



Cobourg Taxpayers Association

Making Local Government Accountable

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***Comments on Lakefront's Water Meter
Replacement Proposal***

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Town of Cobourg
Committee of the Whole
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Why Now?

Reading the agenda for the January 6 Committee of the Whole I was struck by a completely unforeseen request for a \$2.3M loan for a water meter replacement program. Cobourg has had a phased, \$125,000 per year, water meter replacement program at least since 2015. Lakefront's **February 2019** report to Council did not mention any issues with the existing water meter replacement program. What has changed and why did this proposal come to Council so late in the budget cycle? A resolution to request \$2.3M from the Town of Cobourg was approved by Lakefront's Board on **December 13** of **2018**. The request for additional funding was not sent to the Cobourg Town Clerk until a year later. Note that Lakefront's Board resolution to request additional funding was approved two months **before** Lakefront's February report to Council which indicated that everything was proceeding as planned and without issues.

Why did an important project languish on someone's desk for a year? Why did this request come to Council when most were celebrating the holidays with their families and the critical town business of finalizing the 2020 budget was foremost in the minds of our Councillors? Council should request Lakefront to provide an explanation for the year delay in bringing this important matter forward.

Alternatives to Discard and Replace

The report gives two reasons for replacing the meters:

- Currently installed meters are old and it is impossible to obtain repair parts.
- Meter accuracy suffers as the meters age.

There are alternatives to discarding and replacing existing meters and none are even mentioned in the report provided to Council:

- Approximately 4,000 of Cobourg's water meters have been replaced over the last few years. These recently replaced meters could be used to provide spare parts for repairs to the meters still in service.
- EARTH of Ingersoll, Ontario, and other companies repair and recalibrate Neptune meters.
- Neptune's patents expired years ago and there are now several Indian and Chinese companies that make repair parts and even complete clones of older Neptune products.

Lakefront should be asked to investigate the feasibility of these alternatives to discarding current meters. Repairing instead of discarding would reduce Cobourg's footprint and is an important step towards a sustainable future. Cobourg could serve as an example to other Ontario towns that are considering the economics of repair versus discarding and buying new.

Neptune's personnel provided a detailed analysis regarding the likely errors in the readings from our older meters. Given their self interests, verification of information from salesmen is essential. There is no mention in Lakefront's report that Neptune's accuracy estimates were verified nor is there any mention of the cost of eliminating the errors by refurbishing and recalibrating meters rather than discarding working meters.

Neptune has developed software called SEER® (Statistical Evaluation for Enhancement of Revenue). According to Neptune their SEER® model can determine meter accuracy to within a 95% confidence interval without having to perform a site test on the meter. (For details see <https://www.neptunetg.com/globalassets/products/literature/18-001909-ps-seer-04.18.pdf>) Using SEER® and applying a correction factor to those meters producing inaccurate readings Lakefront could gain most of the benefits of actually replacing meters. There would be no need to replace or even to recalibrate meters. At worst only the few, inaccurate, meters would have to be replaced. Has this very low-cost approach been investigated by Lakefront?

Customer Impacts

The higher water bills resulting from more accurate readings will have adverse consequences for many local businesses. According to Lakefront's report, the bills for 53 commercial accounts will increase by an average of 17.77% or \$775 each, 52 more accounts will increase by 13.03% or \$648 each and 30 more accounts will increase by 9.51% or \$412 each. In addition to these 135 businesses it is forecast that 177 additional commercial accounts will have to pay more but with smaller increases. These are all the average increases based on meter age; some customers will be asked to pay much more.

If Lakefront's analysis is correct, Cobourg's businesses will be expected to pay over \$114,000 more each year. (Note that Lakefront's report is inconsistent in this amount. Their detailed data in the table on page 6 of their report shows that the total impact will be about \$122K rather than \$114K.) This unexpected increase in water bills will result in numerous billing disputes and some businesses will have trouble paying the higher amounts. Recall the recent billing dispute between Lakefront and William Street Beer that consumed many hours of our Councillor's time. The dispute was the result of replacing a water meter without a procedure to verify the accuracy of the new meter. Lakefront's report does not mention how meter accuracy will be verified after installation nor how the inevitable disputes will be resolved. A detailed plan to address this problem is essential before any more meters are replaced.

Financial Analysis Issues and Errors

Lakefront's report notes that borrowing \$2.3M to complete the project in 2020 would qualify Cobourg for a discount of approximately \$193,000. What is not mentioned is that borrowing the funds, as recommended, would incur unnecessary interest costs of over \$800,000. This means that the small discount would not be a savings. Qualifying for the discount would result in a net additional cost to Cobourg of over \$600,000!

To eliminate the need to manually read the meters requires software hosting, software licences and gateway services which are quoted as costing \$52,165 each year. In addition to these annual software costs, Cobourg must implement Neptune's "AMI Fixed Network" at a quoted cost of \$527,415. Lakefront paid their meter reading contractor, Olameter, \$60,485 in 2018. Eliminating the requirement for manual meter reading would provide an annual savings of only about \$8,000. Spending more than \$500K to get an annual savings of \$8K would require over sixty years to just breakeven. This is clearly not a financially prudent choice and should be removed from consideration.

If Cobourg disregards financial prudence and chooses to implement Neptune's proprietary AMI system Cobourg will be committed to annual software licence and hosting charges solely determined by Neptune, subject to arbitrary increases and without viable alternatives. The report does not mention any protection from future price increases. We will be unable to produce accurate water bills if the computer hardware and software is not fully functional. The report does not mention guaranteed availability nor time to repair for this complicated hardware and software system. Since Neptune's RF AMI system contains proprietary elements it is unlikely that other vendors will provide a fully compatible product. The report does not mention any contingency plan if Neptune decides to drop support for their AMI system. Remember, Lakefront wants to replace our current and vastly simpler mechanical meters simply because Neptune is dropping support even though support alternatives exist. It is imperative that these issues be fully addressed prior to any purchase of Neptune's advanced technology.

Age is the rationale for replacing our current meters yet there is no mention of the expected lifetimes of the replacement meters. The proposed new meters rely on electronics rather than reliable mechanical parts. Modern electronic devices – computers, TVs, cell phones – typically have service lives of only 5-10 years. Has Neptune provided a guaranteed service life for the new meters? Will repair parts be available for 40+ years? There is no mention of a guaranteed life or even an estimate of service lives in Lakefront's report.

The report asserts that older meters register less than the actual amount of water consumed and claims that replacing all meters is the best way to correct the underbilling. It is claimed that the increased billing will largely pay for the meter replacement project. Lakefront ignores the obvious: Meters do not need to be replaced to remedy accuracy issues; repair/recalibration can also correct any errors and a much lower costs than discarding and replacing the meters.

Lakefront's analysis shows that the billing errors have gradually increased over decades. If Lakefront is correct, Council should question why this could have happened without corrective action. Based on their own data Lakefront has underbilled commercial customers by over \$600K in the last decade. This lack of accurate billing has raised the rates for residential water users and brings the Watson Report's analysis of necessary rate increases into question. Lakefront's management has failed to fulfill their fundamental duty of providing accurate billing for Cobourg's water users.

Lakefront had a year between their Board's approval of the report and their submission to Cobourg's Council to refine their analysis and to correct any errors. The loan amortization information in the report, a critical part of their financial analysis, is seriously in error. The report claims that \$191K annually will repay a \$2.3M loan with an interest rate of 4% in 15 years (see table on page 5 of Lakefront's report). Actually an annual payment of about \$204K is required to repay the loan in 15 years. Lakefront's financial analysis is based on an incorrect amortization schedule which results in **understating** the project cost by \$230K or 10%.

Why is Neptune the Supplier?

The proposal does not mention why Neptune was selected as the supplier. Neptune is US based rather than being a Canadian company. Neptune has many US based competitors including Sensus-Xylem which is a larger company and a global leader in water meter technology. Was there a tender that selected Neptune over their competitors or are Neptune products being purchased simply because Lakefront has bought from them in the past? Many towns are using water meters from several vendors; should

Cobourg do the same? A proposal to spend over \$2M should include at least a cursory rationale regarding why the chosen vendor is the best choice.

What Should be Done?

Cobourg water rates have increased by 9% each year and rates are expected to increase at a similar pace in the future. I urge Council to reject this proposal from Lakefront and request that a fiscally responsible alternative that addresses the issues raised in this delegation be provided.