023 Test Year vs 2018 Approved - *$445,748*

  Increases in station maintenance costs from 2018 Approved to the 2023 Test year include:

  - PUC Distribution added an additional System Operations Engineer position in support of SSG.

- Station maintenance work was reallocated to maintenance versus station operations. Stations operations reflects a minor increase of $25,810 from the last rebasing.
- To plan for the retirement of 2 substations, an additional $40,000 was added for environmental remediation work.
- The remainder of the increase was due to wage progressions, as well as inflationary increases for labour and external expenses.

- Regulatory Affairs

2018 Board Approved vs 2018 Actual - $397,894

The 2018 Board Approved amount was the 2018 Cost of Service Rate Application expenses amortized over five years as compared to the 2018 Actuals where the full amount was expensed.

2023 Test Year vs 2021 Actuals - $262,504

Increases in regulatory affairs costs from 2021 Actuals to the 2023 Test year include:

- An additional Regulatory Analyst position to support the increasing regulatory requirements such as Green Button, Activity Based Performance benchmarking, and other OEB mandated programs and activity.
- In 2023, PUC has included 1/5th of the 2023 COS application costs. These costs, to be incurred in 2022 and 2023, have been recorded in a prepaid account to be recognized as an expense over the 5-year rate-period. This accounting treatment is different than the 2018 COS application costs which were expensed in the year they occurred.
- Inflationary increases for labour and external expenses.

<u>2023 Test Year vs 2018 Approved - $130,702</u>

Increases in regulatory affair costs from 2018 Approved to the 2023 Test year include:

- An additional Regulatory Analyst position to support the increasing regulatory requirements such as Green Button, Activity Based Performance benchmarking, and other OEB mandated programs and activity.
- An Assistant Controller position, added in 2019, supports PUC's regulatory affairs with advisory and oversight responsibilities.
- Inflationary increases for wages and external expenses.

- Administrative

2023 Test Year vs 2018 Approved - $942,571

Increases in administrative costs from 2018 Approved to the 2023 Test year include:

- Increase in software maintenance costs for electronic process updates including Green Button, MyPUC app, implementation of new payroll software (i.e., Dayforce), additional cyber security software and new software to support electronic process conversions including software for contractor management, accounts payable processing, and a new platform for electronic forms for PUC's operations group.
- In addition to inflationary increases to salaries and wages, PUCS added the following positions:

  - Vice President, Corporate Services to ensure compliance with legislation, regulations and codes, develop and maintain emergency preparedness, response and contingency plans and provide leadership and expertise in formulating strategies, programs and policies for People & Culture, IT, Health & Safety, Fleet and Facilities. PUCS will be adding a Director of Innovation & Technology due to the increased demands on information systems, as well as an Information Security Analyst to manage electronic security and data for privacy requirements.
  - Senior People & Culture Business partner to assist the Manager, People & Culture with recruitment and selection of new staff, training plans, and management of labour related matters.
  - Assistant Controller in the Finance division to assist in managing compliance, internal controls, processes, and procedures.
- Increase in training and development costs.
- Inflationary increases for labour and external expenses.

4.3.1. Capitalized OM&A

The 2023 Test Year OM&A is after the transfer of "OM&A" costs charged to capital as part of the overhead capitalization rate. Table 4-11 summarizes these amounts.

Table 4-11: Capitalized OM&A

Capitalized OM&A	2018	2019	2020	2021	2022	2023
	Historical Year	Historical Year	Historical Year	Historical Year	Bridge Year	Test Year
Materials	$ 279,442	$ 269,319	$ 285,879	$ 361,731	$ 315,717	$ 322,032
Engineering	$ 400,223	$ 499,945	$ 524,173	$ 472,489	$ 904,430	$ 952,049
Trucking	$ 426,211	$ 437,547	$ 341,102	$ 351,519	$ 437,981	$ 495,152
Supervisory	$ 295,199	$ 341,910	$ 342,291	$ 285,571	$ 414,533	$ 319,596
Total Capitalized OM&A (A)	**$ 1,401,075**	**$ 1,548,723**	**$ 1,493,445**	**$ 1,471,310**	**$2,072,661**	**$2,088,829**

Capitalized OM&A in the 2023 Test Year is $16,168 higher than 2022 Bridge Year which is immaterial. The level of 2023 Test Year Capitalized OM&A is $601,351 higher than the 2020 Actual. This is due to an increase in capital initiatives, i.e., SSG.

4.3.2. Workforce Planning and Employee Compensation

4.3.2.1 Compensation System

PUC has a long-term service agreement with PUCS for the operation of its distribution system. PUC does not have employees, however, in addition to regular salaries and wages, PUCS offers the following compensation system to PUC equivalent employees:

Unionized Workers

Approximately 75% of PUC's workforce is unionized. The compensation for unionized employees is negotiated through the collective bargaining process and includes both office and trades workers represented by the Power Workers Union ("PWU"), Local CUPE 1000, in separate "Office Worker" and "Outside Worker" agreements.

PUCS's collective agreements provide for annual payroll increases and employee step progressions. Labour rates and benefits are adjusted based on negotiated percentages as per the collective agreement. The commencement and expiry dates of PUC's current collective agreements are shown in Table 4-12 Current Collective Agreements below.

Table 4-12: Current Collective Agreements

Bargaining Unit	Contract Period	Wage increase
PWU Office	May 1, 2021 to April 30, 2024	May 1, 2021: 2.0% May 1, 2022: 2.0% May 1, 2023: 2.0%
PWU Outside	May 1, 2021 to April 30, 2024	May 1, 2021: 2.0% May 1, 2022: 2.0% May 1, 2023: 2.0%

The collective agreement also includes a one-time cost of living adjustment.

Cost of Living Adjustment

If the average monthly CPI for Canada [Base 2002] for the twelve months ending December 31, 2021, is greater than CPI for Canada for the 12 months ending December 31, 2020, a one-time lump sum payment will be made prior to March 31, 2022 based on the following table:

Percentage Change in CPI	Payment as a percent of Gross Earnings from Jan 1, 2021 – Dec. 31, 2021
>=3.50<4.00	0.00
>=4.00<4.50	0.50
>=4.50<5.00	1.00
>5.00	1.50

Each job classification in the collective bargaining agreements has a basic job description and a wage rate progression scale that increases from a minimum to a maximum rate.

<u>Executive and Management (Non-Union) Employees</u>

PUCS's Executive and Management staff ("Management") pay philosophy considers compensation from throughout Ontario at other like-sized or similarly structured utilities, ensuring that Management staff are compensated at levels consistent with comparable organizations. Such compensation levels are reviewed on a regular basis and benchmarked against the MEARIE Group Management Salary Survey administered by Korn Ferry Hay Group. The Management group salaries, a portion of which are allocated to PUC, are at or near the average of the LDCs surveyed.

Specifically, compensation for the President & CEO is administered directly by the Board of Directors. Other Management compensation consists of salaries and benefits. Each Management position has been placed on a pay scale which is reviewed periodically by senior management. As with unionized employees, compensation for Management provides for annual payroll increases and employee step progressions upon approval by the President & CEO, with consideration of budgets that are approved by the Board of Directors.

Every three years a salary structure review is completed to compare the Management salary bands against a utility peer group to ensure compensation remains within the 50th percentile. Salary bands may be impacted by this review. For the intervening years between the salary structure reviews, adjustments are applied to the salary bands based on November CPI[4] for Ontario in accordance with the Management Compensation policy. These amounts are first reviewed and approved by the President & CEO. Table 4-13 below shows the annual increases from 2018 – 2022.

[4] Consumer Price Index, monthly, not seasonally adjusted (statcan.gc.ca)

Table 4-13: Management Salary Increases

Year	Wage Increase
2018	1.8%
2019	1.8%
2020	1.9%
2021	1.5%
2022	5.0%

Health Benefits

A comprehensive and competitive benefits package exists which includes medical and dental insurance, life insurance, vacation and leave policies and a company sponsored retirement pension plan. There are separate benefits plans for active Management, PWU, and retired employees.

The PWU and retiree benefit plans are subject to change during the collective bargaining process and the Management benefit plan is typically adjusted to mirror any negotiated improvements. The plans are designed to address the health and welfare needs of the employees. The benefit packages are essentially consistent across the employee groups for all 171 employees, including the executive team. Variations do exist within the life insurance coverages and health care spending accounts provided for non-unionized employees only.

OMERS Pension Plan

All PUCS employees are members of the Ontario Municipal Employees Retirement System (“OMERS”). OMERS is a multi-employer pension plan in which most Ontario LDCs participate. As such, PUCS pension benefit costs are consistent with other participating Ontario LDCs. While

OMERS is a Defined Benefit plan, for accounting purposes it is effectively treated as a Defined Contribution plan by the participating distributors including PUCS. This means that the annual employer contributions made to the plan are the same as the accrual accounting expense recorded for financial statement purposes. For the 2023 Test Year, PUC assumed OMERS rates of 9.0% on earnings up to the Year's Maximum Pensionable Earnings ("YMPE") limits and 14.6% on earnings over YMPE limits. The 2022 YMPE is $64,900.

<u>Employee Future Benefits</u>

PUCS provides post-employment benefit life insurance and health care to retirees under the age of 65 through a group defined benefit plan.

The cost of post-employment benefits is actuarially determined using the projected benefit method prorated on service and based on assumptions that reflect management 's best estimates. The current service cost for the period is equal to the employee's service rendered in the period. Past service costs from the plan amendments are amortized on a straight line basis over the average remaining service period of the employee's active date of amendment.
As noted above, PUC does not have employees, therefore an actuary report cannot be provided. The actuary report for PUCS has been provided in Appendix A.

PUCS recovers their Ontario Post Employment Benefits ("OPEB") costs based on the accrual method. This method recognizes the cost of OPEBs as an employee's service is rendered and the benefit is earned. PUC's shared portion of the accrued amount is allocated as an overhead on direct labour on an annual basis. As such, PUC's obligation for OPEBs is treated similar to pension funding where there are no future obligations.

4.3.2.2 Succession Planning

As part of a strategic initiative, PUCS has begun to implement a succession planning review and process. It continues to monitor key employee retirement eligibility and employee intentions where known, in order to plan for the necessary employee succession. PUC is working toward a gap analysis with will identify the skill sets required to fill key roles within the organization. The following summarizes Management's plans regarding succession vulnerability:

<u>Powerline</u>

PUCS currently has a crew of qualified and experienced Powerline Technicians. PUC has a sufficient number of qualified and experienced Powerline Technicians and will utilize apprenticeship programs to ensure adequate ability to fill vacancies as they occur.

<u>Stations & Metering</u>

PUCS currently has a staff of qualified and experienced workers with some becoming eligible for retirement within the next five years. PUCS intends to utilize apprenticeship programs to ensure adequate ability to fill vacancies as they occur.

<u>Executive</u>

The senior management team has recruited key personnel in the past few years in response to and to successfully prepare for upcoming retirements.

4.3.2.3 Wages, Salaries and Benefit Expenses

Salaries, wages and benefits are the most significant drivers of PUC's 2023 Test Year OM&A costs and have a 26.1% increase from the 2018 Actual Year as shown in Table 4-14 below. PUC's complement has decreased by 1 FTE ("Full Time Equivalent") since the 2018 actual year; however, total salaries, wages and benefits have increased due to inflation and changes to positions as discussed above.

Table 4-14: Overall Compensation Trend Summary: 2018 Actual to 2023 Test Year

Description	2018 Actuals	2023 Test Year	Variance
FTE's	82	81	(1)
			-1.0%
Total Compensation (Salary, Wages and Benefits)	$ 10,279,952	$ 12,968,022	$ 2,688,069
			26.1%

The reduction in FTE is a result of the allocation of staff members' time to affiliate services. The relative increase in total compensation from 2018-2023 is primarily a result of annual increases to compensation. Wage increases for Unionized staff is in accordance with negotiated collective agreements. Adjustments for Management staff salaries are in accordance with PUCS's Management Compensation Policy, described above, in addition to adjustments for productivity, merit, and promotion.

Included in Table 4-14, which is Board Appendix 2-L, is a summary of OM&A Cost per Customer and per FTE. This table is consistent with the Boards Appendix 2-L, refer to the provided OEB model live excel file, "PUC_2023_Filing_Requirements_Chapter 2, Appendices, Tab App.2.JL_OM&A_per_Cust_FTE". The number of customers is based on the annual average for each rate class of metered customers.

Table 4-14: Recoverable OM&A Per Customer and FTE (Board Appendix 2-L)

	Last Rebasing Year (2018 OEB Approved)	Last Rebasing Year (2018 Actuals)	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year
OM&A Costs							
O&M	$ 6,136,558	$ 6,009,813	$ 6,302,246	$ 6,434,364	$ 6,406,837	$ 6,680,445	$ 7,335,465
Admin Expenses	$ 5,039,598	$ 5,240,983	$ 4,826,405	$ 4,705,436	$ 5,650,761	$ 5,475,593	$ 6,198,236
Total Recoverable OM&A from Appendix 2-JB	**$ 11,176,156**	**$ 11,250,796**	**$ 11,128,652**	**$ 11,139,800**	**$ 12,057,598**	**$ 12,156,038**	**$ 13,533,701**
Number of Customers	33,604	33,613	33,647	33,751	33,865	33,838	33,926
Number of FTEs	84	82	80	78	78	78	81
Customers/FTEs	399	411	421	431	434	434	419
OM&A cost per customer							
O&M per customer	$ 183	$ 179	$ 187	$ 191	$ 189	$ 197	$ 216
Admin per customer	$ 150	$ 156	$ 143	$ 139	$ 167	$ 162	$ 183
Total OM&A per customer	**$ 333**	**$ 335**	**$ 331**	**$ 330**	**$ 356**	**$ 359**	**$ 399**
OM&A cost per FTE							19.9%
O&M per FTE	$ 72,918	$ 73,434	$ 78,926	$ 82,144	$ 82,139	$ 85,647	$ 90,561
Admin per FTE	$ 59,884	$ 64,039	$ 60,443	$ 60,072	$ 72,446	$ 70,200	$ 76,521
Total OM&A per FTE	**$ 132,802**	**$ 137,473**	**$ 139,369**	**$ 142,216**	**$ 154,585**	**$ 155,847**	**$ 167,083**
% increase 2018 Approved to 2023 Test Year							25.8%

	Last Rebasing Year (2018 OEB Approved)	Last Rebasing Year (2018 Actuals)	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year
OEB Inflation less productivity			1.05%	1.55%	1.90%	3.00%	7.40%
Total OM&A per customer (adjusted for inflation)	$ 333	$ 335	$ 336	$ 341	$ 348	$ 358	$ 385
% increase 2018 Approved to 2023 Test Year							15.7%
Total OM&A per FTE (adjusted for inflation)	$ 132,802	$ 137,473	$ 134,196	$ 136,277	$ 138,866	$ 143,032	$ 153,616
% increase 2018 Approved to 2023 Test Year							15.7%

In 2023, OM&A per customer is forecast to be $399. This is 19.9% higher than the $333 OM&A per customer ratio in 2018. The OM&A costs per FTE are forecast to be $167,083. This is 25.8% higher than the $132,802 amount approved in 2018. PUC notes that these increases from 2018 to 2023 are primarily related to inflation. As shown in the bottom section of table above, inflationary adjustments account for a 15.7% impact to OM&A costs per customer and OM&A costs per FTE, which results in $153,616 and $385, respectively.

FTE & Employee Costs

As required, employee complement by FTE, compensation and benefits are set out below in Table 4-16. This table is consistent with the Boards Appendix 2-K, refer to the provided OEB model live excel file, "PUC_2023_Filing_Requirements_Chapter 2, Appendices, Tab App.2.K_Employee Costs".

Table 4-16: Employee Costs (Board Appendix 2-K)

	Last Rebasing Year (2018 OEB Approved)	Last Rebasing Year (2018 Actuals)	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge Year	2023 Test Year
Number of Employees (FTEs including Part-Time)							
Management (including executive)	19	19	18	18	21	21	23
Non-Management (union and non-union)	65	63	62	60	57	57	58
Total	84	82	80	78	78	78	81
Total Salary and Wages including ovetime and incentive pay							
Management (including executive)	$ 2,219,285	$ 2,278,502	$ 2,147,051	$ 2,214,608	$ 2,180,535	$ 2,078,341	$ 2,412,944
Non-Management (union and non-union)	$ 5,475,807	$ 4,962,742	$ 5,087,619	$ 5,127,371	$ 4,984,153	$ 4,654,346	$ 5,515,381
Total	$ 7,695,092	$ 7,241,244	$ 7,234,670	$ 7,341,979	$ 7,164,688	$ 6,732,687	$ 7,928,325
Total Benefits (Current + Accrued)							
Management (including executive)	$ 562,869	$ 700,251	$ 679,384	$ 743,763	$ 697,294	$ 1,165,100	$ 771,614
Non-Management (union and non-union)	$ 1,445,296	$ 1,414,382	$ 1,333,848	$ 1,324,607	$ 1,503,636	$ 1,520,535	$ 1,663,899
Total	$ 2,008,164	$ 2,114,633	$ 2,013,232	$ 2,068,370	$ 2,200,930	$ 2,685,635	$ 2,435,513
Total Compensation (Salary, Wages, & Benefits)							
Management (including executive)	$ 2,782,154	$ 2,978,753	$ 2,826,435	$ 2,958,371	$ 3,287,346	$ 3,590,621	$ 3,184,558
Non-Management (union and non-union)	$ 6,921,103	$ 6,377,124	$ 6,421,467	$ 6,451,977	$ 7,486,888	$ 8,177,594	$ 7,179,280
Total	$ 9,703,257	$ 9,355,877	$ 9,247,902	$ 9,410,349	$ 9,365,618	$ 9,418,322	$ 10,363,838
Total Compensation Breakdown (Capital, OM&A)							
OM&A		$ 7,135,221	$ 6,726,296	$ 7,140,599	$ 6,879,233	$ 6,274,588	$ 7,947,124
Capital		$ 2,219,656	$ 2,521,605	$ 2,269,750	$ 2,486,385	$ 3,143,734	$ 2,416,391
Total	$ -	$ 9,354,878	$ 9,247,901	$ 9,410,348	$ 9,365,618	$ 9,418,322	$ 10,363,515

PUC, through its affiliate PUCS operates using a shared services model. PUC has no employees but rather relies on PUCS to provide the necessary resources to operate the distribution utility. The number of employees shown above is based on the computation of the number of FTE positions throughout each of the fiscal years. Staff members hired by or resigning from PUCS are prorated in that year as a portion of an FTE based on the hours worked. The FTE calculation is based on hours worked by PUCS employees, including overtime hours that are directly and indirectly attributable to PUC. The table excludes Board of Directors and employees dedicated to non-rate regulated activities. PUC does not include hours for staff off on short term or long-term disability. The salaries and wages amounts include all salaries and wages paid, inclusive of incentive pay, overtime, vacation, holidays, sick leave, bereavement leave and other miscellaneous paid leaves.

The benefits amount comprises the employer's portion of statutory benefits, including CPP, EI, EHT and WSIB. In addition, benefit amounts include the company's cost for providing pension benefits ("OMERS") and other employee benefits as described below.

FTE, Wages & Benefits Variance Analysis

Table 4-17 details employee cost variances from 2018 Board Approved through to the 2023 Test Year. The year-to-year variances are due to fluctuations in allocations of PUCS employee resources. In addition, impacts from inflationary increases are included in the salaries, wages and benefits totals. The 2023 Test Year shows an increase due to the added positions explained above in the OM&A variance analysis, section 4.3 of this Exhibit.

Table 4-17: FTE and Employee Cost Variances

	2018 OEB Approved to 2018 Actual	2018 Actuals to 2019 Actuals	2019 Actuals to 2020 Actuals	2020 Actuals to 2021 Actuals	2021 Actuals to 2022 Bridge	2022 Bridge to 2023 Test
Number of Employees (FTEs including Part-Time)						
Management (including executive)	0	(1)	(0)	3	0	2
Non-Management (union and non-union)	(2)	(1)	(1)	(3)	0	1
Total	(2)	(2)	(2)	(0)	0	3
Total Salary and Wages including ovetime and incentive pay						
Management (including executive)	$ 59,217	$ (131,451)	$ 67,557	$ (34,073)	$ (102,194)	$ 334,603
Non-Management (union and non-union)	$ (513,065)	$ 124,877	$ 39,752	$ (143,218)	$ (329,807)	$ 861,035
Total	$ (453,848)	$ (6,574)	$ 107,309	$ (177,290)	$ (432,001)	$ 1,195,638
Total Benefits (Current + Accrued)						
Management (including executive)	$ 137,382	$ (20,867)	$ 64,379	$ (46,469)	$ 467,806	$ (393,486)
Non-Management (union and non-union)	$ (30,914)	$ (80,534)	$ (9,241)	$ 179,029	$ 16,899	$ 143,364
Total	$ 106,469	$ (101,401)	$ 55,138	$ 132,560	$ 484,705	$ (250,122)
Total Compensation (Salary, Wages, & Benefits)						
Management (including executive)	$ 196,599	$ (152,318)	$ 131,936	$ 328,974	$ 303,275	$ (406,063)
Non-Management (union and non-union)	$ (543,979)	$ 44,343	$ 30,510	$ 1,034,911	$ 690,706	$ (998,314)
Total	$ (347,379)	$ (107,975)	$ 162,447	$ (44,731)	$ 52,704	$ 945,516
Total Compensation Breakdown (Capital, OM&A)						
OM&A		$ (408,925)	$ 414,303	$ (261,366)	$ (604,645)	$ 1,672,536
Capital		$ 301,949	$ (251,855)	$ 216,636	$ 657,348	$ (727,343)
Total		$ (106,977)	$ 162,447	$ (44,730)	$ 52,704	$ 945,193

The FTE calculation is based on hours worked by PUCS employees, including overtime hours that are directly and indirectly attributable to PUC. These variations are also reflected in the variances between employee cost categories.

Both Management and Non-Management categories have experienced minor fluctuations since the last rebasing in 2018, with the exception of 2021 due to the impact of the COVID-19 adjustment, and in 2023 due to the additions of resources for SSG, IT and Regulatory.

Benefits, Pensions & Post-Retirement Benefits

Please refer to Table 4-17 for a summary of Benefit Historical details.

Table 4-17: Employee Benefit Costs

Benefit	2018 Last Rebasing	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Bridge	2023 Test
CPP Employers' Portion	$ 188,142	$ 174,462	$ 187,643	$ 192,284	$ 237,683	$ 300,592	$ 331,238
EI Employers' Portion	$ 67,036	$ 77,083	$ 71,482	$ 71,818	$ 79,424	$ 100,446	$ 110,687
Employer Health Tax	$ 117,218	$ 116,266	$ 118,991	$ 120,618	$ 139,312	$ 176,184	$ 194,147
WSIB	$ 57,110	$ 67,224	$ 55,534	$ 63,614	$ 70,925	$ 89,697	$ 98,842
OMERS Employers' Portion	$ 591,221	$ 581,078	$ 618,817	$ 651,832	$ 692,231	$ 875,447	$ 964,701
OPEB	$ -	$ 42,183	$ 34,150	$ 48,978	$ 44,053	$ 55,713	$ 61,393
Corporate Benefits	$ 531,880	$ 751,427	$ 737,866	$ 646,635	$ 827,387	$ 1,046,375	$ 1,153,056
Total Benefits Charged to OM&A	**$ 1,552,607**	**$ 1,809,722**	**$ 1,824,483**	**$ 1,795,780**	**$ 2,091,015**	**$ 2,644,454**	**$ 2,914,064**

Benefit Program Costs

As noted below, PUC is a virtual utility, however, for COS filing requirements, PUC has determined the details of employee benefit programs breakdown above using the shared services allocation methodology described in section 4.3.3. For 2022 Bridge and 2023 Test years amounts have been forecasted using a 5% increase on prior year amounts.

OMERs Pension Plan

PUCS' employees are members of the Ontario Municipal Employees Retirement System ("OMERS"). OMERS is a multi-employer pension plan that most LDC's participate in, therefore the pension benefit provided to PUCS employees is consistent with that of other LDC's. The plan is a contributory defined pension plan which is financed by equal contributions from the employer and employee based on the employee's contributory earnings. For the 2022 Test Year, PUC assumed OMERS rates of 9% on earnings up to CPP earning limits and 14.6% on earnings over CPP earnings limit as per OMER's website. The increases in OMERS premiums from 2018 through 2023 are explained by the increase in pension contribution rates.

Post Retirement Benefits

PUCS provides its retired employees with life insurance and medical benefits. The obligations for these post-employment benefit plans are actuarially determined by applying the projected unit credit method and reflect management's best estimate of certain underlying assumptions. Re-measurements of the net defined benefit obligations, including actuarial gains and losses and the return on plan assets (excluding interest), are recognized immediately in other comprehensive income. When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognized immediately in profit or loss.

4.3.3 Shared Services and Corporate Cost Allocation

As a virtual utility, PUC shares certain resources with affiliates in order to create economies of scale and scope. Benefits are created both when a distributor purchases services from affiliates and when a distributor sells services to affiliates and receives revenue to offset its costs. Within the PUC group, the sharing of services is achieved through PUCS, which provides a range of services to PUC and other companies in the group, as well as to Public Utilities Commission (the "Commission"), a Municipal Services Board of the City. Wastewater services are also provided to the City of Sault Ste. Marie. As well, PUCS owns all of the shared assets of the group, including vehicles, tools and equipment, information technology and systems, etc. The arrangement is intended to create economies of scale and scope through the sharing of human and other resources. The costs incurred by PUCS are recovered through charges made by PUCS to the affiliates, including PUC.

PUCS provides both electricity billing to PUC and water/sewage billing to the Commission through a shared system. All of the activities of the PUC group of companies are carried out in a shared building at 500 Second Line East, which is owned by PUC. The portion of the building used by affiliates is made available by PUC under a lease arrangement. The lease is priced to affiliates at fully allocated cost. The Rent from Electric property is included in PUC's Other Revenue.

The following Tables 4-19 and 4-20 detail the corporate cost allocation for each year in the historic period as well as the test year. These tables are followed by a description of the allocation methodology and variance analysis.

Table 4-19: Shared Services and Corporate Cost Allocations

Appendix 2-N
Shared Services and Corporate Cost Allocation [1]

Year: 2018 Approved

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,334,161	$1,334,161

Year: 2018 Actual

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,332,391	$1,332,391

Year: 2019 Actual

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,220,957	$1,220,957

1

Year: 2020 Actual

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,195,271	$1,195,271

2

Year: 2021 Actual

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,177,752	$1,177,752

3

Year: 2022 Bridge

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,070,245	$1,070,245

4

Year: 2023 Test

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
PUC Distribution	PUC Services	Building Rental	Cost - no markup	$1,035,470	$1,035,470

5

Shared Services - Variance Analyis

Service Offered	2018 Approved	2021 Actual	2023 Test	2023 Test vs 2021 Last Actual	2023 Test vs 2018 Board Approved
Building Rental	1,334,160.93	1,177,752.48	1,035,470.02	(142,282.46)	(298,690.91)

Table 4-20: Shared Services and Corporate Cost Allocation

Year: 2018 Approved

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$481,405
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$220,743
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$526,090
PUC Services	PUC Distribution	Admin Acct 5605 to 5665	Cost - no markup	41.31%	$1,819,004
PUC Services	PUC Distribution	Building 5675	Cost - no markup	46.45%	$416,453
					$3,463,696

Year: 2018 Actual

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$459,694
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$106,721
PUC Services	PUC Distribution	Collections Acct 5321	Cost - no markup	74.00%	$138,067
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$489,475
PUC Services	PUC Distribution	Admin Acct 5605 to 5665	Cost - no markup	41.31%	$1,713,924
PUC Services	PUC Distribution	Building 5675	Cost - no markup	46.45%	$337,731
					$3,245,611

Year: 2019 Actual

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$462,938
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$72,546
PUC Services	PUC Distribution	Collections Acct 5321	Cost - no markup	74.00%	$106,618
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$570,144
PUC Services	PUC Distribution	Admin Acct 5605 to 5635, 5665	Cost - no markup	41.31%	$1,773,625
PUC Services	PUC Distribution	Building 5675	Cost - no markup	46.45%	$351,249
					$3,337,120

1

Year: 2020 Actual

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$437,320
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$67,553
PUC Services	PUC Distribution	Collections Acct 5321	Cost - no markup	74.00%	$111,556
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$521,515
PUC Services	PUC Distribution	Admin Acct 5605 to 5635, 5665	Cost - no markup	41.31%	$1,836,617
PUC Services	PUC Distribution	Building 5675	Cost - no markup	46.45%	$319,987
					$3,294,548

2

Year: 2021 Actual

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$524,770
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$67,606
PUC Services	PUC Distribution	Collections Acct 5321	Cost - no markup	74.00%	$88,508
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$584,897
PUC Services	PUC Distribution	Admin Acct 5605 to 5635, 5665	Cost - no markup	41.31%	$2,614,914
PUC Services	PUC Distribution	Building 5675	Cost - no markup	46.45%	$333,356
					$4,214,051

3

Year: 2022 Bridge

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$419,153
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$73,077
PUC Services	PUC Distribution	Collections Acct 5321	Cost - no markup	74.00%	$63,362
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$634,233
PUC Services	PUC Distribution	Admin Acct 5605 to 5635, 5665	Cost - no markup	41.31%	$2,283,491
PUC Services	PUC Distribution	Building 5675	Cost - no markup	50.34%	$388,823
					$3,862,141

Year: 2023 Test

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs Allocated	Amount Allocated
From	To			%	$
PUC Services	PUC Distribution	Billing Acct 5305 to 5315	Cost - no markup	56.00%	$403,777
PUC Services	PUC Distribution	Collections Acct 5320 to 5335, excl. 5321	Cost - no markup	56.00%	$74,604
PUC Services	PUC Distribution	Collections Acct 5321	Cost - no markup	74.00%	$64,704
PUC Services	PUC Distribution	Customer Services Acct 5405 to 5420	Cost - no markup	56.00%	$662,219
PUC Services	PUC Distribution	Admin Acct 5605 to 5635, 5665	Cost - no markup	42.65%	$2,491,073
PUC Services	PUC Distribution	Building 5675	Cost - no markup	55.34%	$389,410
					$4,085,786

Corporate Cost Allocation - Variance Analysis

Service Offered	2018 Board Approved	2021 Actual	2023 Test	Test Year vs Last Actual	Test Year vs Board Approved
Billing Acct 5305 to 5315	$ 481,405	$ 524,770	$ 403,777	$ (120,994)	$ (77,628)
Collections Acct 5320 to 5335, excl. 5321	$ 133,432	$ 67,606	$ 74,604	$ 6,998	$ (58,829)
Collections Acct 5321	$ 87,311	$ 88,508	$ 64,704	$ (23,805)	$ (22,607)
Customer Services Acct 5405 to 5420	$ 526,090	$ 584,897	$ 662,219	$ 77,322	$ 136,129
Admin Acct 5605 to 5635, 5665	$ 1,819,004	$ 2,614,914	$ 2,491,073	$ (123,841)	$ 672,068
Building 5675	$ 416,453	$ 333,356	$ 389,410	$ 56,055	$ (27,043)
	$ 3,463,696	**$ 4,214,051**	**$ 4,085,786**	**$ (128,265)**	**$ 622,090**

Corporate Costs Allocation Methodology

PUCS provides electricity services, such as billing, collection, customer service, and administration services to the affiliated group, and water services to the Public Utilities

Commission. Administrative services include payroll, human resources, accounting, IT services, etc.

PUC engaged BDR North America Inc. ("BDR") to review PUC's method for allocating shared services in the fall of 2021. The review included consideration of the current method which was based on a review performed by RDI Consulting Inc. in 2007. PUC engaged BDR to review its methodology in the context of the current scope of shared services.

All pricing is at fully allocated cost. The methodology can be summarized as follows:

For business functions that include Operations, Customer Service, Collections, Vehicle operations, Regulatory and Stores, Warehouse and Procurement a direct assignment approach is identified. This approach provides an allocation of the dollar costs and an allocation of work time, or FTEs in each of these business functions. The allocated FTEs are then summed to provide a factor that is used to allocate the costs of resources and activities that support employees in their work. Supporting functions include Human Resources, Information and communications technology, office space, furniture and equipment, payroll administration, accounting, and finance. The number of users of each of the Supporting Functions is considered as reasonable, and in accordance with accepted principles of cost allocation, as an allocator of the costs of these functions. Any costs incurred in a supporting function that can be directly identified to a specific business unit are charged directly to that business unit.

The full report, *Full Absorption Cost Allocation Review* (December 17, 2021) is provided as Appendix B. Overall, the BDR review supported the methodology used in the past with updates to most current payroll data for time studies and direct charges.

The following Tables 4-21 and 4-22 details the allocation percentages to the affiliates for each of the shared services for 2021 and 2018. Overall, the updated factors have remained consistent with the prior report, a 3.42% increase compared to 2018 rates.

Table 4- 21: 2021 Shared Services Allocation

Shared Services	Allocator	PUC Distribution	Public Utilities Commision	PUC Services and Other Related Parties	Total
Billing	# customers	56.00%	44.00%	0.00%	100.00%
Collections	bad debt	74.00%	26.00%	0.00%	100.00%
Customer Services	# of customers	56.00%	44.00%	0.00%	100.00%
Administrative	Labour related effort	42.65%	48.68%	8.67%	100.00%
Building	% building utilized	55.34%	36.93%	7.73%	100.00%
Combined rate		**47.51%**	**42.57%**	**9.92%**	**100.00%**

Table 4-22: 2018 Shared Services Allocation

Shared Services	Allocator	PUC Distribution	Public Utilities Commision	PUC Services and Other Affiliates	Total
Billing	# customers	56.00%	44.00%	0.00%	100.00%
Collections	bad debt	74.00%	26.00%	0.00%	100.00%
Customer Services	# of customers	56.00%	44.00%	0.00%	100.00%
Administrative	Labour related effort	41.30%	43.80%	14.90%	100.00%
Building	% building utilized	46.45%	45.61%	7.94%	100.00%
Combined rate		**44.09%**	**42.57%**	**13.34%**	**100.00%**
Difference 2018 versus 2021		**3.42%**	**0.00%**	**-3.42%**	**0.00%**

4.3.4 Purchases of Non-Affiliate Services

PUC's purchasing policy establishes the principles, requirements, accountabilities and guidelines for the purchase of goods and services. The policy establishes amounts, requirements and approvals necessary to maintain full and open competition between supplies, vendors and contractors through the use of competitive bids, quotations and awards.

PUC confirms that it is in compliance with the Purchasing Policy. The policy ensures that all procurement activities within PUC maintain high legal, ethical, managerial, and professional standards. The policy identifies certain situations where a competitive bid process may not be followed. Exceptions are subject to approval by the President & CEO. A copy of PUC's Purchasing Policy is attached as Appendix C.

Table 4-23 below lists PUC's purchases that exceeded the materiality threshold in 2018 – 2022 of $135,000. The table also identifies the method of vendor selection. PUC anticipates using the same vendors for 2023, however new suppliers are continuously being sourced for best pricing. Occasionally, it is necessary to obtain services or products utilizing a single or sole source process. The details of the single/sole source process are included in the Purchasing Policy.

<u>Table 4-23: Vendor Purchases</u>

Vendor Name	Product/Service	Method of Selection	2018	2019	2020	2021	2022
17 TREES INC.	Line Clearing	Sole source			$ 435,492	$ 899,918	$ 370,372
ANIXTER POWER SOLUTIONS (HD)	TRX and Pole Line Hardware	Competitive Bid	$589,107	$ 488,666	$ 465,700	$ 520,076	$ 288,409
ASPLUNDH CANADA ULC	Line Clearing	Competitive Bid	$441,504	$ 578,870			
BELL CANADA -PRE.	Pole Attachments	Regulated		$ 136,326	$ 184,943	$ 188,643	$ 184,530
BORDEN LADNER GERVAIS LLP	Regulatory Services	Sole source	$206,202				
CAM TRAN CO LTD	Transformers, pole, line Hardware	Competitive Bid	$257,400	$ 415,609	$ 551,314	$ 394,309	$ 324,006
ECOBILITY INC.	AFT Program Delivery	Sole source	$261,940	$1,728,372	$1,298,090	$ 627,434	
EPTCON LTD.	Professional Engineering services	Competitive Bid			$ 183,514	$ 187,332	
GUILLEVIN INTERNATIONAL	PVC, Safety Items, Tools	Competitive Bid	$144,764	$ 144,629		$ 191,399	
JACO LINE CONTRACTORS LTD	Pole Testing	Competitive Bid			$ 287,524		
KTI LIMITED	Metering upgrades	Competitive Bid			$ 208,077		
NORAMCO WIRE & CABLE	Wire	Competitive Bid			$ 238,410		
ONTARIO ENERGY BOARD	OEB Fees	Regulated	$163,938	$ 148,402	$ 144,542		
OVERLAND CONTRACTING CANADA IN	SSG Project	Competitive Bid				$5,926,310	$1,547,634
PICKARD CONSTRUCTION	Customer Demand	Competitive Bid	$334,532	$ 289,056			
POWERNORTH UTILITY CONTRACTORS	Pole Pulling	Competitive Bid					$ 138,871
S & T ELECTRICAL	Customer Demand and Sub 16 Rebuild	Competitive Bid			$ 266,856	$3,095,318	$ 555,179
S S MARIE INNOVATION CENTRE	GIS Services	Sole Source	$336,488	$ 344,859	$ 324,409	$ 299,150	
SENSUS CANADA, INC	AMI Services	Competitive Bid			$ 167,335	$ 152,513	
SIEMENS CANADA LIMITED	Sub 16 Switchgear	Competitive Bid		$ 385,898	$ 736,528	$ 150,253	
SLING-CHOKER MFG LTD	Garage Doors	Competitive Bid				$ 446,662	
STELLA-JONES INC	Wood Poles	Competitive Bid	$334,113	$ 258,345	$ 208,999	$ 256,182	
SUPERIOR INDUSTRIAL	Upgrades at TS1 DUCT BANK	Competitive Bid	$195,426				
VIRGINIA TRANSFORMER CANADA	Sub 16 Transformers	Competitive Bid		$ 499,103	$ 441,684		
WSP CANADA INC.	Professional Engineering services	Competitive Bid	$217,872				

4.3.5 One-Time Costs

PUC has included one-time costs of $136,000 in its 2023 Test Year revenue requirement based on a five-year recovery until the next cost of service application. This amount represents one-fifth of the total forecasted costs of $680,000 related to this Application. The costs are identified in Table 4-23 below. PUC has not applied treatment of any other one-time costs in the Test Year OM&A.

4.3.6 Regulatory Costs

Reporting to the Finance Division, the Rates and Regulatory Affairs Officer is responsible for preparing regulatory filings and rate applications, performing settlement reviews and reconciliations, ensuring regulatory and legislative compliance, performing business and process reviews, participating in regulatory consultations and providing reporting and timely responses to regulatory bodies. Due to the complexity and workload involved in completing regulatory tasks, other members of the Management team are required on an on-going basis to ensure regulatory and legislative compliance and also to provide assistance in preparing rate applications. PUC has included an estimate of total staff costs related to on-going costs in Table 4-24 below.

Other regulatory expenses include annual assessment fees paid to the OEB, cost awards for hearings, proceedings and other matters before the regulatory body and costs associated with consultants providing regulatory compliance assistance. The 2023 Test Year includes an estimate of the full cost of OEB assessments.

Annual ongoing costs include the OEB assessment, section 30 costs, miscellaneous regulatory and training costs, and staff resources allocated to regulatory matters. PUC will incur significant costs for preparing, processing and seeking approval of this application. The costs include consulting and legal fees, incremental expenses related to staff resources, and intervenor costs awards as identified in the Table 4-24 below. As noted above in the variance analysis section, the total application costs are forecasted to be $680,000. Costs are over the 5-year rate period and have been included in Test Year expenses. Total costs have been included in expenses in the 2023 Test Year.

Table 4-24 Regulatory Cost Schedule

	Regulatory Cost Category	USoA Account	Last Rebasing Year (2018 OEB Approved)	Last Rebasing Year (2018 Actual)	Most Current Actuals Year 2021	2022 Bridge Year	Annual % Change	2023 Test Year	Annual % Change
	(A)	(B)	(D)	(E)	(F)	(G)	(H)=[(G)-(F)]/(F)	(I)	(J) = [(I)-(G)]/(G)
	Regulatory Costs (Ongoing)								
1	OEB Annual Assessment	5655	180,000	142,277	137,339	140,000	1.94%	143,000	2.14%
2	OEB Section 30 Costs (OEB-initiated)	5655	10,000	3,247	6,919	10,000	44.53%	10,000	0.00%
3	Expert Witness costs for regulatory matters								
4	Legal costs for regulatory matters								
5	Consultants' costs for regulatory matters	5655	106,816		16,893	20,000	18.40%	20,000	0.00%
6	Operating expenses associated with staff resources allocated to regulatory matters	5655	95,341	79,739	113,204	179,944	58.96%	302,858	68.31%
7	Operating expenses associated with other resources allocated to regulatory matters								
8	Other regulatory agency fees or assessments								
9	Any other costs for regulatory matters (please define)								
10	Intervenor costs	5655							
11	Include other items in green cells, as applicable								
	Regulatory Costs (One-Time)								
1	Expert Witness costs								
2	Legal costs								
3	Consultants' costs	5655	515,000	266,633				430,634	
4	Incremental operating expenses associated with staff resources allocated to this application.			210,958				126,366	
5	Incremental operating expenses associated with other resources allocated to this application.								
6	Intervenor costs		74,000	63,670				100,000	
7	OEB Section 30 Costs (application-related)			18,191				20,000	
8	Settlement Conference Expenses	5655	10,000	19,336				3,000	
1	Sub-total - Ongoing Costs		$ 392,157	$ 225,263	$ 274,354	$ 349,944	27.55%	$ 475,858	35.98%
2	Sub-total - One-time Costs		$ 599,000	$ 578,788	$ -	$ -		$ 680,000	
3	Total		$ 511,957	$ 804,051	$ 274,354	$ 349,944	27.55%	$ 611,858	74.84%

Application-Related One-Time Costs	Total	Total
Total One-Time Costs Related to Application to be Amortized over IRM Period	$ 599,000	$ 680,000
1/5 of Total One-Time Costs	$ 119,800	$ 136,000

One-time costs include consulting costs for legal and consulting assistance from experienced subject matter experts. These are identified in Table 4-25.

Table 4- 25: One Time Cost of Service Application Costs

Cost of Service Application Costs	Total COS
Incremental operating expenses associated with staff resources allocated to this application.	$ 126,366
Consultants' costs (legal, DSP, Shared Services, LRAM)	$ 430,634
Intervenor costs (4)	$ 100,000
OEB application costs	$ 20,000
Settlement conference costs (virtual)	$ 3,000
	$ 680,000

4.3.7 Low-Income Energy Assistance Programs ("LEAP")

In March 2009, the OEB issued its Report of the Board: Low Income Energy Assistance Program (the "LEAP Report") which describes policies and measures for electricity distributors to assist low-income energy consumers, including emergency financial assistance.

The delivery of LEAP relies heavily on the cooperation between PUC and its lead social agency, United Way – Community Assistance Trust, to administer the program within PUC's service territory.

In accordance with filing guidelines 2.4.3.6, PUC understands that the LEAP financial assistance is an ongoing cost, therefore, PUC has included an estimated amount of $31,144 in its 2023 test year expenses. PUC understands that the included figure is a placeholder for LEAP. At the time the final rates are determined, PUC will update this figure as calculated in Table 4-26. In the table below, this amount is based on 0.12% of the 2023 test year revenue requirement. This amount has been included in Account 6205 – Donations, to ensure that it is captured appropriately in the revenue requirement.

PUC's 2023 Test Year revenue requirement does not include any legacy low-income energy assistance programs.

Table 4-26: LEAP

2023 Test Year	
Service Revenue Requirement	$27,952,199
LEAP %	0.12%
LEAP $	$33,543
LEAP Amount Used $	$31,144

4.3.8 Charitable and Political Donations

Other than the LEAP charitable donations, PUC has not included any other charitable donations in OM&A expenses.

PUC also confirms it does not make political contributions; therefore, no political contributions have been included for recovery.

4.3.9 Non-Recoverable and Disallowed Expenses

PUC does not have any expenses that are deducted for general tax purposes but for which recovery in 2023 distribution rates would be disallowed.

4.4 CONSERVATION AND DEMAND MANAGEMENT (“CDM”)

4.4.2 Lost Revenue Adjustment Mechanism ("LRAM") for 2018-2022

PUC proposes to recover an LRAMVA (Account 1568) amount of $201,460 for CDM activities completed in 2018 and 2019 and persistence of CDM activities from 2017, 2018 and 2019 through 2022. This amount includes carrying charges to December 31, 2022 of $6,941. PUC's last LRAMVA claim was approved as part of its 2019 IRM proceeding for savings through to 2017.

PUC is not currently running any CDM programs and confirms that no CDM costs are included in its Test Year revenue requirement. PUC did not offer any programs under the Interim Framework.

<u>Background</u>

On March 31, 2011, the Minister of Energy and Infrastructure issued a directive (the "Directive") to the OEB regarding electricity CDM targets to be met by licensed electricity distributors. On April 26, 2012, the OEB issued *Guidelines for Electricity Distributor Conservation and Demand Management* (EB-2012-0003 – the "CDM Guidelines"). In keeping with the Directive, the OEB adopted a mechanism to ensure LDCs were kept whole for encouraging customer CDM.

The OEB authorized the establishment of LRAMVA Account 1568 (LRAMVA) to capture, at the customer class level, the difference between:

- The results of actual, verified impacts of authorized CDM activities undertaken by distributors for both OEB-Approved CDM programs and IESO-Contracted Province-Wide CDM programs in relation to activities undertaken by the distributor and/or delivered for the distributor by a third party under contract (in the distributor’s franchise area); and
- The level of CDM program activities included in the distributor’s load forecast (i.e., the level embedded in rates).

On March 26, 2014, the Minister of Energy issued a directive regarding the new Conservation First Framework ("CFF") for conservation and demand management activities in place from 2015 to 2020 and continuance of the lost revenue adjustment mechanism.

On March 20, 2019, the Minister of Energy, Northern Development and Mines (“MENDM”) issued a directive to the IESO mandating the discontinuance of the CFF and the establishment of an Interim Framework for CDM programming. Under the Interim Framework, the new province-wide target for CDM savings was 1.4 TWh and the framework was scheduled to expire on December 31, 2020.

Subsequent to the discontinuance of the 2015-2020 CFF, on June 20, 2019, the OEB issued a letter[5] to distributors stating that distributors should continue to have access to LRAM related to the successful delivery of CFF programs. In addition, the OEB updated the Chapter 2 filing requirements to make modifications reflecting the new requirements set forth in the interim framework.

On July 22, 2020, the MENDM issued a directive to the IESO mandating the extension of timelines for certain projects and related deadlines under the CFF to June 30, 2021. These extensions are intended to offset the disruptions caused by COVID-19 for participants and those businesses involved in delivering CDM programs. Contracted program participants in the certain CFF programs are eligible for project extensions to June 30, 2021 (i.e., Retrofit Program, Process and Systems Upgrade Program, Residential New Construction Program, High Performance New Construction Program). On December 9, 2021, the deadline was extended once more to December 31, 2022.

LRAM Variance Account (LRAMVA)

PUC is applying for disposition of Account 1568 – LRAMVA to recover lost revenues in the amount of $201,460. PUC is requesting disposition of the net lost revenues from:

- Persistence of 2017 results from January 1, 2018 to December 31, 2022;

[5] OEB Letter, June 20, 2019, Lost Revenue Adjustment Mechanism for 2020 Rate Applications

- Results of programs offered in 2018, and persistence of 2018 results through to December 31, 2022; and
- Results of programs offered in 2019, and persistence of 2019 results through to December 31, 2022.

PUC did not have any CDM projects or programs completed in 2020 or 2021.

Some of the projects in these programs were not finalized until after the programs shut down, but all were approved before April 1, 2019 as part of the CFF. PUC confirms its claim for 2018 through 2022 is considered final.

A summary of the LRAMVA disposition request by customer class including projected carrying charges to December 31, 2022, is presented in Table 4-27.

Table 4-27: LRAM

Customer Class	Billing Unit	Principal ($)	Carrying Charges ($)	Total LRAMVA ($)
Residential	kWh	$42,005	$2,502	$44,507
GS<50 kW	kWh	($103,740)	($3,211)	($106,950)
GS 50-4,999 kW	kW	$256,254	$7,650	$263,903
Unmetered Scattered Load	kWh	$0	$0	$0
Sentinel Lighting	kW	$0	$0	$0
Street Lighting	kW	$0	$0	$0
Total		**$194,519**	**$6,941**	**$201,460**

Methodology for Calculating LRAMVA

PUC retained IndEco Strategic Consulting Inc. ("IndEco") to develop its 2023 LRAMVA claim. Their full report is available in Appendix D. PUC has also submitted the completed OEB LRAMVA work form as a live excel file, "PUC_2023_LRAMVA_Workform_20220831". IndEco used the most recent input assumptions available at the time of the program evaluation, including the following information:

- IESO's 2017 final verified CDM results report for PUC Distribution Inc. (filed with EB-2018-0219);
- IESO's 2017 final verified CDM results report by project for PUC Distribution Inc. (key results on Tab 3-a of the live workform);
- IESO's April 2019 Participation and Cost Report ("P&C") for PUC Distribution Inc. (filed live excel file, "PUC_2023_Participation and Cost Report (2019 04) _20220831"); and
- PUC's CDM databases for project data in 2018 and 2019 (key results on Tab 3-a of the workform).

For 2017, the 2017 final verified results report contains net energy and demand savings by program, and persistence of these beyond the forecast period. The results by project were used to determine the allocation of savings for the Audit Funding and Retrofit Programs, which spanned more than one customer class. The customer class for each project was determined, and the percentage of energy savings (for projects in GS<50 kW) and demand savings (for projects in GS 50-4,999 kW) were calculated. Information about projects, and the calculation of the allocation is provided on a new Tab 3-a of the LRAMVA work form. Some additional 2017 savings were identified in the April 2019 P&C. Net demand and persistence of these were calculated based on net demand and persistence of the other results for that program in the final verified 2017 values.

For 2018 and 2019, residential net energy savings in 2018 and 2019, and their persistence in 2020 were taken from the April 2019 Participation and Cost ("P&C") report for PUC. Net energy savings for 2018 and 2019 in the program year and 2020 were also taken from that report. Persistence of these is based on the persistence of that program seen in the verified 2017 results.

The P&C report did not fully capture all projects completed in 2018 and 2019, nor does it identify the individual projects included. PUC databases were used to identify the gross reported energy and demand savings for non-residential projects. These were then multiplied by the 2017 verified net-to-gross and realization rate values for that program to determine net savings. Persistence was estimated using the same rate of persistence loss seen in the 2017 final verified results. Allocation across customer classes was calculated as for the 2017 results.

Savings already captured in the 2018 load forecast were subtracted from the savings calculated to get the variance in load that results in lost revenues. The amount in the load forecast is the LRAMVA threshold specified in the Settlement Agreement of EB-2017-0071 and reproduced in the Board's decision.
The uncaptured savings are multiplied by the appropriate annualized volumetric distribution rate for each class to determine the lost revenues in that class.

Carrying charges on outstanding amounts from January 1, 2018 through December 31, 2022 are calculated according to the OEB specified methodology and using OEB interest rates. OEB has not yet prescribed the interest rate for Q4 2022. The most recent rate (for Q3 2022) was assumed to persist.

Rate Rider Calculation

PUC proposes to recover the LRAMVA amount of $201,460 through class-specific volumetric rate riders that would be in effect for a period of 12 months from May 1, 2023 to April 30, 2024. These class-specific rate riders were determined by totalling the class-specific LRAMVA amounts by program and dividing by volumetric billing determinants consistent with the proposed load forecast. The proposed rate riders are shown in Table 4-28 below.

Table 4-28: LRAM Rate Rider

Rate Class	Units	kW / kWh / # of Customers	Allocated Account 1568	Rate Rider for Account 1568
Residential	kWh	274,738,681	$ 44,507	**0.0002**
GS<50 kW	kWh	79,051,528	$ (111,834)	**(0.0014)**
GS 50-4,999 kW	kW	547,687	$ 263,903	**0.4819**
Unmetered Scattered Load	kWh	878,528		-
Sentinel Lighting	kW	7,200		-
Street Lighting	kW	566		-
Total			**$ 196,576**	

There are no savings claimed, and there is thus no rate rider for Unmetered Scattered Load, Sentinel Lighting, or Streetlighting as there were no projects in any of these customer classes over the period being claimed. It is appropriate to make a claim for other customer classes at this time, as no additional projects are expected to be finalized as part of the Conservation First Framework.

APPENDIX A PUCS

Actuary Valuation

Report 2021

PUC SERVICES INC.

REPORT ON THE ACTUARIAL VALUATION OF POST-RETIREMENT NON-PENSION BENEFITS

AS AT DECEMBER 31, 2021

FINAL – February 11, 2022

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Purpose

RSM Canada Consulting LP was engaged by PUC Services Inc. (the "Corporation") to perform an actuarial valuation of the post-retirement non-pension benefits sponsored by the Corporation and to determine the accounting results for those benefits for the fiscal period ending December 31, 2021. The nature of these benefits is defined benefit.

This report is prepared in accordance with the International Financial Reporting Standards ("IFRS") guidelines for post-retirement non-pension benefits as outlined in the International Accounting Standard 19 – Employee Benefits ("IAS 19").

The most recent full valuation was prepared as at December 31, 2018 based on the assumptions chosen by management at that date and in accordance with IAS 19.

The purpose of this valuation is threefold:

i) To determine the Corporation's liabilities in respect of post-retirement non-pension benefits at December 31, 2021;

ii) To determine the defined benefit costs to be recognized for fiscal year 2021; and

iii) To provide all other pertinent information necessary for compliance with IAS 19.

Note that all monetary figures in this report are rounded to the nearest hundreds of dollars and summated figures in this report may not match total figures due to rounding.

The intended users of this report include the Corporation and its auditors. This report is not intended for use by the plan beneficiaries or for use in determining any funding of the benefit obligations.

Included in the Appendix attached hereto are detailed accounting schedules containing the results of the valuation.

SECTION A — VALUATION RESULTS

Section A.1 shows the key valuation results compared to previous year's figures projected from the most recent full valuation as well as a breakdown between active and retired individuals and type of benefit.

Section A.2 shows the sensitivity of the valuation results to certain changes in assumptions. We have shown an increase/decrease in the health claims cost trend rates by 1% per annum and an increase/decrease in the discount rate by 1% per annum.

Section A.3 shows the development of changes in the present value of defined benefit obligation as a result of the re-measurement at December 31, 2021.

Valuation Results

Section A.1—Valuation Results

Results from the actuarial valuation as at December 31, 2021 compared to previous year's figures projected from the most recent full valuation:

	December 31, 2020	December 31, 2021
Present Value of Defined Benefit Obligation (PV DBO)	**2,349,500**	**1,786,800**

	CY 2020	CY 2021
Current Service Cost	146,800	137,300
Interest Cost	63,800	59,900
Defined Benefit Cost Recognized in Income Statement	210,500	**197,200**
Actuarial (Gain)/Loss	120,100	(669,400)
Defined Benefit Cost Recognized In OCI	**120,100**	**(669,400)**
Defined Benefit Cost	**330,600**	**(472,200)**

The following table provides results from the actuarial valuation as at December 31, 2021 broken down by active (including LTD) and retired individuals and type of post-retirement non-pension benefit:

Dec. 31, 2021 PV DBO	Actives (incl. LTD)	Retirees	Total
Life	30,100	106,500	**136,600**
Health	1,209,400	440,800	**1,650,200**
Total	**1,239,500**	**547,300**	**1,786,800**

Sensitivity Analysis

Section A.2—Sensitivity Analysis

	Dec. 31, 2021 PV DBO	Difference	% Difference
Base Assumptions	1,786,800		
Cost Trends +1%	1,983,100	196,300	11%
Cost Trends -1%	1,619,900	(166,900)	-9%
Discount Rate +1%	1,590,800	(195,900)	-11%
Discount Rate -1%	2,025,700	238,900	13%

Management's best estimate assumptions are those outlined in *Section C – Summary of Actuarial Method and Assumptions* in this report.

Development of Changes in the Present Value of Defined Benefit Obligation

Section A.3—Development of Changes in the Present Value of Defined Benefit Obligation

PV DBO at December 31, 2020	2,349,500
2021 Current Service Cost	137,300
2021 Benefit Payments	(90,500)
2021 Interest Cost	59,900
Expected PV DBO at December 31, 2021	**2,456,200**
Actuarial (Gain)/Loss at December 31, 2021	(669,400)
PV DBO at December 31, 2021	**1,786,800**

The decrease indicated above of $669,400 in the PV DBO from the expected PV DBO at December 31, 2021 is due to the re-measurement of the liability; a breakdown of the changes is as follows:

Change in composition of active and retiree data (actual experience different from expected)	(98,700)
Change in assumptions:	
Claims Cost	(390,700)
Withdrawal Table	(113,300)
Discount Rate	(66,700)
Total Actuarial (Gain)/Loss at December 31, 2021	**(669,400)**

Pursuant to IAS 19, the re-measurement of the PV DBO at December 31, 2021 based on the changes in the assumptions and experience is recognized immediately in other comprehensive income at December 31, 2021.

SECTION B — PLAN PARTICIPANTS

Section B.1 sets out the summary information with respect to the plan participants valued in the current valuation compared to those valued in the previous valuation.

Section B.2 reconciles the number of participants in the previous valuation to the number of participants in the current valuation.

Participation Data

Section B.1—Participant Data

Membership data as at October 31, 2021 was received from the Corporation via e-mail and included information such as name, sex, age, date of hire, benefit amounts and other applicable details for all active employees and people in receipt of benefits.

Although the data provided reflected status and benefit information as at October 31, the Corporation has indicated that any changes in status and other member data occurring from October 31 to December 31 are not expected to be material to the valuation results.

We have reviewed the data and compared it to the data used in the previous valuation for consistency and reliability for use in this valuation. The main tests of sufficiency and reliability that were conducted on the membership data are as follows:

- Date of hire prior to date of birth;
- Ages under 18 or over 100;
- Abnormal levels of benefits and/or premiums; and
- Duplicate records

In addition, the following tests were performed:

- A reconciliation of statuses from the prior valuation to the current valuation;
- A review of the consistency of individual data items and statistical summaries between the current and prior valuations; and
- A review of the reasonableness of changes in such information since the prior valuation.

	November 30, 2018	October 31, 2021
Employee Count		
Male	123	122
Female	50	47
Total	**173**	**169**
Employee Average Service		
Male	12.0	10.5
Female	10.9	9.5
Total	**11.7**	**10.2**
Retiree (in Receipt of Benefits) Count		
Male	64	67
Female	23	24
Total	**87**	**91**

RSM

	Employee Count as of October 31, 2021			Employee Avg Service as of October 31, 2021		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
< 30	8	1	9	3	2	3
30 - 35	12	11	23	5	5	5
36 - 40	26	5	31	10	10	10
41 - 45	26	7	33	9	11	9
46 - 50	18	13	31	13	10	12
51 - 55	19	7	26	13	14	13
56 - 60	8	3	11	12	9	11
61 - 65	4	-	4	23	-	23
66 - 70	1	-	1	33	-	33
71 - 75	-	-	-	-	-	-
> 75	-	-	-	-	-	-
Total	**122**	**47**	**169**	**10.5**	**9.5**	**10.2**

Participant Reconciliation

Section B.2—Participation Reconciliation

	Actives	Disabled	Retired
November 30, 2018	**173**	**3**	**87**
New Entrants	37	-	-
Actives	-	3	33
Terminated	(11)	-	-
Retired	(33)	-	-
Deceased	-	-	(11)
Disabled	(3)	-	-
Not Eligible for Benefits*	-	-	(18)
October 31, 2021	**163**	**6**	**91**

** These 18 individuals are no longer eligible for benefits as they are over the eligibility age (age 65) for post-retirement health benefits and have also opted out of post-retirement life benefits.*

SECTION C — SUMMARY OF ACTUARIAL METHOD AND ASSUMPTIONS

Actuarial Method

The aim of an actuarial valuation of post-retirement non-pension benefits is to provide a reasonable and systematic allocation of the cost of these future benefits to the years in which the related employees' services are rendered. To accomplish this, it is necessary to:

- make assumptions for discount rates, mortality, and other decrements;
- use these assumptions to calculate the present value of the expected future benefits; and,
- adopt an actuarial cost method to allocate the present value of expected future benefits to the specific years of employment.

The Defined Benefit Obligation and Current Service Cost were determined using the projected benefit method, pro-rated on service. This is the method stipulated by IAS 19. Under this method, the projected post-retirement benefits are deemed to be earned on a pro-rata basis over the years of service in the attribution period. IAS 19 stipulates that the attribution period commences on the date when service by the employee first leads to benefits under the plan (whether or not the benefits are conditional on further service) and ends on the date when further service by the employee will lead to no material amount of further post-retirement non-pension benefits under the plan, other than from further salary increases.

For each employee not yet fully eligible for benefits, the Present Value of the Defined Benefit Obligation (PV DBO) is equal to the present value of expected future benefits multiplied by the ratio of the years of service to the valuation date to the total years of service in the attribution period. The Current Service Cost is equal to the present value of expected future benefits multiplied by the ratio of the year (or part) of service in the fiscal year to total years of service in the attribution period.

The PV DBO at December 31, 2021 is based on membership data as at October 31, 2021 and management's best estimate assumptions established for calculations as at December 31, 2021.

For health benefits, the Corporation has selected the premium rates charged retirees as management's best estimate of the benefits costs to be incurred. The total monthly premium rates, inclusive of premium taxes, used for the current and previous valuation are as follows:

	Current Valuation (Plan E)		Current Valuation (Plan E1)	
Effective Period	Health Single	Health Family	Health Single	Health Family
April 1, 2021 – December 31, 2021	$ 76.20	$ 194.69	$ 91.77	$ 214.21

	Previous Valuation	
Effective Period	Health Single	Health Family
March 1, 2019 – February 28, 2020	$ 90.04	$ 228.00

The rates above are at the 100% level and prior to any cost-sharing provisions under the plan.

Management's Best Estimate Assumptions

The following are management's best estimate economic and demographic assumptions for calculations as at December 31, 2021.

Economic Assumptions

Discount Rate

The rate used to discount future benefits is assumed to be 2.90% per annum as of December 31, 2021. This rate reflects the Corporation's expected projected benefit cash flows for post-retirement non-pension benefits and the market yields on high quality bonds at the time of preparing the valuation.

The assumption used in the previous valuation was 4.00% per annum as at December 31, 2018, which was subsequently updated to 2.60% as at December 31, 2020.

Claims Cost Trend Rate

The rates used to project benefits costs into the future were chosen based on a research paper published by the Canadian Institute of Actuaries – *Model of Long-Term Health Care Cost Trends in Canada* - dated March 2018. This assumption remains unchanged from the previous valuation.

The following table provides a sample of the health trend rates used in the current valuation.

	Current Valuation
Year	Health
2022	4.70%
2025	5.30%
2030	5.30%
2035	4.60%
2040 and thereafter	4.00%

Demographic Assumptions

Mortality Table

The mortality tables used are as per the Canadian Institute of Actuaries Canadian Pensioners' Mortality Pension Experience Subcommittee final report dated February 11, 2014 (CIA Report). More specifically, the Canada Pensioners Mortality ("CPM") Table Public Sector (CPM2014 PUBL) has been used with the generational projection of mortality improvement based upon the CIA MI-2017 mortality improvement scale published in 2017.

This assumption remains unchanged from the previous valuation.

Rates of Withdrawal

Termination of employment is assumed to be in accordance with the following withdrawal table:

Age Bucket	Current Valuation
18 – 29	2.90%
30 – 34	2.15%
35 – 39	1.85%
40 – 49	1.45%
50 – 54	1.25%

In the previous valuation, termination of employment is assumed to be 0.5% per annum prior to age 55.

Retirement Age

All active employees are assumed to retire at age 59 (or immediately if currently over age 59), which was based on the Corporation's retirement experience as well as a seven year retirement experience study on a group of local distribution companies for which data was available.

This assumption remains unchanged from the previous valuation.

Disability

No provision was made for future disability

This assumption remains unchanged from the previous valuation.

Other Assumptions

Family/Single Coverage

The following assumptions were chosen for the current valuation and are unchanged from the previous valuation:

- Coverage Type at Retirement (i.e. family, single) – The employee's coverage type at the valuation date will remain the same until the employee reaches the assumed retirement age.
- Spousal Gender – For employees with family coverage, the retiree has a spouse of the opposite gender at the date of retirement.
- Spousal Age Offset – Male spouses are assumed to be three years older than female spouses.

Coverage Participation

Upon retirement, it is assumed that 50% of eligible retirees will opt to continue with the life insurance benefit and 100% of eligible retirees will opt to receive extended health benefits until age 65.

This assumption remains unchanged from the previous valuation.

Expenses and Taxes

The taxes and expenses are included in the premium rates assumed for health benefits.

We have assumed 10% of benefits is required for the cost of sponsoring the program for post-retirement life insurance.

These assumptions remain unchanged from the previous valuation.

SECTION D —
SUMMARY OF POST-RETIREMENT BENEFITS

The following is a summary of the plan provisions that are pertinent to this valuation, based on information provided by and discussions with the Corporation.

Eligibility

All employees who retire from the Corporation have the option to sign up for post-retirement life insurance benefits and extended health coverage.

Participant Contributions

The Corporation shall pay 50% of the cost of life insurance benefits for all retirees if they choose to sign up for life insurance, except for the retirees with coverage amount of $2,000, of which 100% of the cost will be paid.

The Corporation shall pay 100% of the cost of the extended health care until 65 for all retirees if they choose to keep the benefit.

Past Service

Past service is defined as continuous service prior to joining the plan if the participant was employed by another electrical distribution company prior to joining the Corporation.

Length of Service

Length of service is defined as continuous service from the date of hire to the valuation date, measured in years and months.

Summary of Benefits

Life Insurance

All eligible early retirees who choose to sign up for post-retirement life insurance are entitled to lifetime post-retirement life insurance with a flat benefit coverage amount of $5,000, the cost of which is shared equally between the Corporation and the retiree. There are exceptions for a few retirees who have flat benefit coverage amounts of $2,000 which is fully paid by the Corporation.

Health Benefits

All eligible employees are entitled to receive post-retirement health benefits to age 65.

A detailed description of the health benefits covered under the post-retirement non-pension benefits plan can be found in benefit information booklets provided to employees.

ACTUARIAL CERTIFICATION

An actuarial valuation has been performed on the post-retirement non-pension benefit plans sponsored by PUC Services Inc. (the "Corporation") as at December 31, 2021, for the purposes described in this report.

In accordance with the Canadian Institute of Actuaries Consolidated Standards of Practice General Standards, we hereby certify that, in our opinion, for the purposes stated in the Executive Summary:

1. The data on which the valuation is based is sufficient and reliable;

2. The assumptions employed, as outlined in this report, have been selected by the Corporation as management's best estimate assumptions (no provision for adverse deviations) and we express no opinion on them;

3. All known legal and constructive obligations with respect to the post-retirement non-pension benefits sponsored by and identified by the Corporation are included in the calculations; and

4. This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.

We are not aware of any subsequent events after the date of completing this valuation that would have a significant effect on the valuation results contained herein.

The latest date on which the next actuarial valuation should be performed is December 31, 2024. If any supplemental advice or explanation is required, please advise the undersigned.

Respectfully submitted,
RSM CANADA CONSULTING LP

Stanley Caravaggio

Stanley Caravaggio, FSA, FCIA
Director

Jamie Wong

Jamie Wong, ASA, ACIA
Manager

Toronto, Ontario

February 11, 2022

RSM

SECTION E — EMPLOYER CERTIFICATION

**Post-Retirement Non-Pension Benefit Plan
of PUC Services Inc.
Actuarial Valuation as at December 31, 2021**

I hereby confirm, as an authorized signing officer of the administrator of the Post-Retirement Non-Pension Benefit Plan of PUC Services Inc. that, to the best of my knowledge and belief, for the purposes of the valuation:

i) The membership data summarized in Section B is accurate and complete;

ii) The assumptions upon which this report is based as summarized in Section C, are management's best estimate assumptions and are adequate and appropriate for the purposes of this valuation; and

iii) The summary of Plan Provisions in Section D is an accurate and complete summary of the terms of the Plan in effect on December 31, 2021.

PUC SERVICES INC.

February 9, 2022	Kim McLellan
Date	Signature
Kelly McLellan	VP, Finance and Corporate Support
Name	Title

RSM

APPENDIX — DETAILED ACCOUNTING SCHEDULES

RSM

PUC Services Inc.

Estimated Benefit Expense (IAS 19)

FINAL

	Actuals CY 2021 *	Projected ** CY 2022	Projected ** CY 2023	Projected ** CY 2024
Discount Rate at January 1	2.60%	2.90%	2.90%	2.90%
Discount Rate at December 31	2.90%	2.90%	2.90%	2.90%
Health Benefit Cost Trend Rate at December 31	4.40%	4.70%	4.90%	5.10%
Dental Benefit Cost Trend Rate at December 31	4.70%	4.90%	5.10%	5.40%
Long Term Health and Dental Benefit Cost Trend Rate	4.00%	4.00%	4.00%	4.00%
First Year Of Long Term Health and Dental Benefit Cost Trend Rate	2040	2040	2040	2040
Assumed Increase in Employer Contributions	actual	expected ***	expected ***	expected ***

A. Change in the Net Defined Benefit Liability/(Asset) Recognized in Balance Sheet

	CY 2021	CY 2022	CY 2023	CY 2024
Net Defined Benefit Liability/(Asset) as at January 1	2,349,497	1,786,769	1,854,163	1,919,184
Defined Benefit Cost Recognized in Income Statement	197,195	180,674	183,005	186,793
Defined Benefit Cost Recognized in Other Comprehensive Income	(669,408)	-	-	-
Benefits Paid by the Employer	(90,515)	(113,280)	(117,984)	(119,337)
Net Defined Benefit Liability/(Asset) as at December 31	1,786,769	1,854,163	1,919,184	1,986,640

B. Determination of Defined Benefit Cost

B1. Determination of Defined Benefit Cost Recognized in Income Statement

	CY 2021	CY 2022	CY 2023	CY 2024
Current Service Cost	137,285	130,489	130,933	132,854
Interest Cost	59,910	50,185	52,072	53,939
Defined Benefit Cost Recognized in Income Statement	197,195	180,674	183,005	186,793

B2. Remeasurements of the Net Defined Benefit Liability/(Asset) Recognized in Other Comprehensive Income

	CY 2021	CY 2022	CY 2023	CY 2024
Net Actuarial Loss/(Gain) arising from Changes in Financial Assumptions	(457,388)	-	-	-
Net Actuarial Loss/(Gain) arising from Changes in Demographic Assumptions	(113,293)	-	-	-
Net Actuarial Loss/(Gain) arising from Experience Adjustments	(98,727)	-	-	-
Return on Plan Assets (Excluding Amounts Included in Net Interest Cost)	-	-	-	-
Change in Effect of Asset Ceiling	-	-	-	-
Defined Benefit Cost Recognized in Other Comprehensive Income	(669,408)	-	-	-
Total Defined Benefit Cost	(472,213)	180,674	183,005	186,793

C. Change in the Present Value of Defined Benefit Obligation

	CY 2021	CY 2022	CY 2023	CY 2024
Present Value of Defined Benefit Obligation as at January 1	2,349,497	1,786,769	1,854,163	1,919,184
Current Service Cost	137,285	130,489	130,933	132,854
Interest Cost	59,910	50,185	52,072	53,939
Benefits Paid	(90,515)	(113,280)	(117,984)	(119,337)
Net Actuarial Loss/(Gain)	(669,408)	-	-	-
Present Value of Defined Benefit Obligation as at December 31	1,786,769	1,854,163	1,919,184	1,986,640

* The expected December 31, 2021 PV DBO and CY 2021 defined benefit cost are calculated based on membership data at December 31, 2018 and management's best estimate assumptions at December 31, 2020.

** Projected CY 2022, 2023, and 2024 results are provided for informational purposes only. Significant changes such as re-negotiated benefits, increased benefit costs, or significant swings in demographics may require revised projections or a full actuarial review.

*** Based on exepcted benefits to be paid to those eligible for benefits.

RSM

02/11/2022

PUC Services Inc.
Estimated Benefit Expense (IAS 19)
FINAL

	Actuals CY 2021 *	Projected ** CY 2022	Projected ** CY 2023	Projected ** CY 2024
Discount Rate at January 1	2.60%	2.90%	2.90%	2.90%
Discount Rate at December 31	2.90%	2.90%	2.90%	2.90%
Health Benefit Cost Trend Rate at December 31	4.40%	4.70%	4.90%	5.10%
Dental Benefit Cost Trend Rate at December 31	4.70%	4.90%	5.10%	5.40%
Long Term Health and Dental Benefit Cost Trend Rate	4.00%	4.00%	4.00%	4.00%
First Year Of Long Term Health and Dental Benefit Cost Trend Rate	2040	2040	2040	2040
Assumed Increase in Employer Contributions	actual	expected ***	expected ***	expected ***

D. Calculation of Component Items

	Actuals CY 2021 *	Projected ** CY 2022	Projected ** CY 2023	Projected ** CY 2024
Interest Cost				
Present Value of Defined Benefit Obligation as at January 1	2,349,497	1,786,769	1,854,163	1,919,184
Benefits Paid	(45,258)	(56,640)	(58,992)	(59,669)
Accrued Benefits	2,304,240	1,730,129	1,795,171	1,859,516
Interest Cost	59,910	50,185	52,072	53,939
Expected Present Value of Defined Benefit Obligation as at December 31				
Present Value of Defined Benefit Obligation as at January 1	2,349,497	1,786,769	1,854,163	1,919,184
Current Service Cost	137,285	130,489	130,933	132,854
Benefits Paid	(90,515)	(113,280)	(117,984)	(119,337)
Interest Cost	59,910	50,185	52,072	53,939
Expected Present Value of Defined Benefit Obligation as at December 31	2,456,177	1,854,163	1,919,184	1,986,640

E. Net Actuarial Loss/(Gain)

	Actuals CY 2021 *	Projected ** CY 2022	Projected ** CY 2023	Projected ** CY 2024
Net Actuarial Loss/(Gain) as at December 31				
Expected Present Value of Defined Benefit Obligation	2,456,177	1,854,163	1,919,184	1,986,640
Actual Present Value of Defined Benefit Obligation	1,786,769	1,854,163	1,919,184	1,986,640
Net Actuarial Loss/(Gain) as at December 31	(669,408)	-	-	-

* The expected December 31, 2021 PV DBO and CY 2021 defined benefit cost are calculated based on membership data at December 31, 2018 and management's best estimate assumptions at December 31, 2020.

** Projected CY 2022, 2023, and 2024 results are provided for informational purposes only. Significant changes such as re-negotiated benefits, increased benefit costs, or significant swings in demographics may require revised projections or a full actuarial review.

*** Based on exepcted benefits to be paid to those eligible for benefits.

APPENDIX B BDR

North America Inc. –

PUC Full Absorption

Cost Allocation

Review

FULL ABSORPTION COST ALLOCATION REVIEW

Prepared for
PUC Services Inc.
December 17, 2021

BDR NorthAmerica Inc.
416-807-3332

BDR

Table of Contents

Executive Summary

Introduction and Scope

The PUC group of companies is comprised of five (5) subsidiaries of the Corporation of the City of Sault Ste. Marie (the "City"). The group includes PUC Distribution Inc. ("PUCD"), which distributes electricity to residences and businesses within the boundaries of the City of Sault Ste. Marie, the Batchewana First Nation (Rankin Reserve), Prince Township and parts of Dennis Township. PUCD is regulated by the Ontario Energy Board ("OEB"), and therefore requires approval from the OEB for rates charged to electricity consumers. Its most recent Cost of Service rate application, involving a full review of costs in support of the rates, was completed in 2018.

As is common for small and medium sized Ontario electricity distributors ("distributors" or "LDCs"), PUCD shares certain resources with affiliates in order to create economies of scale and scope. Benefits are created both when a distributor purchases services from affiliates and when a distributor sells services to affiliates and receives revenue to offset its costs. Within the PUC group, the sharing of services is achieved through PUC Services Inc. ("PUCS"), which provides a range of services to PUCD and other companies in the group, as well as to Public Utilities Commission (the "Commission"), a Municipal Services Board of the City. Water and wastewater services are also provided to the City.

PUCS employs all of the employees providing services to the PUC group. As well, PUCS owns all of the shared assets of the group, including vehicles, tools and equipment, information technology and systems, streetlights, etc. The arrangement is intended to create economies of scope and scale through the sharing of human and other resources. The costs incurred by the PUCS are recovered through charges made by PUCS to the affiliates, including PUCD.

PUCS provides both electricity billing to PUCD and water billing to the Commission through a shared system.

All the activities of the PUC group of companies are carried out in a shared building at 500 Second Line East, which is owned by PUCD. The portion of the building used by affiliates is made available by PUCD under a lease arrangement. The lease is priced to affiliates at fully allocated cost.

In August, 2021, in anticipation of PUCD's forthcoming cost of service application to the OEB, PUCS retained BDR to review the transfer pricing and inter-company cost allocations in the context of the current scope of shared services. During August and September, 2021, PUCS provided BDR with information about the current corporate structure, scope of shared services and the manner in which they are rendered and clarified any issues through discussion. In September and October, 2021, BDR conducted its analysis. This document is the Report of BDR resulting from that review.

Summary of Conclusions as to Transfer Pricing Methodology

The following table ES-1summarizes the services ***provided by PUCS to PUCD.*** All of the pricing is at fully allocated cost. The table shows, for each type of service, the allocation method used, and BDR's comment or recommendation.

The methodology can be summarized as follows:

For certain business functions an allocation or direct assignment approach is identified. These include:

- Operations;
- Customer Service;
- Credit and Collections;
- Vehicles Operations;
- Regulatory; and
- Stores, Warehouse and Procurement.

This provides an allocation of the dollar costs in each of these functions, and also an allocation of work time, or FTEs[1]. The allocated FTEs are then summed to provide a factor that is used to allocate the costs of resources and activities that support employees in their work ("Supporting Functions"). The number of users of each of the Supporting Functions is considered as reasonable, and in accordance with accepted principles of cost allocation, as an allocator of the costs of these functions.

Any costs incurred in a supporting function that can be directly identified to a specific business unit are charged directly to that business unit.

Supporting Functions include:

- Human Resources (recruitment, labour relations, benefits administration, training, etc.);
- Information and communications technology;
- Office space;
- Furniture and equipment;
- Payroll administration; and
- Accounting and Finance.

[1] Full Time Equivalents. FTEs as a measure may be a fraction. For example, if an employee works 40% of time for one business unit and 60% for another, this represents 0.4 FTE and 0.6 FTE, respectively. Similarly, a part-time employee working half of the normal full-time hours per week, would count as 0.5 FTE.

Vehicle costs are assigned to business units based on utilization records, at an hourly rate calculated to recover the total costs. Garage space costs are allocated based on the vehicle costs.

Procurement and warehousing costs, including the costs of the warehouse facility, are allocated on the basis of the value of goods in inventory.

Insurance premiums are broken down to the business units by the insurer and charged to the business units accordingly.

Account interest is allocated by the monthly balances of each business unit's account.

The costs of the Board of Directors of PUCS are allocated based on the level of activity of the Board related to each business unit. Costs of the Boards of PUCD and the other affiliates, and of the Commission are not shared, and are therefore directly assigned.

Table ES-1 summarized the allocation methodology used, and the prior methodology, by type of cost. ***All of the currently used methodologies are considered by BDR to be reasonable and in accordance with accepted principles of cost allocation***.

For expense items, the cost being allocated is the annual expense. For assets, the cost being allocated is "fully allocated cost," consisting of depreciation expense plus cost of capital at the OEB-approved weighted average rate, applied to the book value, net of accumulated depreciation, of the asset. This is unchanged from the previous methodology.

Table ES-1: Services Provided by PUCS to PUCD

Nature of Service	Allocation Method Used	Method Previously Used
A. Direct Functions		
Operations, Non-Supervisory	Timesheets, specifying the business unit served. Effectively a direct assignment of costs.	Same as current method
Operations Supervision and Management	Allocation in proportion to Operations Non-Supervisory	Budgeted allocation
Customer Service Non-Supervisory	Total hours, allocated by number of customer accounts	Same
Customer Service Supervision and Management	Total hours, allocated by number of customer accounts	Same
Credit and Collections	Allocated by bad debt expense.	Same

Table ES-1: Services Provided by PUCS to PUCD		
Nature of Service	**Allocation Method Used**	**Method Previously Used**
Regulatory, All FTEs	No activities identifiable with affiliates; therefore 100% assigned to PUCD	Same
Stores, Warehouse and Procurement, All FTEs	Value of Inventory Issued	Same
Accounting and Finance	All employee FTEs Contractor labour excluded.	A&G factor based on labour review, including contractors.
Furniture, fixtures, and equipment	All employee FTEs Contractor labour excluded.	Direct labour hours
Land, buildings, and improvements, office	All employee FTEs Contractor labour excluded.	Direct labour hours
Human Resources	All employee FTEs Contractor labour excluded.	A&G factor based on labour review, including contractors.
Information technology, other than directly assigned costs	All employee FTEs Contractor labour excluded.	A&G factor based on labour review, including contractors.
Payroll Administration	All employee FTEs Contractor labour excluded.	A&G factor based on labour review, including contractors.
Vehicles and equipment	Recorded vehicle usage, applied to average hourly cost for recovery	Same
Garage building space	As allocation of cost of vehicles	Direct labour hours
Procurement, Stores and Warehouse, including Building Space	By value of issued inventory.	Department expenses by value of materials. Building space by direct labour hours.
Insurance	Designated by the insurer to business units. Direct assignment.	Same

The only charge made from PUCD to PUCS is for leasing the building at 500 Second Line East, which is owned by PUCD and utilized by the employees of PUCS in providing all of the listed services to the PUC group and the Commission.

Historically, PUCD has charged PUCS for the building at fully allocated cost (depreciation expense, plus the OEB approved cost of capital applied to the undepreciated costs).

Since there is a competitive market for commercial real estate, Section 2.3.3 of the OEB's Affiliate Relationships Code governs the pricing of this service. Specifically, Section 2.3.3.6 states that where, as in the case of this building, the service is being provided by the utility to affiliates, the transfer price must be at least ***the greater of*** the market price or fully allocated cost.

As a result, at the advice of BDR, PUCS sought a market rate report, and compared the market rates with the current fully allocated cost. The result was that at present, fully allocated cost exceeds the market rate. To comply with the ARC, the building will therefore continue to be priced at fully allocated cost for 2022. PUCS will continue to monitor market rates from time to time, so that pricing may transition to a market basis once market rates exceed fully allocated cost.

For allocation of the building cost among affiliates, the allocator is Operations FTE hours, for all departments with operations out of 500 Second Line. This results in water and wastewater treatment and environmental operations being excluded from an allocation, since those functions have their own facilities.

This is the same methodology used in the past, with updates to most currently available payroll hours data.

In the past, lease charges were at cost, including depreciation expense and cost of net invested capital at the OEB-approved rate.

1 SCOPE OF STUDY

PUCD is an electricity distributor licensed by the OEB to provide service to consumers within the boundaries of the City of Sault Ste. Marie, the Batchewana First Nation (Rankin Reserve), Prince Township and parts of Dennis Township.

The OEB, which regulates Ontario LDCs, has a mandate to protect the interests of distribution ratepayers by ensuring that rates are just and reasonable. Since affiliate transactions provide a potential opportunity for a shareholder to benefit inappropriately at the expense of electricity ratepayers, the OEB has implemented an Affiliate Relationships Code ("ARC") that establishes requirements for affiliate transactions. The nature and magnitude of affiliate transactions may be reviewed by the OEB on a compliance basis, and the appropriateness of costs and revenues from affiliate transactions may also be scrutinized as part of the LDC's distribution rate application.

As is common for small and medium sized Ontario electricity distributors ("distributors" or "LDCs"), PUCD shares certain resources with affiliates in order to create economies of scale and scope. Benefits are created both when a distributor purchases services from affiliates and when a distributor sells services to affiliates and receives revenue to offset its costs. Within the PUC group, the sharing of services is achieved through PUC Services Inc. ("PUCS"), which provides a range of services to PUCD and other companies in the group, as well as to Public Utilities Commission (the "Commission"), a Municipal Services Board of the City. Water and wastewater services are also provided to the City.

PUCS employs all of the employees providing services to the PUC group. As well, PUCS owns all of the shared assets of the group, including vehicles, tools and equipment, information technology and systems, streetlights, etc. The arrangement is intended to create economies of scope and scale through the sharing of human and other resources. The costs incurred by the PUCS are recovered through charges made by PUCS to the affiliates, including PUCD.

PUCS provides both electricity billing to PUCD and water billing to the Commission through a shared system.

All the activities of the PUC group of companies are carried out in a shared building at 500 Second Line East, which is owned by PUCD. The portion of the building used by affiliates is made available by PUCD under a lease arrangement. The lease is priced to affiliates at fully allocated cost.

Costs incurred by PUCS for its services are directly assigned to the user company where appropriate, and otherwise allocated using a methodology established in 2007. Since then, some changes in the application of the methodology have been necessary to reflect the fact that the corporate structure (number and type of business units) has changed.

The methodology can be summarized as follows:

- Costs that can be specifically identified as incurred to the benefit of one affiliate are directly assigned to that affiliate. This includes external costs and costs identified through the system of work orders to which some employees charge their time.
- Costs that are incurred on a shared basis and therefore cannot be identified as incurred for one specific affiliate are allocated to the affiliates based on an allocation factor.

- PUCS has developed allocation factors for each of the following cost pools: billing and customer service; collections; administration; building operations and maintenance; and building asset. The allocation factors are then applied to the costs in each of the related USOA accounts.

It is estimated that 69% of the costs of services provided by PUCS to PUCD is charged on a direct basis, and 31% is allocated using allocators that reflect cost causality.

In August, 2021, in anticipation of PUCD's forthcoming cost of service application to the OEB, PUCS retained BDR to review the transfer pricing and inter-company cost allocations in the context of the current scope of shared services. During August and September, 2021, PUCS provided BDR with information about the current corporate structure, scope of shared services and the manner in which they are rendered and clarified any issues through discussions between PUCS Management and BDR. In September and October, 2021, BDR conducted its analysis. This document is the Report of BDR resulting from that review.

In the course of the study, BDR was provided by Management with information as to the nature of the shared services and the 2007 methodology. All information was clarified through conversations with Management. BDR has not independently verified the provision of any services, the level of activity, the costs, or the value of any service.

All of the functions for which costs are allocated by PUCS to PUCD are part of the normal scope of activity of a local distribution company, and necessary to provide service to consumers. Through discussions with management, BDR ascertained that none of these functions duplicate a service that is self-supplied or otherwise procured by PUCD.

This report and its conclusions are the result of a review of the organization structure of the PUC group of companies, the number and activities of those companies, and the corporate approach to delivery of resources and services as at the time of the review. Management has advised BDR that while these factors may change over time, it intends to maintain a consistent approach toward the provision of shared services to maximize economies of scale and scope, and toward the allocation of the costs of those services among the companies.

2 Structure of the Organization

The Corporation of the City of Sault Ste. Marie is the sole shareholder of PUC Services Inc. (PUCS) and PUC Inc., a holding company. PUC Distribution Inc. is a wholly owned subsidiary of PUC Inc. The other subsidiaries of PUC Inc. are:

- Northern Waterworks Inc., located in Red Lake, Ontario, a water, and wastewater management company providing services to Municipal, First Nation and Industrial clients; and
- 17 Trees Inc., which provides vegetation management services to its 3-way ownership partners, PUCD, Greater Sudbury Utilities Inc. and North Bay Hydro Services Inc.

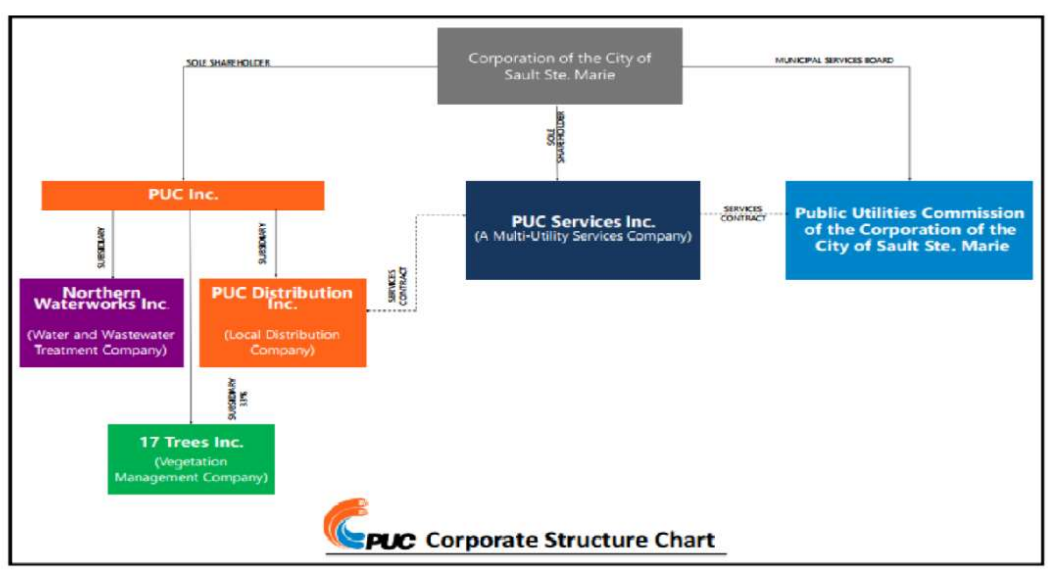
PUCS provides administrative services to 17 Trees Inc. and allocates a portion of shared administrative costs to 17 Trees Inc. for those services.

Northern Waterworks Inc. is a stand-alone company that provides its own administrative services and is therefore not allocated a share of administrative service costs from PUCS. If this arrangement changes in the future, PUCS will revise allocations accordingly, consistently with the allocation methodology.

The structure also includes the Public Utilities Commission, which provides water and wastewater services in the community. The Commission receives administrative services from PUCS and is allocated a share of costs for these services.

It is anticipated that as PUC's group of companies grows, this methodology will apply to include future businesses.

Figure 2.1 – Corporate Organization Structure of PUCD and Affiliates



3 Overview of Inter-Affiliate Services

3.1 *Shared Corporate Services*

The ARC, in providing direction as to inter-affiliate transfer pricing, provides the following important definition:

> "shared corporate services" means business functions that provide shared strategic management and policy support to the corporate group of which the utility is a member, relating to legal, regulatory, procurement services, building or real estate support services, information management services, information technology services, corporate administration, finance, tax, treasury, pensions, risk management, audit services, corporate planning, human resources, health and safety, communications, investor relations, trustee, or public affairs".[2]

Section 2.3.5 of the ARC provides that fully allocated cost-based pricing is the appropriate treatment for these costs.

PUCD receives shared corporate services from PUCS.

3.2 *Other Services Provided by PUCS to PUCD*

3.2.1 Operations of PUCD and the Commission

Employees performing distribution operations functions for PUCD are a service provided by PUCS. Since these costs are specifically identified through the corporate system as related to the operations of PUCD, they are charged to PUCD directly as incurred, and are not an allocated shared cost.

BDR considers that the direct assignment of a cost incurred for the benefit of a specific business unit is cost based and consistent with accepted cost allocation methodology.

The time of operation's employees, in terms of FTEs, is computed and becomes part of the FTE factor used to allocate the costs of Supporting Functions.

3.2.2 Billing and Customer Service

PUCS provides billing and customer service activities on a shared basis to PUCD in respect of electricity customer service and billing, and to the Commission in respect of water services and billing. Section 4.3 of this report addresses billing services. No

[2] ARC, Section 1.2.

other business units require the customer service and billing activities of PUCS. Billing and customer service is not a “shared corporate service” within the meaning of the ARC.

3.2.3 Vehicles

All of the vehicles used by business units are owned by PUCS. Vehicles are not a “shared corporate service” within the meaning of the ARC. Vehicle costs, like operations labour cost, is directly assigned according to recorded vehicle usage. Hourly rates for vehicle usage are established on a cost recovery basis.

3.3 *Shared Facility Owned by PUCD*

PUCD owns a building which is used in providing directly assignable and shared services to all of the business units. The basis of charges to affiliates for use of the building and vehicles is discussed in Section 4.4.

4 TRANSFER PRICING OF SHARED CORPORATE SERVICES

4.1 *Adherence to Fully-Allocated Cost Approach*

Pricing for all of the “shared corporate services” is cost-based, as required by the ARC. In reviewing the transfer pricing for the cost-based services, consideration was given to whether the total amounts are determined on the appropriate basis (i.e. cost as incurred, without arbitrary “markup,” but including, where applicable, depreciation, return on assets, and any payments in lieu of tax attracted by the return).

Staff within PUCS is organized functionally, with departmental costs accumulated for allocation. For each of the shared corporate services, costs of shared resources and activities are allocated on a basis intended to reflect the use of the service by the business unit.

Activities that are carried out in PUCS, but which are used by only one business unit (rather than shared) are specifically identified and the costs are passed through to that business unit as incurred (i.e., directly assigned). As a result, certain costs (for example, membership in the Electricity Distributors Association and costs associated with compliance with regulation by the OEB) are borne 100% by PUCD. If a cost is specifically incurred for the benefit of a business unit other than PUCD, this methodology results in PUCD being excluded from sharing in that cost.

4.2 *Allocation of Specific Corporate Shared Services*

4.2.1 Information Technology and Telephone Services

Costs of this function were first identified to the following categories: workstation hardware; corporate systems other than SCADA; and SCADA systems.

SCADA systems for the electricity system and the water/wastewater systems are separate and identifiable in the accounts. As costs are incurred for upgrades to these systems, they are identified as for the electricity system or for the water system. Electricity-related SCADA costs are directly assigned to PUCD. Water-related SCADA costs are directly assigned to and recovered from the Commission.

BDR considers this treatment to be in accordance with accepted principles of cost allocation.

All other IT is considered a Supporting Function.

Each employee of PUCS has a personal workstation and access to the corporate IT systems. Management advised BDR that the hardware and local software associated with an employee who works mainly from a desk (management, supervisory, administrative, and customer service employees) has a current average cost of acquisition of $2,600. The cost of hardware and local software for an employee who works mainly from a vehicle (field staff) averages $2,000.

At present, all IT costs are allocated following the allocation of employee labour. BDR discussed with Management the possible refinement of a weighting factor that would account for the differential in per-employee workstation costs. Management advised that no material difference resulted from this addition to the computation, while adding more administrative effort to the allocation. ***BDR therefore considers continuation of the allocation based on labour, to be reasonable.***

For major systems and hardware, PUCS allocates costs following the allocation of the employees (FTEs), as the systems support the employees in their work for all business units.

BDR considers this treatment to be in accordance with accepted principles of cost allocation.

4.2.2 Executive and Board of Directors

The CEO and executive team charge their time to an administrative cost pool. This cost pool is then allocated to the companies in the PUC group following the allocation of all other FTEs.

Management has advised BDR that the executive leaders spend the majority of their time on activities that cannot be clearly identified with only one business unit, and as is common for these positions, are challenged in recording time by frequent interruptions and short-duration activities. They therefore consider that a measure of the activity in the business units they lead constitutes the fairest allocator for their time. Such a measure of activity is the FTEs of other staff as allocated to each business unit.

BDR considers this treatment to be reasonable in the circumstances, and in accordance with accepted principles of cost allocation.

The Board of Directors charge their time according to the meetings and time they spend directly to the company in the PUC group. Certain Board members may sit on more than one board, splitting their time accordingly.

BDR considers this treatment to be in accordance with accepted principles of cost allocation.

4.2.3 Insurance

Insurance premiums are identified by the insurer as associated with each of the business units, and then directly assigned to the business units by PUCS.

In BDR's view, direct assignment is the preferred treatment of costs where possible.

4.2.4 Payroll

Activities of the payroll administration support the employees and are therefore considered a Supporting Function and allocated on the basis of total FTEs.

On review, BDR considers that allocation based on employees reflects cost causation with respect to this function and is consistent with accepted principles of cost allocation.

4.2.5 Regulatory

This function provides the affiliates with all services related to compliance with regulation and licensing by the OEB. There is typically no activity with regard to maintaining licensing for the generation and competitive services business units, therefore the costs of this function can be attributed 100% to PUCD. An allocation of 100% of the regulatory costs to PUCD can therefore be considered to accord with time spent.

BDR considers that the allocation of costs of the regulatory function to PUCD is appropriate and consistent with accepted principles of cost allocation.

4.2.6 General Financial Services

These services comprise accounting, treasury, accounts payable and receivable, financial reporting, and audits.

Where possible, PUCS identifies any costs that can be directly assigned to an affiliate, i.e., audit fees. However, most activities in this category provide value to multiple business units as they are carried out and cannot be directly assigned to individual business units. Several possible measures of level of activity of the business units were considered, and none appear to be more clearly related to cost causation than staffing levels.

Therefore, activities of the accounting and finance resources support the employees are considered a Supporting Function and allocated on the basis of total FTEs.

BDR considers that the time estimation approach is reasonable under the circumstances and reflects accepted principles of cost allocation

4.2.7 Procurement and Stores Services

A percentage of the value of goods in inventory is applied, to recover the cost of stores services and procurement.

BDR has concluded that an allocation based on the value of issued inventory is reasonable in the circumstances, when applied to stores services and procurement.

4.2.8 Human Resources

Services provided by this department include employee records, labour relations, union contract administration, salary administration, staff training, staff recruitment, human rights management, and job evaluation administration. The Human Resources activity is considered a Supporting Function by PUCS.

BDR discussed with Management whether specific program or service costs could be directly identified and assigned among the business units. Management considered that doing so for some costs, combined with an FTE-based allocation of other costs for similar and related activities, would not result in an overall allocation reflective of the value that each business unit receives from the Human Resources function.

Therefore, all Human Resources costs are allocated to business units according to FTEs.

On review, BDR concurs with the view of Management as to specific identification of some components of the cost and considers that the costs of this function are causally related to the employees as a resource for each affiliate's business. Therefore, this allocation approach is reasonable and consistent with accepted principles of cost allocation.

4.3 *Customer Services Related to Billing*

PUCS provides billing services to PUCD in respect of electricity services, and to the Commission in respect of its water and wastewater services. A shared call centre responds to customer inquiries about billing, account administration and related matters. Bills are rendered monthly and include both electricity and water services to all customers that receive both services. A shared customer information system maintains customer account and billing records and computes bills.

The current methodology being used is to allocate in proportion to number of accounts for each service.

In proposing a cost allocation approach related to cost causation, it is important to start from an understanding that "billing and customer service" as a line item for reporting purposes is in fact the aggregate of a number of components that are different as to causation.

The initial step in addressing each subcomponent was to answer the question of whether costs could be directly identified as attributable to either electricity or water. If such an identification could be made, that information was used to assign the cost directly.

For the other subcomponents, the major factor or combination of factors in cost causation was identified by considering the nature of the function. Generally, costs related to maintenance of billing records, collecting, and processing of billing information, bill computation, and payment processing are related to number of bills as a causation factor. In the case of PUCD and the Commission, each renders a bill to each customer on a monthly basis. Therefore, the ratio of number of bills is the same as the ratio of number of accounts.

For bill printing and delivery, some LDCs have historically taken account of such factors as printed lines or space on the bill taken up by information related to each service. This count or allocation of page space would then be used to allocate the costs of stationery for billing and mailing costs.

In recent years, customers are gradually accepting electronic billing and bill delivery in substitution for printing and mailing. While this transition is not complete, it is underway, and electronic delivery will clearly dominate in the future. For a bill rendered and delivered electronically, the physical size and weight of a printed document is no longer as relevant to costs. BDR therefore concludes that such a refinement would not significantly enhance the quality of allocation of billing costs.

PUCS maintains a call centre that receives and handles calls related to customer account support and bill inquiry. In BDR's opinion the most accurate approach in cases of a shared call centre is to be able to track the number and length of calls to each service, as a means to develop an allocation factor. BDR has discussed with Management and determined that PUCS does not have such a system. Furthermore, Management is of the view that calls could not be identified accurately as to the service being questioned, even if a tracking system were in place.

On this basis, it is not possible at present to develop an allocator that is more refined than the number of accounts for each of the two services.

In summary, it is BDR's opinion that use of the number of accounts as the cost allocator for all cost components of the customer service and billing function is reasonable in the circumstances, and consistent with accepted principles of cost allocation.

Customer service FTEs as determined by this method form part of the allocation factor for Supporting Functions.

4.4 *Collections and Bad Debts*

These costs are being allocated by a factor derived from the bad debt expense associated with each of electricity service and water services.

BDR considers this method to be reasonable and consistent with accepted principles of cost allocation.

4.5 *Vehicles*

The business units make use of vehicles owned by PUCS. Management is proposing fully-allocated cost as the basis for pricing of this service to PUCD.

Costs are allocated by applying an hourly charge-out rate to all vehicle usage. When an employee logs time to the work order system, the associated use of vehicle is tracked by work order within the business units. Rates are set to recover actual costs when applied to all vehicle hours, where actual cost includes fuel, maintenance, and amortization, and cost of capital based on the OEB-approved rate of return applied to the net book value of the assets. Different rates are set for each of several vehicle classes, based on review by Finance staff as to the relative cost of each vehicle class.

In discussion with Management, BDR confirmed that PUCS does not use contractor-provided work vehicles except in the case of a vacuum truck as required, and therefore has no information as to the pricing that might be offered for these services in its local area. Vehicles are purchased by PUCS at a competitive market price.

The allocated vehicle usage cost is used to allocate the building costs for the garage.

BDR concludes that cost is the appropriate basis for pricing for the use of PUCS's vehicles by business units since the acquisition cost of vehicles is a market price. The allocation of costs based on hourly use, at rates that reflect the costs of vehicle classes, is reasonable and in accordance with accepted principles of cost allocation. BDR also considers vehicle usage cost as a reasonable basis for allocation of building costs for the garage.

4.6 *Furniture and Fixtures*

Office furniture. equipment and fixtures are considered a Supporting Function and allocated based on FTEs.

BDR considers this method to be reasonable and consistent with accepted principles of cost allocation.

4.7 *Building*

4.7.1 Distribution Buildings

All buildings other than 500 Second Line East are owned by PUCD and fully utilized for purposes of the electricity distribution activity, and the costs are fully included in the distribution revenue requirement. No transfer pricing is applicable for these facilities. PUCD does not use, and is not allocated costs for, buildings owned by any of its affiliates or by the City.

4.7.2 Head Office and Service Centre Complex

(a) Transfer Pricing from PUCD to PUCS

PUCD owns the head office and service centre complex at 500 Second Line East. Space in this building is used by the employees of PUCS in performing direct and shared services for all of the business units. The space consists of office, garage, and warehouse areas.

PUCD leases a portion of 500 Second Line East to PUCS. Historically, the lease pricing from PUCD to PUCS was determined on a cost basis, including annual amortization and cost of capital. Cost of capital was determined by applying the pre-tax weighted cost of capital, as most recently approved for PUCD by the OEB, by the net book value of the asset.

Since there is a competitive market for commercial real estate, Section 2.3.3 of the OEB's Affiliate Relationships Code governs the pricing of this service. Specifically, Section 2.3.3.6 states that where, as in the case of this building, the service is being provided by the utility to affiliates, the transfer price must be at least ***the greater of*** the market price or fully allocated cost.

As a result, at the advice of BDR, PUCS sought a market rate report, and compared the market rates with the current fully allocated cost. The result was that at present, fully allocated cost exceeds the market rate. To comply with the ARC, the building will therefore continue to be priced at fully allocated cost for the immediate future. PUCS will continue to monitor market rates from time to time, so that pricing may transition to a market basis once market rates exceed fully allocated cost.

In BDR's view, use of fully allocated cost as the basis for pricing of the building by PUCD to PUCS is in compliance with the ARC, since fully allocated cost is presently above market price. In the future, if market price comes to exceed fully allocated cost, then market price should apply.

(b) Allocation of Building Lease and Operating Costs

For recovery of the building costs by PUCS to each of the business units, the lease cost is allocated separately for the office space, the garage space, and the warehouse space.

Office space is considered a Supporting Function and allocated in accordance with the FTE methodology. The allocator is Operations FTE hours, for all departments with operations out of 500 Second Line. This results in water and wastewater treatment operations being excluded from an allocation, since those functions have their own facilities.

This is the same methodology used in the past, with updates to most currently available payroll hours data.

Garage space is allocated in proportion to the allocation of vehicle costs. Warehouse space is allocated in proportion to the allocation of procurement and stores operating costs.

Building operating costs including property taxes, electricity, heating, water and sewer, insurance, janitorial, repairs and maintenance were determined on a square footage basis and charged in addition to the cost-based lease charge from PUCD.

BDR concludes that the allocation methodology reflects cost causation and is therefore reasonable and consistent with accepted principles of cost allocation.

Consulting Team Curricula Vitae

In alphabetical order:
Michael J. Roger
Paula Zarnett

MICHAEL J. ROGER

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ASSOCIATE, RATES AND REGULATION

Michael has over 40 years of experience in the electricity industry dealing in areas of finance, cost allocation, rate design and regulatory environment. Michael has been an expert witness at numerous Ontario Energy Board proceedings and has participated in task forces dealing with his areas of expertise. Michael is a leader and team player that gets things done and gets along well with colleagues.

PROFESSIONAL OVERVIEW

Elenchus **2010 - Present**
Associate Consultant, Rates & Regulation

- Provide guidance on the Regulatory environment in Ontario for distributors and other stakeholders, with particular emphasis on electricity rates in Ontario and the regulatory review and approval process for cost allocation, rate design and special studies such as Working Capital Allowance and shared services studies. Prepare and defend related evidence. Appear as expert witness at regulatory proceedings.
- Some of the clients that Michael provides advice include: Hydro Quebec Energy Marketing Inc., GTAA, Ontario Energy Board, City of Hamilton, Hydro One Transmission, Powerstream, Hydro Ottawa, Ontario Power Generation, Veridian, SaskPower, British Columbia Utilities Commission and APPrO.

Hydro One Networks Inc. **2002 - 2010**
Manager, Pricing, Regulatory Affairs, Corporate and Regulatory Affairs

- In charge of Distribution and Transmission pricing for directly connected customers to Hydro One's Distribution system, embedded distributors and customers connected to Hydro One's Transmission system.
- Determine prices charged to customers that conform to guidelines and principles established by the Ontario Energy Board, (OEB).
- Provide expert testimony at OEB Hearings on behalf of Hydro One in the areas of Cost Allocation and Rate Design.

- Keep up to date on Cost Allocation and Rate Design issues in the industry.
- Ensure deliverables are of high quality, defensible and meet all deadlines.
- Keep staff focused and motivated and work as a team member of the Regulatory Affairs function. Provide support to other units as necessary.

Ontario Power Generation Inc. **1999 - 2002**
Manager, Management Reporting and Decision Support, Corporate Finance

- Produce weekly, monthly, quarterly and annual internal financial reporting products.
- Input to and coordination of senior management reporting and performance assessment activities.
- Expert line of business knowledge in support of financial and business planning processes.
- Coordination, execution of review, and assessment of business plans, business cases and proposals of an operational nature.
- Provide support to other units as necessary.
- Work as a team member of the Corporate Finance function.

Ontario Hydro **1998 - 1999**
Acting Director, Financial Planning and Reporting, Corporate Finance

- Responsible for the day to day operation of the division supporting the requirements of Ontario Hydro's Board of Directors, Chairman, President and CEO, and the Chief Financial Officer, to enable them to perform their due diligence role in running the company.
- Interact with business units to exchange financial information.

Financial Advisor, Financial Planning and Reporting, Corporate Finance **1997**

- Responsible for co-ordinating Retail, Transmission, and Central Market Operation divisions' support of Corporate Finance function of Ontario Hydro to ensure financial information consistency between business units and Corporate Office, review business units compliance with corporate strategy.
- Provide advice to Chief Financial Officer and Vice President of Finance on business unit issues subject to review by Corporate Officers.
- Participate or lead task team dealing with issues being evaluated in the company.
- Supervise professional staff supporting the function.
- Co-ordinate efforts with advisors for GENCO and Corporate Function divisions to ensure consistent treatment throughout the company.

Section Head, Pricing Implementation, Pricing **1986 - 1997**

- Responsible for pricing experiments, evaluation of marginal costs based prices, cost-of-service studies for municipal utilities, analysis and comparison of prices in the electric industry, rate structure reform evaluation, analysis of cost of servicing individual customers and support the cost allocation process used to determine prices to end users.

- Responsible for the derivation of wholesale prices charged to Municipal Electric Utilities and retail prices for Direct Industrial customers, preparation of Board Memos presented to Ontario Hydro's Board of Directors and support the department's involvement at the Ontario Energy Board Hearings by providing expert witness testimony.

Section Head (acting), Power Costing, Financial Planning & Reporting, Corporate Finance **1994 - 1995**

- Responsible for the allocation of Ontario Hydro's costs among its customer groups and ensure that costs are tracked properly and are used to bill customers.
- Maintain the computer models used for cost allocation and update the models to reflect the structural changes at Ontario Hydro.
- Participate at the Ontario Energy Board Hearings providing support and expert testimony on the proposed cost allocation and rates.
- Provide cost allocation expertise to other functions in the company.

Additional Duties **1991**

- Manager (acting) Rate Structures Department.
- Review of utilities' rates and finances for regulatory approval.
- Consultant: Sent by Ontario Hydro International to Estonia to provide consulting services on cost allocation and rate design issues to the country's electric company.

Analyst, Rates **1983 - 1986**

- In charge of evaluating different marketing strategies to provide alternatives to customers for the efficient use of electricity.
- Co-ordinate and supervise efforts of a work group set up to develop a cost of service study methodology recommended for implementation by Municipal Electric Utilities and Ontario Hydro's Rural Retail System.
- Provide support data to Ontario Hydro's annual Rate Submission to the Ontario Energy Board.
- Participate in various studies analysing cost allocation areas and financial aspects of the company.

Forecast Analyst, Financial Forecasts **1980 – 1983**

- Evaluating cost data related to electricity production by nuclear plants and preparing short term forecasts of costs used by the company. Maintain and improve computer models used to analyse the data.
- Review Ontario Hydro's forecast of customer revenues, report actual monthly, quarterly and yearly results and explain variances from budget.
- Support the development of new computerized models to assist in the short-term forecast of revenues.

Project Development Analyst, Financial Forecasts **1979 - 1980**

- In charge of developing computerized financial models used by forecasting analysts planning Ontario Hydro's short term revenue and cost forecasts and also in the preparation of Statement of Operations and Balance Sheet for the Corporation.

Assistant Engineer – Reliability Statics, Hydroelectric Generations Services **1978 – 1979**

- In charge of analysing statistical data related to hydroelectric generating stations and producing periodic report on plants' performance.

ACADEMIC ACHIEVEMENTS

1977	Master of Business Administration, University of Toronto. Specialized in Management Science, Data Processing and Finance. Teaching Assistant in Statistics.
1975	Bachelor of Science in Industrial and Management Engineering, Technion, Israel Institute of Technology, Haifa, Israel.

Paula Zarnett

Paula Zarnett has more than 35 years broadly based experience specializing in regulatory compliance, regulated tariffs and pricing issues for electricity and gas utilities. She has been responsible for design and implementation of a wide variety of innovative rates including time of use, both for large industrial and for residential customers, curtailment incentives, and special rates for load retention. She has performed customer cost allocation studies for utilities serving customers with electricity, natural gas and steam, and studies for allocation of shared corporate costs and transfer pricing for electricity and natural gas utilities.

Following a series of rate and cost allocation specialist positions first in the natural gas sector and then in the electricity sector, she was promoted to the position of Manager of Marketing and Energy Management at Toronto Hydro. There, her responsibilities included all rate and regulatory issues, customer research including load research and forecasting, and customer program design with a focus on conservation and demand management.

In her consulting practice, Paula provides a variety of advisory and analytical services to energy sector clients with a focus on rate approvals and issues impacted by regulatory policy and process. Her work includes business case and project feasibility analysis, cost allocations and pricing designs, energy sector mergers and acquisitions, and expert testimony before regulators. She is a skilled hands-on analyst and facilitator of cross-functional project teams. She was an instructor in Cost Allocation and Rate Design at CAMPUT's Energy Regulation Course, 2006, 2007 and 2008. She has been accepted as an expert witness in cost allocation in New Brunswick, Québec and Ontario.

She has performed assignments for clients in North America, China, Ghana, Barbados, and Turks and Caicos Islands.

	Selected Experience by Subject Area (INCLUDES PROJECTS UNDERTAKEN AS A CONSULTANT, AND IN THE COURSE OF RESPONSIBILITIES WITHIN ORGANIZATIONS)
Shared and Corporate Cost Allocation, Transfer Pricing	**Independent Electricity System Operator (Ontario)** – study to recommend allocation approaches for shared costs between core and non-core activities **Gazifère –** study to allocate shared costs between regulated and unregulated businesses (to Régie de l'Energie) **Greater Sudbury Hydro –** study to allocate costs of services purchased from affiliate (OEB) **Bluewater Power –** study to allocate costs of services provided to and purchased from affiliates (OEB) **Kingston Hydro –** study to review transfer pricing methodologies and allocation of shared costs for services provided by non-regulated affiliates. (OEB)

	FortisOntario and utility affiliates – Five studies to allocate corporate and shared costs among regulated and non-regulated affiliates (OEB) **EnWin Utilities** – study to allocate corporate and shared costs among corporate affiliates (OEB)
Customer Class Cost Allocation and Load Research	**Government of Turks and Caicos Islands** – study to allocate costs of service to customer classes and geographic zones, in connection with consideration of application for rate increase by the incumbent electric utility, FortisTCI; study included analysis of detailed load data **Municipal Utilities of New Brunswick –** advised the municipal utilities in their intervention in the application to NBEUB of NB Power, for approval of cost allocation methodology; assignment includes participation at preliminary stakeholder meetings on methodology; review and analysis of all filed material, assistance in development of interrogatories, advice on position and strategy for the intervention, work with legal counsel in developing cross examination of applicant and intervenor witnesses. (Matter 271) Also supported interventions by the municipal utilities, specifically related to issues of cost allocation, in NB Power's General Rate Application Matters 272, 336 and Matter 375 Also advised the municipal utilities in cost allocation and rate design hearings at NBEUB in 2005 and 2007; testified on their behalf before NBEUB on cost allocation in 2005. **Electricity Distributors Association –** advice, analysis, and representation at stakeholder processes with regard to proposed allocation by Hydro One Transmission of costs related to proposed new transmission facilities in southwestern Ontario **Rogers Cable and Communications Inc. –** represented this consumer stakeholder in a regulator-driven process to resolve issues in regulator-mandated methodology for the allocation of costs to street lighting and other unmetered loads **Toronto Hydro-Electric System** – Study to allocate the cost of service to customers that are individually metered suites in multi-unit residential buildings. **Rogers Cable and Communications Inc. –** represented a consumer stakeholder in a regulator-sponsored stakeholder process to determine a cost allocation methodology and analysis approach for information filings by all electric distribution utilities in Ontario. **Perth-Andover Electric Light Commission –** study to allocate the bundled costs of electricity service to customer classes and assess the impacts on cost allocation of changes to the wholesale rate structure. **Saint John Energy** – four (4) studies to allocate the bundled costs of electricity service to customer classes; one of these studies included

	analysis of metered system load profiles and publicly available typical customer profiles to develop demand allocation factors (most recent studies including load research data analysis). **Enwave District Energy Limited** – study to allocate costs of service for a district steam system as a basis for pricing redesign; study included analysis of detailed time-related customer consumption data as a basis for allocation of costs, as well as operating and financial data. **Toronto Hydro** – planning and execution of customer load research projects, including deployment of research metering, load data analysis and related customer research and surveys. **Toronto Hydro** – coordination of first comprehensive cost of service study, a one-year cross-functional project, including in-depth data collection, selection of allocation methodologies and development of computer-based analytical tools. Led subsequent updates and refinements to the study. **ICG Utilities Ltd.** – fully allocated cost of service studies for natural gas distribution systems in Manitoba and Alberta, including data analysis and development of computer-based analytical framework.
Testimony before Regulators	**ORAL:** **Gazifère Inc. –** testified to a study to allocate shared costs between regulated and unregulated businesses (to Régie de l'Energie) **Toronto Hydro-Electric System –** Testified before the Ontario Energy Board in support of the allocated costs of service to customers that are individually metered suites in multi-unit residential buildings. **Utilities Municipal of New Brunswick –** Testified before the New Brunswick Public Utilities Board in support of intervention in the Cost Allocation and Rate Design application of New Brunswick Power Distribution and Customer Service Corp.; and before New Brunswick Energy and Utilities Board in support of intervention in General Rate Application (GRA) of New Brunswick Power. **Rogers Cable and Communication Inc.** – Testified before Ontario Energy Board in support of consensus for treatment of certain unmetered electricity loads in the development of guidelines for electricity distribution rates. **ICG Utilities** testified in three hearings before British Columbia regulator (BCUC) on the subject of lead-lag studies. **WRITTEN ONLY:** **Independent Electricity System Operator (Ontario)** – study to recommend allocation approaches for shared costs between core and non-core activities

	Summerside Electric – expert study of Canadian precedents related to bypass by a load customer of a utility's system and charges. **Essex Power, Bluewater Power and Niagara-on-the-Lake Hydro –** expert testimony in support of intervention in the application to the Ontario Energy Board for approval of an acquisition by Hydro One Networks Inc. of Norfolk Power **Greater Sudbury Hydro –** study to allocate costs of services purchased from affiliate (OEB) **Bluewater Power –** study to allocate costs of services provided to and purchased from affiliates (OEB) **Kingston Hydro –** study to review transfer pricing methodologies and allocation of shared costs for services provided by non-regulated affiliates. (OEB) **FortisOntario –** Five studies to allocate corporate and shared costs among regulated and non-regulated affiliates (OEB) **EnWin Utilities** – study to allocate corporate and shared costs among corporate affiliates (OEB) **Ontario Power Authority –** model development and analysis in support of evaluation of a potential generation, transmission and demand response alternatives in York Region; report in support of generation alternative to the Ontario Energy Board.
Rate Designs and Pricing Studies	**Municipal Utilities of New Brunswick –** advised the municipal utilities and participated on their behalf in stakeholder sessions related to a rate design approval application by New Brunswick Power (Matter 357) **Canadian Federation of Independent Business --** Advised and represented CFIB in stakeholder processes of the Ontario Energy Board to design electricity distribution rates applicable to all sizes of non-residential metered customers **Saint John Energy –** comprehensive recommendations to re-align rates to customer classes based on results of cost allocation study **IGPC Ethanol Inc. –** supported the intervention of this industrial consumer in the rate application of its gas supplier, Natural Resource Gas **Rogers Cable and Communications Inc. –** representation at Ontario Energy Board staff consultation process with regard to rate designs for Ontario's electric distribution utilities; development of policy and position documents, attendance at stakeholder meetings, analysis in support of positions on rate design for General Service classification and unmetered scattered loads; distribution cost allocation stakeholder process and 2006 distribution rate handbook.

City of Markham (Ontario) – recommendations for restructuring water and wastewater rates

Oklahoma Gas and Electric – review of results of residential time of use rate pilot including estimation of impact of the rate design on total customer consumption and peak hour consumption (load shifting).

Summerside Electric/City of Summerside – advisory and analysis service with regard to proposals of Maritime Electric for an Open Access Transmission Tariff.

Nova Scotia Department of Energy – advisory and analysis services to support intervention in Nova Scotia Power's request to the regulator for approval of a fuel adjustment mechanism.

BC Hydro – assisted a staff team in development of a Phase I report on long-term rate strategy; research on rate designs in several North American jurisdictions.

Energy East (RGE and NYSEG) – analysis as to the potential value of load shifting which might take place as result of rate-driven (time of use or critical peak pricing) programs supported by universal interval metering in the State of New York; regulatory precedents as to cost recovery for advanced metering and meter reading technology

East China Grid Company – advice in developing and simulating an unbundled electricity distribution tariff for Shanghai Municipal and four provincial electric power companies

British Columbia Ministry of Energy and Mines – advisory and due diligence services with regard to recommendations by the British Columbia Utilities Commission for implementation of proposed Heritage Contract and stepped rates to wholesale and industrial customers.

Perth-Andover Electric Light Commission – long-term rate strategy and detailed bundled retail rate designs for all electricity consumer classifications.

Volta River Authority (Ghana) – development of tariff structure and preliminary rates for open access use of the national electric transmission system in Ghana.

Enwave District Energy Limited – determination of appropriate customer classification and pricing design alternatives for a district steam system in a context of competitive electricity and gas markets and wider service choices for existing and potential customers.

Toronto Hydro – development and initial implementation of time of use rates for residential and large industrial customers; development of pricing strategies and policies for all customer classes.

	Toronto Hydro – development of all customer rate designs, implementation strategy, and preparation of annual submissions for approval of the rates. Managed a team of specialists in the preparation of associated detailed studies, load forecasts and load research. **ICG Utilities –** coordinated preparation of applications, supporting materials, and other aspects of regulatory process for regional gas utility managements, as member of a head office specialist team; provided expert technical services in rate design, cost allocation, and working capital allowance determination (lead-lag)
Regulatory and Industry Policy	**Ontario Energy Board** – cross-jurisdictional review and assessment of regulatory approaches to the issue of farm stray voltage across North-America **Ontario Energy Board –** comparison of heritage contracts and similar arrangements in leading jurisdictions **Ontario Energy Board –** identification of appropriate roles and responsibilities for the OEB under alternative industry and market structure scenarios, including default supply arrangements **Barbados Public Utilities Board** – study to recommend procedures, rules and systems for oversight of the natural gas sector by a new regulatory agency. **Electricity Distributors Association --** analysis of cash flow patterns of electricity distribution utilities in Ontario reflecting customer payment patterns and market settlement requirements **Electricity Distributors Association** – study to determine the financial benefit to municipalities of ownership of local distribution companies (LDCs). **National Grid Co. --** Assessment and overview report on regulatory framework and issues in Ontario. **Bruce Power** – Assessment and overview on industry structure, generation and transmission capacity, pricing and issues in New Brunswick **CMS Energy –** report on Ontario electricity industry structure, market, and regulatory environment, in support of decision to respond to RFP for new generation in the province **New Brunswick Municipal Electric Utilities Association** – cross jurisdictional survey with respect to policy as to regulation of municipal utilities and rural cooperatives.

	CAREER HISTORY
2001 – Present	**BDR** – consultant specializing in rate designs, cost and financial analysis, business planning and mergers and acquisitions in the energy sector
1998 – 2001	**In association with Acres Management Consulting** – consultant specializing in rate designs, cost and financial analysis, business planning and energy market restructuring issues.
1995 – 1998	**Toronto Hydro** – Manager, Marketing and Energy Management
1993 – 1995	**Toronto Hydro** – Special Assistant to the General Manager (responsible for organizational performance improvement initiatives)
1986 – 1992	**Toronto Hydro** – Supervisor of Rates and Cost Analysis
1984 – 1986	**Toronto Hydro** – Senior Rate Analyst
1981 – 1984	**ICG Utilities Ltd**. – Coordinator, Rate Administration
1979 – 1981	**H. Zinder & Associates Canada Ltd.**, Senior Analyst
	EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS
Degrees and Designations	CPA, CMA (Manitoba) University of Calgary, Masters of Business Administration (Finance) University of Toronto, Bachelor of Arts (Hon), Anthropology
Professional Association	Chartered Professional Accountants of Manitoba (CPA Manitoba)
Continuing Professional Development	Queens University School of Business, Marketing Program Queens University School of Business, Sales Management Program Society of Management Accountants of Canada—Customer Profitability Analysis Society of Management Accountants of Canada—Strategic Cost Management Society of Management Accountants – Auditing I Success Resources America – Train the Trainer Success Resources America – Leadership Summit Success Resources America – Ultimate Speaker Academy CPA Manitoba - Ethics
	PROFESSIONAL INVOLVEMENT
Teaching, Training ,and Industry Committees	Invited speaker at CAMPUT annual conference, 2019, on subject of recovery of disaster-related service restoration costs. Instructor in Cost Allocation and Rate Design for Annual Energy Regulation Course, CAMPUT (Canadian Association of Members of Public Utility Tribunals) 2006, 2007, 2008. Member and Vice-Chair, Electricity Distributors Association

	Commercial Members Steering Committee (2007 to 2014) Member – Ontario Energy Board Cost Allocation Working Group (2003 and 2005-6) Member – Ontario Energy Board Working Group on Cost Allocation for Unmetered Electricity Loads (2012-2013) Member – Municipal Electric Association Cost of Service Sub-Committee (1986-1988)

April, 2021

APPENDIX C

PUC Corporate

Purchasing Policy

1.0 PURPOSE

The Board of Directors of PUC Inc., PUC Services Inc., PUC Distribution Inc. and the Public Utilities Commission (collectively PUC) have the ultimate authority for all expenditures. The Boards delegate this authority to the President & Chief Executive Officer (CEO) through approved budgets or specific resolutions. This policy specifies the purchasing practices to be followed by all employees of PUC Services Inc. with respect to the procurement of goods and services for the operation of PUC.

2.0 SCOPE

This policy applies to all employees of PUC Services Inc.

3.0 OBJECTIVES

- To purchase for PUC, required goods and services and to dispose of unusable, obsolete, worn out or scrapped goods in accordance with PUC's policies and procedures.
- To ensure fair, open, transparent and accountable competitive processes are followed in the acquisition of goods and services from suppliers.
- To maintain the confidentiality of supplier information.
- To ensure compliance with all applicable laws (Ontario Disabilities Act, Discriminatory Business Practices Act, Occupational Health & Safety Act, etc.)
- Where practical, to promote standardization, partnership arrangements, joint purchases, and avoid unnecessarily restrictive specifications.
- As required, to provide goods and services to all user departments in the most expedient and economical manner, considering lifecycle cost, consistent with an ethical purchasing philosophy.
- To achieve harmonious, productive, working relationships with all departments or functions within PUC. The purchasing activities cannot be effectively accomplished solely by the efforts of the Purchasing Department. Collaboration with other departments and individuals within PUC is vital to the success of the business.
- To maintain adequate quality standards set in conjunction with user departments on materials and services in order to meet or exceed our customers' and regulatory requirements.
- To promote reduction in the amount of waste requiring disposal through the purchase of environmentally responsible goods and services.
- To promote the procurement of all goods and services from reputable and ethical vendors. The success of PUC depends on its skill in locating and/or developing vendors, analyzing vendor capabilities, and then selecting the appropriate vendor. Only if the final selection results in vendors who are both responsible and reliable will PUC obtain the items it needs at the best value.

- To maintain inventories at levels capable of sustaining operations without committing PUC to undue financial investments.

4.0 GUIDING PRINCIPLES

- PUC is committed to receiving the "best value and life cycle cost" for its money, i.e., to purchase the best services and products at the most competitive price. In order to leverage its resources to advance the community in which its customers live, PUC considers "best value" to include the generation of positive social benefits in addition to high quality and competitive price. PUC strives to enable local entities to compete for PUC contracts, provide opportunities for local entities to be successful bidders and to work with out-of-town suppliers to maximize the utilization of local resources.

- In accordance with PUC's Code of Conduct employees involved in the purchasing process may not accept gifts from vendors. Nominal promotional items such as pens, calendars, t-shirts, ball caps, etc. are excluded from this ban.

- Purchases of a personal nature that are not business related are prohibited. In accordance with PUC's Signing Authority Policy, no employee will solely approve their own purchases.

- In addition, the procurement process should follow the principles advocated by the Supply Chain Management Association of Canada.

- For greater clarity, if an employee has any pecuniary interest in relation to any purchase of goods or services, the employee shall immediately disclose the interest to their supervisor and shall not take part in the purchasing decision or in any way influence the purchasing decision.

- In the best interest of PUC Services Inc., the Purchasing Department reserves the right to question any purchase and ask for rationale and/or supporting documentation at any time.

5.0 HEALTH & SAFETY REQUIREMENTS

- All purchases must comply with all applicable health & safety standards, codes, regulations and organizational specifications.

- All suppliers of "controlled products" as defined by the Workplace Hazardous Materials Information System (WHIMIS) must meet the requirements of the Occupational Health & Safety Act, and are subject to the requirements of the Regulations for Industrial Establishments.

- Materials required for the electrical distribution system must be in accordance with Ontario Regulation 22/04 and PUC's Electrical Distribution Safety Program. (reference EDS-P10 Purchasing Approved Equipment). All materials and chemicals required for water distribution and water treatment shall meet the requirements of the Municipal Drinking Water License issued pursuant to the Safe Drinking Water Act.

- No new "designated product" will be purchased without knowledge of the Manager, Safety and Environment or his designate and the Joint Health & Safety Committee. See PUC's Workplace Hazardous Material Control Program.

- All contracts for services will comply with the Occupational Health & Safety Act and PUC's Health and Safety policies:
  - Safety Prequalification is the process used to minimize the amount of risk associated with hiring contractors. This process ensures each contractor demonstrates the basic general requirements to ensure workplace safety culture and to comply with the regulations put in place by the Ontario Occupational Health and Safety Act and its Regulations. See PUC's Contractor Safety Program document.
  - In addition, the hiring supervisor (requisitioner) is accountable to assess the potential safety risk associated with the work. Additional safety information may be needed depending on such risk level; this can be accomplished by completing the Contractor Checklist found in the Contractor Safety Program document.

6.0 GENERAL PURCHASING REQUIREMENTS

Value of Commitment		Purchase Method (minimum requirement)	Process Options
6.1	Over $100,000	Formal Competitive Bidding	Requisition/Purchase Order/Contract
6.2	$25,001 to $100,000	Formal request by invitation for quotation/proposal – written proposal to be signed and sealed or sent to purchasing dept. "bids" e-mail address (3 minimum) (invitation)	Requisition/Purchase Order
6.3	$2,500 to $25,000	Informal Request for quotation/proposal: • $2500-5000 - minimum one quote to be attached • $5000-25000 * must have minimum of three quotes **Exception with VP written approval*	Requisition/Purchase Order
6.4	Under $2,500	No Quotes	Credit Card/Petty Cash/Direct Purchase/Requisition/Purchase Order

All purchases will be completed by following the purchasing process as outlined in APPENDIX A.

Tendering will be carried out as per APPENDIX B.

6.1 Over $100,000 in value - Formal Competitive Bidding

PUC will call Tenders when the total expenditure of goods and services is estimated to be more than $100,000. Tenders may be called at a lesser dollar amount where deemed warranted.

In estimating the value of goods and services to determine if the purchase is within the tendering limit, the following criteria will be used:

- The expenditure must be related to a whole or complete job, item or service.
- The purchase must not be segmented or divided in a manner that would circumvent the tendering process.

The act of tendering is an important segment of PUC's Purchasing Policy in that it ensures the following:

- That PUC receives the benefit of competitive pricing.
- It makes the provision of goods and services to PUC available to a wide range of business organizations.

Split awards may be made when advantageous to do so.

When a tender is awarded a purchase order will be created to coincide with the signed contract.

Tenders will be issued where the goods and services are fairly well defined and generally commercially available. In these cases best value and life cycle costs will be the major determining factor. A scoring methodology will be established and documented prior to opening bids.

Professional services such as architects, engineers, banking, consultants, insurance brokers and adjusters and certain other goods and services such as computer hardware and software or property development cannot be as easily defined and specified as the procurement of other more generally commercially available goods and services. A Request for Proposal will be issued where the negotiation and award is based on demonstrated competence, professional qualifications and the technical merits of the submission at a fair price.

A Request for Proposal will follow the general procedures of the purchasing tender. The evaluation process for selection of the Supplier should be clearly outlined in each Request for Proposal. The two envelope method may be used for Request for Proposals where the true scope and complexity of the service is difficult to define in advance.

6.2 Purchases $25,001 to $100,000 in value - Request for Quotations

PUC will require a minimum of three (3) quotations when the total estimated expenditure for goods and services is estimated to be more than $25,000 but less than $100,001. The quotations will be in the form of a written Request for Quotes/Proposal. The quotations will be secured by the Purchasing Department and shall be in writing and sealed or sent to the purchasing department "bids" e-mail address. The quotes shall be analyzed by the requisitioning department who justify the selected quotation. If after reasonable effort only a lessor number of quotations are obtained, approval to proceed is required from the VP level. The quotations shall be retained by the Purchasing Department. The requisitioning department shall forward an approved requisition to the Purchasing Department to issue a purchase order.

6.3 Purchases $2,500 to $25,000 in value – Informal Request for Quotations

PUC will require a minimum of one (1) quote for purchases estimated to be $5,000 or less, and three (3) quotations when the total expenditure for goods and services is estimated to be more than $5,000 but less than $25,001. The quotations may be in the form of a Request for Quotes/Proposal or an informal solicitation of quotes. The quotations shall be in writing and be secured by the Requesting department or Purchasing department. The quotes shall be analyzed by the requisitioning department who justify the selected quotation. In the event of Sole Source situation or if after reasonable effort only a lessor number of quotations are obtained, approval to proceed is required from the VP level. The quotations shall be retained by the Purchasing Department. The requisitioning department shall forward an approved requisition, attaching all quotations, to the Purchasing Department to issue a purchase order.

6.4 Purchases under $2,500

The purchaser of goods or services under $2,500 must be able to demonstrate that the purchase was made at fair value. Purchases of goods in this cost range can be made using petty cash (small dollar amounts), PUC credit card (as per the terms of the Credit Card Policy), Direct Purchase or requisition/purchase order method. Requisitions must be approved as per PUC's Signing Authority Policy before a purchase order can be created. Direct Purchases, Credit Card purchases and Petty Cash purchases are subject to PUC's Signing Authority Policy.

- *Credit Card Purchases*

The purpose of the Credit Card is to provide an efficient, cost effective method of purchasing and processing small dollar or 'one off' type purchases. Items purchased with credit cards require appropriate supporting documentation and approvals and have specified dollar limits. (See PUC's Corporate Credit Card Policy)

7.0 OTHER PURCHASING PRACTICES

7.1 IT Purchases

All purchases of IT hardware, software and services must receive advisory approval from the Manager of IT and Communications in order to enable tracking of systems and to maintain Corporate IT standards.

7.2 Emergency Purchases

For a situation where immediate action is required to avoid jeopardizing operations, disrupting service to the public, or threatening the health and safety of staff or the public, purchases can be made by any method available. Subsequent to the emergency situation the purchaser shall provide written justification to their immediate supervisor for the purchase and the purchase will proceed through the normal approval process in accordance to the PUC's Signing Authority Policy before payment. Moving forward, consideration should be given to ensuring critical spares are established whenever possible.

7.3 Non-competitive Procurements

Excluding O.E.M. and standardized equipment Non-competitive procurement is only allowed in approved circumstances. Prior written approval is required for non-competitive purchases and must be attached to a purchase requisition (see APPENDIX C for Sole Source Approval Form). All sole source purchases under $5,000 must be approved by Purchasing. All sole source purchases exceeding $5,000 require the approval of the Divisional VP and Vice-President, Finance & Corporate Support. All sole source purchases exceeding $50,000 to be approved by President & CEO.

7.4 Excluded Purchases

The purchasing methods described in this policy do not apply to the items listed in APPENDIX D.

7.5 Electronic Requisitions and Approvals

Purchase requisitions are generated using the in-house requisitioning application (Cayenta) to initiate the purchasing process.

7.6 Consortiums/Co-Operative Purchasing

Cooperative purchasing or an arrangement between two or more entities (Consortiums) to tender commonly used goods or services together is encouraged in an effort to reduce costs by purchasing in larger volumes. The general principles of PUC's purchasing policy should be followed by any consortium that PUC participates with.

7.7 Vendor Credit Applications

The Purchasing Department will provide PUC's Credit Application -Standard form (See APPENDIX E) as required by new vendors. Purchasing Department will gather required information from prospective vendors on PUC's Vendor Activation Form (See APPENDIX F) and forward to Finance to be setup in the system.

7.8 Asset Disposal Procedure

The Manager of a department may declare goods as surplus or obsolete with the approval of the divisional VP. The Purchasing Department will determine if the goods can be used in other departments. If there is no corporate wide use for the goods, the Purchasing Department shall sell, exchange, donate or otherwise dispose of the goods according to guidelines established by the Purchasing Department. No employee who has responsibility for declaring goods surplus shall bid on or obtain any goods he or she has declared surplus.

7.9 Green Procurement Philosophy

PUC supports the purchase of environmentally preferred products. See APPENDIX G for PUC's green purchasing philosophy.

8.0 RELATED POLICIES

All purchases are subject to the signing authority policy and credit card policy as applicable.

9.0 DEFINITIONS

Bidders or Vendors: Contractor, wholesaler, distributor, service provider or any outside entity competing for corporate business. For the purpose of this policy these terms are used interchangeably and refer to the same entity.

Blanket Purchase Order: A contract between PUC and a vendor for the supply of repetitively ordered specified goods or services at a specified price but not specified quantity.

Controlled Products:
Under the Workplace Hazardous Materials Information System (WHMIS), a controlled product: Is any substance that is a compressed gas, or an oxidizing material. A substance that is

poisonous, infectious, flammable, combustible, corrosive or dangerously reactive. Meets the criteria in The Controlled Products Regulations.

Direct Purchase: Purchase not made with petty cash, credit card or purchase requisition. Invoice approval follows PUC's Signing Authority Policy.

Emergency: A situation where immediate action is required to avoid jeopardizing operations, disrupting service to the public, or threatening the health and safety of staff or the public.

Formal Competitive Bidding (Tenders, Request for Quotes or Proposals, Request for Prices): Procurement of goods/services, with bid opened in private and read at a predetermined time and place. The requisitioning party and at least one other person must be present at all tender openings along with the Purchasing Agent or designate. All submissions must be received as per the tender request package.

Hazardous Products:
Hazardous products are considered those that contain designated substances. This would be products that contain: Acrylonitrile; Arsenic; Asbestos; Benzene; Coke oven emissions; Ethylene oxide; Isocyanates; lead; mercury; silica; Vinyl chloride o. Reg. 490/09,s.2. Under the Hazardous Products Act

Non-competitive procurement: refers to an acquisition from a:

- Sole Source, or
- The item is an item of required design or is a proprietary or patented item, or
- There is a need for compatibility with goods and services previously acquired and there is no reasonable alternatives, or
- A reasonable attempt to identify competition has been unsuccessful.

O.E.M: is short for original equipment manufacturer. An original equipment manufacturer is a company that produces parts and equipment that may be marketed by another manufacturer.

Preferred vendor or contractor: A vendor or contractor that has a continuing arrangement to provide PUC with products or services. In addition, consideration of the following factors may apply: ability and experience to perform the work required; record of past performance with PUC; finance and technical resources; knowledge of PUC operations, systems and services; and compatibility with other goods and services of PUC.

Prequalification: A procurement process used to prequalify vendors for subsequent participation in an invitational Request for Proposal or Request for Quotation/Tender. Responses from proponents are evaluated against selection criteria set out in the solicitation, and a short list of pre-qualified proponents is created. Such could also be used for ongoing contract work of a lesser value.

Purchase Order: A legal document between PUC and a vendor to supply a specific quantity of goods or a specific set of services defined by such things as time period, location and price.

Purchase Requisition: A request to purchase, initiated by an employee, which defines the purchase specifications and requirements.

Sole Source: Recommended supply source where there is only one source of supply that meets the requirements.

Specification: A document package comprised of but not limited to technical provisions, safety rules, special provisions and other contract terms and conditions which must be satisfied by the contractor or supplier in performing the work. Specifications should be detailed but, where possible, not brand specific to allow for potential vendors to provide alternatives in the event an equal or better-proven product or method is available and shall not deter a competitive process.

Technical Provisions: The technical portion of the specification which relates to drawings, quality, design, standards, and description or by sample is the responsibility of the user department. Once established this information shall be retained in the appropriate filing system.

Tender: A formal request for sealed bids for the supply of goods or services in response to a formal solicitation process (advertised or not). For certainty, a Tender may include a Request for Proposal, a Request for Tender, a Request for Quotations, and any other document that is generally considered to facilitate the tendering process. Rules of the Tender are found in the request for Tender document and will govern the conduct of the various parties.

Terms and Conditions: Written provisions that determine the nature and scope of an agreement or contract and the responsibility and remedies of the parties to the agreement or contract.

Two Envelope Method: Bids are received in two separate envelopes. The first envelope contains technical and qualitative information and is opened and evaluated first. The second envelope contains price information and will be opened and evaluated after the information in the first envelope has been evaluated in accordance with the request for proposal documents.

Approved: ______________________ Date: Dec 28, 2018.

President & CEO

Revision History:

NOTE: A red line on the right side of document indicates a change		
Revision #	Date	Description

APPENDIX A

PURCHASING PROCESS

The requisitioner (being either our employee or an agent working on our behalf) is responsible for determining the need, specification, design or other technical data associated with a purchase as well as the following:

- All user departments are to provide the Purchasing Department with sufficient information to complete a transaction as noted. Failure to provide this information could result in a delay of turnaround time. Sufficient lead time must also be given to allow completion of the purchasing process and delivery.

- All purchases shall be in accordance with approved budgets.

- The necessary technical specifications and details as may be required to form a quotation and/or Tender Call must be forwarded to the Purchasing Department.

- The requisitioning department must assess the potential risk associated with contracted work and if necessary complete contractor prequalification.

- A purchase requisition may be generated by any employee but must be approved electronically by the appropriate signing authorities and include the proper account coding. Non- compliance to the above will result in the return of the purchase requisition to the source and ultimately loss of lead time.

Purchase requisitions are generated using the in-house requisitioning application (Cayenta) to initiate the purchasing process. The following are the steps in the purchasing process:

1. Description of the Need

The requestor must provide an accurate description of the materials or services required. For services, a Statement or Scope of Work must be prepared. General Terms and Conditions and technical recommendations should be provided for significant expenditures to support the need.

2. Determination and Analysis of Possible Sources of Supply

All potential vendors must be assessed to determine if they have the capability to provide the equipment, material, supplies or services.

Prequalification may be a requirement. This may include a risk assessment requirement as in the case of the PUC's Contractors Policy.

The Purchasing Department will attempt to ensure that any qualified person/company capable of supplying satisfactory goods and services has an equal opportunity to compete for the sale of products or services needed to support the requirements of PUC. Where prices are equal, determining factors may include conformity to specifications, record of deliveries and past performance of supplier's service and proximity of supply.

Some departments require cost estimates to determine whether or not to proceed with a project. Suppliers must be advised that these are study estimates only and any action on a purchase will go through the standard purchase process. Departments other than Purchasing may investigate pricing for their specialized technical needs when needed.

3. Determination of Terms and Conditions

All purchase requisitions must include general terms and conditions specific for the type of product and/or service required. The requisitions must include the proper authorizations and account coding.

The Purchase Requisition is forwarded to the Purchasing Department who will review the requisition for completeness.

When Purchasing processes a purchase requisition the following steps are taken:

- Check for alternative items, if required. The Purchasing Department will make every effort to investigate alternative items that might be acceptable to the requisitioner's requirements.
- If the materials or services are to go out for Tender, the Tender process must be followed.
- Participate in evaluating the quotations submitted by the requisitioner (if any), reviewing requisitioner's request, delivery requirements and cost, and obtain requisitioner's input as needed.
- Complete the purchase order.
- Confirm the order with the vendor and requisitioner and secure delivery.
- Arrange to have the goods or services delivered to the requisitioner or to the Stores Department.

4. Preparation and Placement of Purchase Order

The Purchasing Department will be responsible for the creation and issuing of all Purchase Orders. A blanket purchase order can be used for the supply of repetitively ordered specified goods or services at specified a price but not specified quantity. The term of a blanket order may be up to three (3) years, with allowable extensions provided the Value is maintained or a pricing structure is determined in advance and approved.

Proper authorization in accordance with PUC's Signing Authority Policy must be obtained in advance of purchases. Purchase Orders initiated after the provision of goods or services and/or receipt of supplier invoices are a serious violation of this policy and will require additional levels of authorization.

5. Follow-up on and/or Expediting Order

The Purchasing Department will be responsible for expediting all outstanding orders. The Purchasing Department will be responsible for invoicing discrepancies and will work in cooperation with Accounts Payable and the requisitioner to resolve such issues.

6. Receipts and Inspection of Goods

All materials purchased must be received and inspected to ensure that the requirements of the Purchase Order have been met. If material is nonconforming, it must be isolated prior to further processing.

All packing slips for material not received at PUC's main warehouse must be forwarded to the Stores Department in order to close the purchase order. This will allow for the timely processing of invoices for payment.

7. Clearance of the Invoice

All invoices will be paid by Accounting upon receipt of confirmation that the materials or services were received and acceptable and proper approvals are in place.

8. Change Order Request

A purchase order can only be changed if the requestor sends a new approved purchase request to the Purchasing Department requesting the change to the specific purchase order.

9. Records Management

All Purchasing records must be maintained by the Purchasing Department and/or the requesting employee/requester/originator as may be required. Documentation must be made available to the Purchasing Department as requested.

A copy of all approved Purchase Orders will be maintained on file in the corporate software.

For competitive processes, the Purchasing Department shall file, electronically or in hard copy, as appropriate, all documents associated with the procurement process and contract award (the solicitation document and any addendum and questions and answers; the supplier(s) proposal(s) and submission; the Purchase Orders; all contract related documents; and any other relevant supporting documentation), systematically for ease of reference and retrieval.

Proprietary and confidential information of suppliers will be safeguarded with appropriate care.

APPENDIX B

TENDERING PROCESS

1. Preparing a Tender Package

The Purchasing Department and the Requisitioner are both responsible for the preparation of the tender package:

The Requisitioner will:

- provide a complete statement of work and/or list of specifications which the item or service being purchased must meet;
- provide drawings, design details and schedules;
- detail the contract agreement and general conditions;
- detail supplementary conditions;
- detail a weighted scoring matrix to ensure awards are made to the bidder offering the best value;
- provide any addenda if necessary (prior to tender closing).

The Purchasing Department will:

- invite sealed Tenders by specific invitation and/or by public advertisement
- provide a standard Tender document on which the bidder will include the total price and other required information;
- provide a standard Tender covering letter establishing the date/time of Tender issuing and closing as well as place for receiving proposals;
- provide instruction to bidders detailing the how, when, where, and what form Tenders must be submitted;
- provide standard Terms of Conditions;
- send out the Tender package to bidders or post the Tender package electronically;

- obtain confirmation from the bidders as to their intent to participate;
- provide any addenda if necessary (prior to tender closing), and
- other relevant instructions as required.

2. General Rules to the Bidders

- No bids will be accepted after the Tender closing; late bids will be disqualified and returned, unopened, to the bidder.
- A new bid for the original unopened bid can be made, provided it is received before the bid closing date and time.
- Any inquiries made by the bidder must be directed electronically to the Purchasing Department or designate. The Purchasing Department along with the Requisitioner will respond. The inquiry and response will be formally issued to all bidders who have completed the confirmation of intent to participate.
- All other conditions of the Tender must be met.

3. Receipt of Tenders

All bids must be received at the location specified in the Tender document. Upon receipt of the Tender the receiver will date and time stamp and secure the Tenders.

- The minimum individuals attending the Tender opening meeting will be the Requisitioner, the Purchasing Agent and a third person;
- Bids will be opened and reviewed for acceptance;
- Any bid that does not satisfy the requirements may be disqualified, and duly noted
- A Bid Summary Sheet will be completed and circulated to the approving party
- A recommendation letter, with the bid summary sheet will be forwarded to the Requisitioner and Approver from Purchasing Agent indicating the Supplier/Contractor to be awarded the contract.

4. Award of Contract

The Purchasing Department or its designate will notify the successful vendor, in writing, of the intent to award of contract. If required, instructions about proceeding with the job will be detailed on the notification.

Unsuccessful bidders in a tender process can approach PUC to discuss where they can improve on their submissions and be debriefed on why they did not receive the award of contract. Details of the successful bid will remain confidential (price, etc.)

5. Preparation and Placement of Purchase Order

The Requestor will generate a purchase requisition and the Purchasing Department will prepare the contracts for signature. The Purchase Order will include the following information as appropriate:

- List the contract number
- a clear description of the product or services ordered;
- precise identification of type, class, and grade of the product; and
- any quality system standards which will apply.

Approved contracts are signed by the appropriate signing authority as per the signing authority policy, and then forwarded to the successful bidder for acceptance. The Requisitioning Department retains one copy of the contract and the original is filed in the Purchasing Department.

6. Guarantee of Contract Execution

- Where required tenders >$50,000 using the services of contractors shall be accompanied by a tender deposit in the form of a certified cheque or irrevocable letter of credit payable to PUC Services Inc. in the amount of Five Thousand Dollars ($5,000.00). Such deposit shall be security to PUC Services Inc. that the Bidder, if successful, will execute the contract documents within two (2) weeks of award and will start Work as specified. Failure to execute the documents within two (2) weeks or failure to start Work as specified will result in forfeiture of the tender deposit. Tender deposits of unsuccessful Bidders will be returned within three (3) weeks after award of the contract. The tender deposit of the successful Bidder will be returned with the first progress certificate.

- Suppliers may withdraw tenders/quotations prior to time of closing but not at any time thereafter. Bid deposits of any supplier withdrawing after time of closing shall be forfeited to PUC.

- Prior to the commencement of the work, the successful bidder may be required to provide security in the form of a performance bond to guarantee the performance of a contract, a labour and material payment bond to guarantee the payment of labour and materials supplied in connection with a contract or an irrevocable letter of credit.

- Other means to guarantee the execution of the contract may include surety bonds or other security deposits, progress payments and holdbacks.

- All contracts awarded for supply of labour and/or equipment must present proof of insurance at stipulated levels. Bid documents must clearly indicate the insurance requirements to be provided and maintained until the termination of the contract by the successful bidder, including a cross liability clause endorsement certifying PUC is named as an additional insured. The insurance coverage shall indemnify and save harmless PUC, their agents and employees from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by third parties that arise out of, or are attributable to, the contractor's performance of the contract.

- Prior to payment to a supplier, contracts awarded for supply of labour must present a Certificate of Clearance from the Workplace Safety and Insurance Board (WSIB) ensuring all premiums have been paid to the date of payment. It is the responsibility of the contractor to ensure that the Purchasing Department of PUC has, at all times, current copies of all required documents. Failure to do so may result in termination of contract. Clearance certificates must be refreshed every three months (for contracts with duration of three months or more).

- All contracts shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

7. Topic of Bid Irregularities

Extreme care shall be exercised to ensure that Irregular Bids are handled in a manner which is fair to other bidders as well as PUC Services operations.

Irregularities that may render a Bid reject-able will be disclosed in the Tender Document.

All open Bids will be reviewed for irregularities and if detected will be addressed at the discretion of the Evaluation Team with the Purchasing Agent. The Evaluation Team will use Guidelines set out by Purchasing to determine the appropriate response to the irregular bid.

APPENDIX C

500 Second Line East, P.O. Box 9000
Sault Ste. Marie, Ontario P6A 6P2

SOLE SOURCE APPROVAL FORM

Department

Requestor's NAME

Is this an Emergency or Critical to Operations ?

Vendor Name and info:

Instructions:
Your Purchase Requisition must have this completed and signed Form attached to it at time of sending PR for approval in System.
Quotation and/or other relevant documentation must be attached to this Form.
PR values less the $5,000.00 will need your manager and Purchasing Agent approval
PR values greater than $5,000.00 will need the above, and the approval of VP Finance & Corporate Support
PR values greater than $50,000.00 will need the above and the President/CEO's approval

Rationale / Justification information

Attachments

- ☐ quotation
- ☐ proposal
- ☐ other documentation

Budgetary Cost

Approval signatures

FIRST Level Approval

SECOND Level Approval

THIRD Level Approval

FOURTH Level Approval

APPENDIX D

EXPENDITURES EXCLUDED FROM THE APPLICATION OF THIS POLICY

The purchasing methods described in this policy do not apply to following goods and services:

- Training and education, courses, workshops, memberships, subscriptions, etc.
- Travel, meals, and accommodations
- Refundable employee expenses
- Medicals
- Damage claims
- Conservation and Demand Management, customer rebates or customer refunds
- Developer rebates and construction deposit refunds
- Wholesale electricity, transmission and connection invoices
- Electrical Safety Authority fees, rights-of-way, joint use agreement fees,
- Ontario Energy Board regulatory payments
- Payroll related payments , federal, provincial, municipal taxes and fees, vehicle license fees, and Payments in lieu of taxes (PIL's)
- Software license fees and annual maintenance fees (ongoing in nature after original award)
- Utility payments (hydro, cable, water, natural gas)
- Postage
- Debt retirement and Interest payments on debt
- Payments to Shareholders (including dividends)
- Charitable donations/Sponsorship
- Road reconstruction projects in conjunction with the City of Sault Ste. Marie

APPENDIX E

PUC

CREDIT APPLICATION INFORMATION

PUC SERVICES INC.

NATURE OF BUSINESS

Distribution of Electricity & Water

MAILING ADDRESS	SHIPPING ADDRESS
P.O. Box 9000, 500 Second Line East	500 Second Line East
Sault Ste. Marie, ON P6A 6P2	Sault Ste. Marie, ON P6B 4K1
(705) 759-6500	

TYPE OF BUSINESS	Revenue Canada - HARMONIZED SALES TAX NUMBER:
Corporation – Incorporated in 1917	R122198567

OWNERS / PRINCIPAL OFFICERS

Rob Brewer	Kelly McLellan
President / CEO	Vice President, Financial Services
500 Second Line East	500 Second Line East
Sault Ste. Marie, ON P6B 4K1	Sault Ste. Marie, ON P6B 4K1

ACCOUNTS PAYABLE		FINANCIAL INSTITUTION
CONTACT:	Accounts Payable Clerk	Royal Bank
PHONE #	(705) 759-6526	602 Queen Street East
EMAIL:	accounts.payable@ssmpuc.com	Sault Ste. Marie, ON

CURRENT TRADE SUPPLIERS

Guillevin Int.	Anixter Power Solutions	Wamco Waterworks Northern
81 White Oak Dr. E.	P.O. Box 399, Purdy Rd.	1771 Old Falconbridge Rd.
Sault Ste. Marie, ON P6B 4J7	Colborne, ON K0K 1S0	Sudbury, ON P3A 4R7
(705) 254-6461	(800) 263-7738	(705) 525-5000

ANNUAL REPORTS

Our financial reports can be found on our website, www.ssmpuc.com

ACKNOWLEDGEMENT

I hereby certify that the information contained herein is complete and accurate. This information has been furnished with the understanding that it is to be used to determine the amount and conditions of the credit to be extended. Furthermore, I hereby authorize the financial institutions listed to release necessary information of PUC Services Inc.

SIGNATURE OF AUTHORIZED OFFICAL

SHELLEY HAMBLY
PURCHASING AGENT

APPENDIX F

500 Second Line East, P.O. Box 9000
Sault Ste. Marie, Ontario P6A 6P2

VENDOR ACTIVATION FORM

Date

Vendor Name

Business Number - O/A

Sales Contact Name

Accounts Receivable Name

Street Address

Remit to Address (if different)

City

Remit to City

Phone Number

Prov / State

Postal Code

Sales - Group e-mail address for P.O.'s

A/R Email Address

Provide a brief description of product/service your firm offers

Provide physical address of pick-up locations if different then above

Information Regarding Our Purchases

- Purchase orders are sent electronically via E-mail, and therefore a group e-mail account to send to is preferred to ensure it has been reviewed and a confirmation can be returned in a timely manner.
- IncoTerms are DDP, unless otherwise agreed to.
- Orders are paid net45 unless discount terms are offered.
- Orders are in CAD currency, unless otherwise stated.

Please provide all necessary Banking details below for us to process electronic payments to you.

Specify your discount terms

GST / HST No. (Revenue Canada)

Financial Institution Name

Bank No.

Transit No.

Account No.

E-mail Address for Payment Notification

Currency

W9 Income Form (IRS) (USA only)

Customs Brokerage Information (USA only)

If you are a CONTRACTOR or SERVICE PROVIDER the following must be completed

Check off the list below of items that are included with your submittal

- ☐ WSIB Clearance Certificate or Workers Insurance Certificate
- ☐ WSIB Incident Summary Report (NEER)
- ☐ General Liability Insurance - minimum of $2,000,000.00
- ☐ Current signed Health & Safety Policy
- ☐ Proof of completion of OHSA "Basic Awareness Training" - a letter is sufficient
- ☐ Signed Confidentiality Agreement
- ☐ Other: Trade Licenses or Certificates

SUPPLIER AUTHORIZATION

Authorized Signature

Date

Printed Name

Title

APPENDIX G

GREEN PURCHASING PHILOSOPHY

The Purchasing Department's policy at PUC Services is to support the purchase of recycled and environmentally preferred products in order to minimize environmental impacts relating to our work. We recognize our employees can make a difference in favor of environmental quality. We strongly recommend the purchase of environmentally preferable products whenever they perform satisfactorily and are available at a reasonably competitive price. We encourage waste prevention, recycling and the use of recycled/recyclable materials through contractual relationships and purchasing practices with vendors, contractors and businesses.

"Environmentally Preferable Products" means products that have a lesser impact on human health and the environment when compared with competing products. This comparison may consider raw materials acquisition, packaging, distribution, reuse, operation and/or disposal of the product.

"Recycled Products" are products manufactured with waste material that has been recovered or diverted from the waste stream. Recycled material may be derived from post-consumer waste (material that has served its intended end-use and been discarded by a final consumer), industrial scrap, manufacturing waste and/or other waste that otherwise would not have been utilized.

Purchasing solicits the use of recycled and other environmentally preferred products (e.g. paper Products, including janitorial supplies, shop towels, hand towels, facial tissue, toilet paper etc.) in its procurement documents as appropriate. We also structure applicable contracts to offer and/or feature recycled-content products whenever possible, (e.g., office supplies and janitorial supplies).

The Purchasing Dept. supports PUC Services Environmental Policy and its commitment to making environmental protection an integral part of our planning, operating and purchasing decisions. We accomplish this by supporting the purchase of recycled and environmentally preferred products in order to minimize environmental impacts relating to our work.

APPENDIX D

IndEco PUC LRAMVA

(2018-2022)

Strategic Solutions for a Changing World™

PUC Distribution Inc.
2018-2022 LRAMVA

PUC Distribution Inc.

Lost revenue related to Conservation and Demand Management

2018-2022

IndEco

This document was prepared for PUC Distribution Inc. by IndEco Strategic Consulting Inc.

For additional information about this document, please contact:

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IndEco report C2198

12 July 2022

Table of Contents

Introduction

The Lost Revenue Adjustment Mechanism (LRAM) was developed to remove a disincentive electricity local distribution companies (LDCs) may have to promote conservation and demand management (CDM) programs. CDM programs are designed to provide energy savings and peak demand reductions for the customers of the LDC. These savings and reductions directly impact the LDC's revenue. The LRAM allows LDCs to be compensated for lost revenue that resulted from CDM programs the LDC offered to its customers.

Starting in 2011, the Ontario Energy Board (OEB) authorized LDCs to establish an LRAM variance account (LRAMVA) to capture the impact of CDM programs on the revenue of LDCs. The variance in the LRAMVA is between the lost revenue due to independently verified load impacts of CDM and the lost revenue from any CDM impacts on the LDC included in the LDC's load forecast.[1]

PUC Distribution Inc. contracted with the Ontario Power Authority (OPA, which has now been merged into the Independent Electricity System Operator – IESO) to offer a suite of CDM programs to customers for the 2011-2014 period and subsequently with the IESO for the 2015-2019 period.

PUC's lost revenues from CDM have already been claimed for results through 2017. Lost revenue variances being claimed in the 2023 rate application are summarized on Figure 1.

[1] *Guidelines for Electricity Distributor Conservation and Demand Management*. Ontario Energy Board. April 26, 2012 (EB-2012-0003).

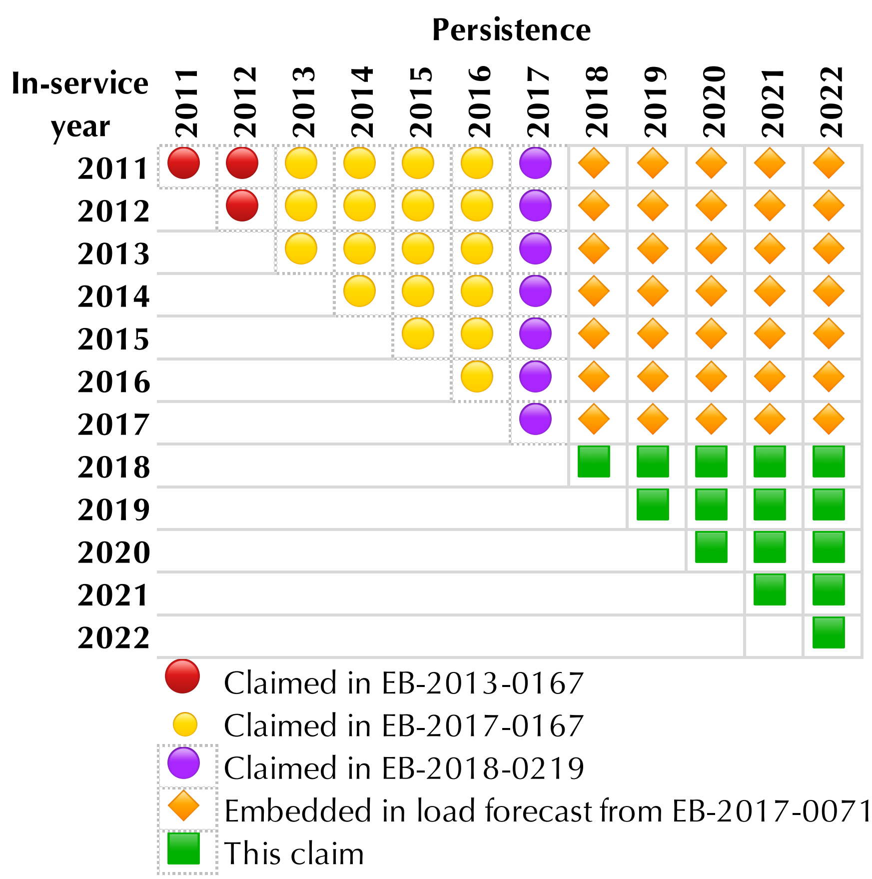

Figure 1 LRAMVA claims for PUC Distribution Inc.

PUC is requesting disposition of the LRAMVA balance that will remain at the end of 2022, including specifically:

- Savings in 2018 and 2019 of projects approved before April 1, 2019 as part of the Conservation First Framework, but completed in 2018 or later
- Persistence of those savings through 2022
- Persistence in 2018-2022 of savings from programs offered in 2017.

PUC is making this claim as part of a cost of service rate application for the 2023 rate year. That application will include a new load forecast that will capture any savings from the Conservation First Framework or the earlier framework that persist beyond 2022. Given that PUC is no longer offering customers new CDM programs, the LRAMVA balances that will remain through December 31, 2022 from PUC's initiatives under the Conservation First Framework (CFF) can be determined at this time.

In preparing this claim, the methodology prescribed by the OEB filing requirements has been followed:

"The OEB will rely on the Participation and Cost Reports and detailed project level savings files as supporting documentation when assessing applications for

lost revenues in relation to energy and demand savings from programs delivered under the CFF where final verified results from the IESO are not available."[2]

[2] Ontario Energy Board, 2021. *Filing Requirements for Electricity Distribution Rate Applications - 2021 Edition for 2022 Rate Applications*. Chapter 2 Cost of Service

Methodology

In principle, the determination of lost revenues is a simple calculation:

LR = (CDM results – CDM results in the load forecast) * rate

In practice, it is somewhat more complicated than that because of the limitations of the information available to calculate CDM results, the use of different volumetric units for billing in different customer classes and the need to determine carrying charges on the lost revenues.

The information sources for the LRAMVA analysis are summarized on Table 1.

Table 1 Information sources for LRAMVA analysis

CDM program years	Sources	Information used in this analysis	Used for
2017	2017 final verified results reports for PUC (IESO)	Net first year energy savings by program	Savings
		Net first year demand reductions by program	Savings
		Persistence of results through 2022 by program	Savings
	2017 final verified results by project (IESO)	Net first year energy savings by project	Allocation to rate classes
		Net first year demand reductions by project	Allocation to rate classes
2018 - March 2019	April 2019 Participation & Cost Report for PUC (IESO)	Unverified first year net savings for 2018, Jan-Apr 2019, and adjustments for 2017 by program	Savings
		Unverified persistence in 2020 by program	Savings in 2020
	CDM databases (PUC)	Reported gross energy and demand savings	Calculating net savings
	2017 final verified results reports for PUC (IESO)	Net-to-Gross and Realization Rates	Calculating net demand savings in the P&C reports
		Rate of loss of persistence	Persistence in 2020-2028
2018-2022	CDM databases (PUC)	Reported gross first year energy savings by project	Gross savings and allocation by program
		Reported gross first year demand savings by project	Gross savings and allocation by program
	2017 final verified results reports for PUC (IESO)	Net-to-Gross and Realization Rates	Calculating net energy and demand savings by program
		Rate of loss of persistence	Persistence through 2022 where IESO persistence is not available.

CDM RESULTS

For programs offered in 2017, the IESO performed evaluations which examined reported gross energy savings from the programs, and the Realization Rate (RR) and the net-to-gross ratio (NTGR), and then from those calculated net energy savings for each initiative or program. Peak load reductions were also calculated and reported in the same way. For some programs the IESO calculated gross and net energy at the project level.

Provincial results were allocated to individual LDCs based on each LDC's individual performance where possible, or through an allocation process.

The IESO provided the persistence into future years of savings and reductions for each program.

Before final evaluation results were available, the IESO published monthly Participation and Cost (P&C) reports that showed both verified and preliminary unverified savings. With the ending of the Conservation First Framework by the Ontario government on April 1, 2019, the IESO stopped producing reports of verified results. Unverified net energy savings for 2018, Q1 2019 and adjustments to program results for 2017 that came in after the 2017 final verified results report are in the April 2019 Participation and Cost reports. Results after the April 2019 Participation and Cost reports are from PUC databases which record gross values, as reported to the IESO.

These are the best and most definitive and defensible estimates of savings associated with these programs and incorporate the most appropriate estimates of results from the measures installed.

However, these data have some limitations, and require some adjustments for use in lost revenue calculations.

Determining net demand savings for projects completed after the 2017 final results

Only reported gross demand savings are available for projects completed after the 2017 final results report. That includes both projects captured in the P&C report, and post-P&C projects captured in PUC CDM databases. These reported values were converted to net values using the net-to-gross values and realization rates in the 2017 final verified results report.

Allocating results to customer classes

The IESO reports results by program or initiative. These only partially map onto customer classes. The IESO provided net results by project for projects in programs that span multiple customer classes in 2017 and PUC identified the customer classes for these projects to calculate the allocation across customer classes. For 2018 through 2021, PUC reported information on projects to the IESO and again the customer classes were identified for individual projects to calculate the allocation. The allocation was calculated according to the billing unit of the relevant customer class. That is, for GS<50 projects, the allocation to GS<50 is the percentage of total kWh for projects in that customer class; for

GS>50, their allocation is the percentage of total kW for projects in that customer class.

In most cases, the allocation is straightforward. Savings in the Retrofit Program and the Audit Funding Program spanned more than one customer class in any given year. For these, allocations were done using the process described in Figure 2.

Figure 2 Allocation of savings to customer classes

Customer classes were identified for all projects in the program, the percentage of total energy use in each customer class billed by kWh was calculated, and the percentage of total demand reductions in each customer class billed by kW was calculated.

PUC bills customers in different customer classes using different volumetric units, either kilowatt hours (kWh), or customer peak monthly kilowatts (kW). The customer classes (and billing units) for PUC are:

- Residential (kWh)
- GS <50 kW (kWh)
- GS 50 – 4,999 kW (kW)
- Unmetered Scattered Load (kWh)
- Sentinel Lighting (kW)
- Street Lighting (kW).

Tables 5-c through 5-e of the OEB LRAMVA work form show the percentage allocation by customer class for 2017 through 2019 results respectively. (PUC did not identify any projects completed after 2019.) In each year the customer class allocation percentage totals for each program may not add up to exactly 100% in cases where kWh savings are allocated to customer classes billed by kWh and kW demand reductions are allocated to customer classes billed by kW. The details of the allocation calculation are on Tab 3-a of the work form.

Application of reported results

The IESO reported both energy savings and reductions in demand. Depending on the customer class, distribution revenue is based on either kilowatt-hours used, or the customer's monthly peak kilowatt use. For customer classes where the customer is charged for distribution by energy use (kWh), the IESO reported net energy savings are used to calculate lost revenues related to CDM results. For customer classes where the LDC charges for distribution are based on the customer's peak monthly demand (kW), the IESO reported net peak demand reductions are used to calculate lost revenues related to CDM results. The demand reductions in the IESO reports are multiplied by the number of months a specific program impacts a customer's peak demand. "The IESO indicated that the demand savings from energy efficiency programs shown in the Final CDM Results should generally be multiplied by twelve (12) months to represent the demand savings the distributor has experienced over the entire year."[3]

No lost revenues are claimed for demand response programs, consistent with OEB policy.[4]

For 2018 and 2019 and adjustments to 2017 made after the 2017 final results were available, the IESO did not report demand reductions. Demand reductions were estimated based on the reported post-completion gross demand savings by project and the 2017 NTG and RR factors.

Persistence

Persistence of 2017 to 2019 results through 2022 is shown at the bottom of Table 5-c to Table 5-e of the workform.

Persistence of programs in 2015 to 2017 is included in the 2017 final verified results report.

The April 2019 Participation and Cost report provided estimated net energy persistence in 2020 for all verified and unverified results.

Where persistence data were not provided, persistence is estimated using the following methods:

- For unverified program results in 2017 to 2019 in the April 2019 Participation and Cost Report, the annual persistence of the unverified results to 2020 was estimated using linear interpolation between the program year and 2020
- For unverified results, persistence in 2021 to 2022 was estimated using the same rate of persistence seen in 2017 for the verified results for 2017.

Load reductions accounted for in the load forecast

In recent years, LDCs have tried to account for load losses due to CDM programs in their load forecasts, submitted as part of their Cost of Service

[3] Ontario Energy Board, *Updated Policy for the Lost Revenue Adjustment Mechanism Calculation: Lost Revenues and Peak Demand Savings from Conservation and Demand Management Programs*, EB-2016-0182, May 19, 2016, p. 4.

[4] Ibid. p. 7.

applications. These forecasted reductions need to be deducted from load losses attributable to CDM programs to determine the final impact of CDM on revenues. That is, the impact is the *variance* between the results accounted for in the load forecast and the results attributable to the programs. In PUC, the last load forecast was for 2018, and a threshold for 2018 and later was determined.

Overall impact of CDM on load, by customer class

The overall impact of CDM energy savings and demand reductions on load is calculated from the IESO energy savings and peak demand reductions, allocated by customer class. Finally, the difference is calculated between the overall estimated impact on loads and the load reductions attributable to CDM that were captured in the most recent load forecast.

Overall lost revenues in 2018-2022 are shown on Table 5-d to 5-h of the workform.

DISTRIBUTION RATES

Revenue impacts to the LDC associated with CDM are calculated using the distribution volumetric rate. Most other rate components (e.g. service charges, global adjustment, transmission charges) are either fixed charges or pass-throughs for the utility that do not affect the LDC's revenues when energy efficiency measures are adopted by customers. An exception is for certain rate riders related to taxes or where rate implementation was delayed, and these are added to the distribution volumetric rates for lost revenue calculations, where applicable.

CARRYING CHARGES

Because these revenues are lost throughout the year and are only recovered through rate riders in subsequent years, the Ontario Energy Board has permitted the LDCs to claim carrying charges on these lost revenues at a rate prescribed by the OEB and published on the Board's website. The carrying charges are simple interest, not compounded, and are calculated on the monthly lost revenue balance. Because the IESO final results estimates are reported annually, and monthly estimates are not available, the incremental results are assumed to be equally distributed across the months. So, 1/12 of the annual results are allocated to each month of the year.

Carrying charges for results realized in 2018 to 2022 accrue from the time of the results. Carrying charges on persistent savings from earlier projects accrue from January 1, 2018. Carrying charges on savings through December 31, 2017 have already been claimed.

Results

Following the methodology described above, lost revenues were calculated for PUC. The discussion of results refers to tables provided in the completed LRAMVA work form. The work form uses the OEB's template.

LOST REVENUES

The lost revenues for each year by customer class for PUC calculated from final CDM program results are shown on Table 1-b of the OEB LRAMVA work form. The lost revenue for 2018 through 2022 is based on the load impact for each customer class multiplied by the rate for that customer class in that year. The load impact includes only the impact of CDM programs offered through the Conservation First Framework.

Table 1-b of the OEB LRAMVA work form also shows the anticipated lost revenue in each year due to CDM activities accounted for in PUC's 2018 Cost of Service application. The impact on PUC's revenue is the variance between what is calculated from final CDM program results and estimated CDM activities.

CARRYING CHARGES

The monthly carrying charges by customer class on PUC's lost revenue variance are shown on Table 6 of the OEB LRAMVA work form. The carrying charges are reported monthly, from the time the lost revenues accrue.

TOTAL LRAMVA CLAIM

The LRAMVA balance on December 31, 2022 for PUC that includes persistence of results from 2017-2022 CDM programs is $194,519. The total carrying charges on this LRAMVA balance accumulated to December 31, 2022 are $6,941. The balances by rate zone and individual customer class are shown on Table 2.

There are only savings to claim in the residential and general service customer classes. Savings in none of the customer classes will increase over time, and there is thus no reason to delay a claim because of the zero amounts in other customer classes.

PUC plans to recover the LRAMVA balance over one year.

Table 2 Summary of LRAMVA claim by customer class and rate zone

Customer class	Principal	Carrying charges	Total LRAMVA claim
Residential	$42,005	$2,502	$44,507
GS<50 kW	-$103,740	-$3,211	-$106,950
GS 50-4,999 kW	$256,254	$7,650	$263,903
Total	**$194,519**	**$6,941**	**$201,460**

Note: there is no LRAMVA claim for customer classes not shown.