

Alectra Rear Lot Conversion Initiative & Stormwater Fee Update

General Committee – September 3, 2019

Agenda

- Overview of Alectra Rear Lot Conversion Initiative & Customer Survey Results (From Alectra Utilities)
- Overview of Options for Accelerating the Lot Conversion Initiative
- Impacts to Stormwater Fee
- Staff Recommendations

Background

- Council approved the stormwater fee of \$47 for residential properties (2014) and \$29 per \$100,000 CVA for non-residential properties (2015)
- In 2019, staff reviewed program costs, and recommended an increase by \$3 per property for residential properties (\$1 per year increase thereafter) and \$2 per 100,000 CVA for non-residential properties (2% increase per year thereafter), to be implemented beginning in 2020
- At Council on April 16, 2019, Staff were directed to review the potential inclusion of the costs associated with Alectra's Rear Lot Conversion (RLC) Initiative to the City's stormwater fee

Purpose

- To provide an overview of Alectra's Rear Lot Conversion Initiative, related to the undergrounding of back yard hydro lines
- To provide a summary of options for accelerating the Rear Lot Conversion Initiative
- To define the potential impact of the program on the City's stormwater fee



Rear Lot Conversion Initiative - Overview

- Several older suburban and urban neighbourhoods contain rear lot or “backyard” infrastructure for electricity service. Infrastructure is 40 years of age or older.
- Approximately 11,000 of the 1 Million customers that Alectra Utilities services are supplied through rear lot overhead infrastructure; of those approximately 2,000 customers are located in Markham.
- Rear lot infrastructure present the following operational challenges:
 - Repairs and maintenance is complicated due to access challenges for trucks and equipment. Private amenities (trees, pools, sheds, etc.) create obstacles.
 - Rear lot overhead equipment is subject to greater tree contact during severe weather.
 - Elevated safety risks should the infrastructure fail on customer property.
- Due to these challenges, outage restoration is typically three times longer for rear lot customers compared to customers with underground front lot service.



Alectra Utilities' Customer Survey & Engagement

- In the spring of 2019, based on initial customer needs and priorities and a preliminary set of potential investments for 2020-2024, Alectra Utilities engaged customers to assess their preferences between specific investment options.
- Alectra Utilities received responses from 32,000 customers.
- The survey was directed to all customers including specific customers who are serviced with rear lot overhead infrastructure.
- The customers are asked to provide their preference on the following:
 - Preferred Design Option (e.g. Partial Underground, Full underground)
 - Timing and pacing of investment for the rear lot conversion initiative.

Alectra Utilities Survey - Design Approaches

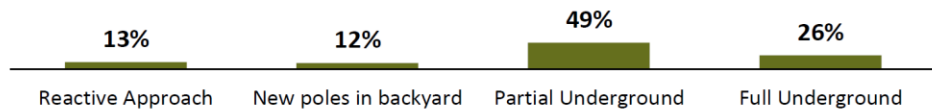
Q

Which of the following design approaches would you prefer?

Option	Rear lot or "backyard" equipment design choices
Reactive Approach <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Reactively replace rear lot assets when they have reached their physical end-of-life criteria, knowing that there could be prolonged reliability impacts. This option leaves customers vulnerable to longer than average storm outages and resulting safety risks.
New poles in backyard <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Proactively replace old poles and equipment, with new poles and equipment in backyards. This would improve day-to-day reliability but leaves customers vulnerable to longer than average storm outages, and resulting safety risks.
Partial Underground <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Proactively re-locate some rear lot infrastructure to front lot underground. This would address some of the vulnerability to longer than average storm outages and resulting safety risks.
Full Underground <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Proactively re-locate all rear lot infrastructure to front lot underground. This would completely resolve the vulnerability to longer than average storm outages and resulting safety risks.

Survey Findings:

1. **75% Support for undergrounding of key rear lot infrastructure exists**
2. **Little support (25%) for replacing poles with like for like infrastructure**



n=17,705

Alectra Utilities Survey - Timing of Works

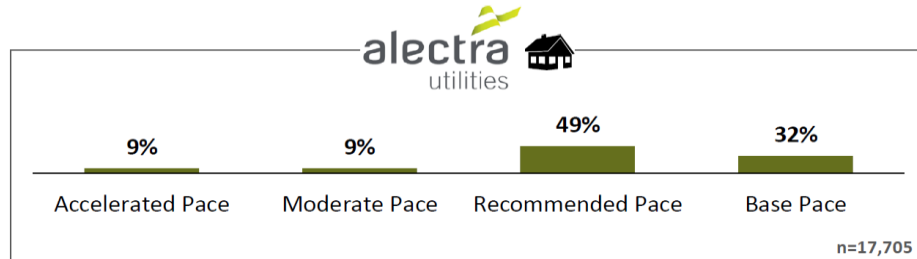


Which of the following timing options would you prefer?

Option	Pacing of renewal and conversion	Service renewed and converted over 5-year period
Accelerated Pace <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Renew and convert existing rear lot overhead locations over 30 year period	Approximately 1,810 customers (16% of customer with rear lot)
Moderate Pace <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Renew and convert existing rear lot overhead locations over 40 year period	Approximately 1,360 customers (12% of customer with rear lot)
Recommended Pace <i>Additional \$X.XX per month annually (\$Y.YY more per bill by 2024)</i>	Renew and convert existing rear lot overhead locations over 70 year period	Approximately 851 customers (8% of customer with rear lot)
Base Pace <i>Within current rates</i>	Renew and convert existing rear lot overhead locations on a reactive emergency basis	Expose customers serviced by these lines to prolonged outage and safety risks

Survey Findings:

- 81% of respondents are satisfied with the current pace of the program, which was also recommended by Alectra Staff.**
- Only 18% of respondents supported acceleration of the program beyond the recommended pace.**



Rear Lot Renewal Implementation – Alectra Utilities

- Alectra Utilities owns and operates these assets, and is responsible for their maintenance and replacement. Alectra Utilities applies and requires approval from the Ontario Energy Board (OEB) for capital investments and to recover the investment through rates.
- At the pacing level suggested in the OEB submission; Alectra Utilities projects that it will take 70 years to renew and convert the existing rear lots in its entire service area; Alectra Utilities projects that will take 33 years at an estimated cost of \$60M (2019\$) to renew the rear lot customers in Markham.
- Alectra Utilities continues to seek increased investment funding for rear lot conversion projects. To date, applications at the Ontario Energy Board have not been fully approved.
 - Partial budget approved for rear lot conversion projects implemented in 2015-2017.
 - Application for 2018 & 2019 was not approved, Alectra Utilities will continue to inspect, maintain and repair rear lot overhead infrastructure.
- Alectra Utilities provided plans to Markham to complete rear lot conversion in several scenarios; implementation of 33 years (base case), 20 years and 10 years (accelerated)
- Acceleration of the initial beyond the base case would require an external funding source and approval of budget for projects not funded through rates.

Funding Overview - Markham

- No budget has been allocated to maintenance/replacement of rear lot infrastructure because Alectra is responsible for this work;
- Alectra has estimated costs for accelerating the program completion in 10-20 years, from the current 33 year implementation period;
 - If OEB approves funding for the program, Alectra funds base costs, and Alectra wants Markham to fund costs associated with program acceleration
 - If OEB does not approve funding for the program (as in 2018-2019), the program would be further delayed, or could go forward should Markham fund the total cost
- The Stormwater Fee uses stormwater runoff volumes as the basis for splitting costs between Residential and Non-Residential land owners (60%/40% split). This would not apply to the rear lot conversion program because:
 - Program is 99% focused in residential areas
 - Runoff volumes are unrelated to the conversion of hydro lines (different asset types)
- Additional public consultation would be required to change purpose of a dedicated stormwater fee

PRINCIPLES USED TO SPLIT COSTS BETWEEN RESIDENTIAL/NON-RESIDENTIAL USERS FOR THE STORMWATER FEE DO NOT APPLY TO THIS REAR LOT CONVERSION INITIATIVE. SHOULD COSTS BE ADDED TO THE FEE, THEY SHOULD ONLY BE CHARGED TO RESIDENTIAL OWNERS.

Stormwater Rate Impacts

- Based on updates to the Flood Control Program, a \$3 increase (from \$47 to \$50 for residential properties) is required in 2020, prior to consideration of the rear lot conversion initiative. The rate would be increased \$1 per year thereafter;
- To fund the rear lot conversion initiative, an additional increase to the residential rate above and beyond the stormwater fee would be needed;
- Given uncertainty in OEB approvals, a very significant increase in the stormwater fee would be required to fund the entire program – incremental increases from \$28- \$51 (see below) - this is not a preferred option

	Rear Lot Conversion Initiative Costs (2017 Dollars)			Required 2020 Residential Stormwater Rate Increase (In Addition to \$50/year for existing program)			Required New 2020 Residential Stormwater Rate with Inclusion of RLC Initiative	
Implementation Time	Base (A)	Program Acceleration (Markham) (B)	Total Program Cost (C) = (A) + (B)	Base (D)	Program Acceleration (E)	Total (F) = (D) + (E)	Program Acceleration (\$50 + E)*	Total Rear Lot Conversion Program (\$50 + F)**
33 Year Option	\$60.0M	\$0	\$60.0M	\$28	\$0	\$28	\$50	\$78
20 Year Option	\$60.0M	\$26.7M	\$86.7M	\$28	\$12	\$40	\$62	\$90
10 Year Option	\$60.0M	\$52.7M	\$112.7M	\$28	\$23	\$51	\$73	\$101

SIGNIFICANT INCREASE IN THE RATE WOULD RESULT BY INCLUDING THE REAR LOT CONVERSION INITIATIVE WITHIN THE STORMWATER FEE

* Assuming Base cost is funded by Alectra & Acceleration cost by Markham

** Assuming Base + Acceleration costs funded by Markham

Staff Recommendations – Rear Lot Conversion Initiative

- Staff recommend that funding for the rear lot conversion initiative not be included within stormwater fee for the following reasons:
 - Based on Alectra surveys, little public interest exists in accelerating the rear lot conversion initiative
 - City would be paying for maintenance/ replacement of assets that are not owned by the City
 - Public transparency on changing the purpose of a dedicated fee without public consultation
 - Principles used to split costs for the stormwater fee do not apply to this initiative
 - Significant uncertainty with program implementation due to OEB approval process – no guarantee that program acceleration alone costs will be sufficient
 - Significant increase in costs result in large increase in stormwater fee

Stormwater Fee Recommendations

1. That the report “Stormwater Fee Update” be received; and,
2. That an annual stormwater fee continue to be imposed on all property within the municipal boundaries of the City of Markham, save and except those noted in the Stormwater Fee By-law 2020-XXX as outlined in Appendix “A” to this staff report; and,
3. That the annual stormwater fee for Residential properties be increased in year 2020 from \$47 to \$50 per property; and further be increased by \$1 per year, each year thereafter; and,
4. That the annual stormwater fee rate for Non-Residential properties be increased in year 2020 by \$2 per \$100,000 of current value assessment (CVA); and further be increased by 2% per year, each year thereafter; and,
5. That the annual stormwater fee rate for Vacant Land properties be increased in year 2020 by \$2 per \$100,000 of current value assessment (CVA) and further be increased by 2% per year, each year thereafter; and,
6. That the Treasurer continue to be authorized to adjust the annual stormwater fee rate for both Non-Residential and Vacant Land properties to compensate for the average annual change in City-wide CVA; and,

Stormwater Fee Recommendations

7. That the annual stormwater fee levied continue to be included as a separate line item on the final tax bill of the property; and,
8. That the City continue to allocate \$2,000,000 per year of Federal Gas Tax funding to the Flood Control Program;
9. That By-law 2015-130 be repealed in its entirety and replaced with the Stormwater Fee By-law 2020-XXX as outlined in Appendix "A" to this staff report; and,
10. That staff report back to Council in 2024 with any required update to the annual Stormwater Fees, for implementation in 2025, to ensure that the Flood Control Program is adequately funded; and,
11. That Staff be authorized and directed to do all things necessary to give effect to this resolution.