

# LED lights saving money, energy ? but not as quickly as hoped

**By Brock Weir**

Since 2015, over 4,500 of Aurora's street lights have been switched from traditional lamps to energy-efficient LED models, a move spurred in a bid to save both energy and money. But, while money and energy is being saved, it will take longer than expected for the expensive project to pay for itself.

The \$3.27 million conversion process was expected to pay for itself after nine years, but a series of hurdles have been faced, pushing this payback off at least to 10.

A recent report to Council states the conversion project is 'substantially complete' but streetlight billing has proved to be a 'complex' process.

'The Streetlight LED Conversion project is now complete, save for 27 troublesome lamps,' said Town Treasurer Dan Elliott in his report to Council. 'The electricity demand reductions were achieved. However, there have been delays in realizing the savings on our billings. Further, the project took longer to complete than expected, resulting in lost savings previously expected. Further, the expected reductions in streetlight maintenance costs have not been fully realized.

'Staff are working to realize retroactive electricity billings and are working to discuss delay adjustments with the contractor, prior to final payments to them for the work completed.'

Compounding the billing issue, he contended, was a communications breakdown between the LED streetlight vendor RealTime Energy and the power company Alectra (formerly PowerStream) on the pace of the conversions, resulting in energy overcharges of more than \$52,000.

Getting actual numbers on how much money the LED conversion was actually saving Aurora has been a key issue of focus for Councillor Harold Kim, who said the report was 'surprising' in that 'commonsensical' things were not caught and the Town has to look at recouping expenses.

'Whose responsibility was it to review the audit consultant's report and should the auditor consultant not have asked us more questions about the nature of our maintenance and our cost structure?' he asked. 'Did we even know our maintenance costs for our street lighting at that time or even ask it? The savings of \$362,000 per year, which was, with a payback period of nine years, it looks like it is going to be about 10.3 or 10.5 years. Eventually we will get that paid back, but it will be stretched out over a longer period of time.

'Staff were advised this savings would be guaranteed by RealTime and the final contract excluded this language. It is almost as if it is akin to buying a car and saying you have the five year bumper to bumper warranty, but you forgot to read the fine line on the contract.'

In response, Mr. Elliott said he and his department have been working to clear up the discrepancies.

He met with Alectra in February, he said, and both parties are 'in the process of exchanging information.' The discussions, he added, have been positive.

'I walked in with the attitude this was exploratory, where are we at, how can we get through this issue? The person I was dealing with opened the meeting by stating they were already at a \$32,000 and I recognize that is not enough yet and I am not finished,' said Mr. Elliott. 'I'm at \$52,000 and she's at \$32,000, and she's not finished yet. It's a work in progress, but I was very encouraged by the attitude and reception I had.

Financial issues aside, Council members also had questions of a more practical nature, particularly Councillor Wendy Gaertner who said, since the new lights were installed, she has fielded a complaint from a resident over an improperly installed fixture.

'I got a complaint who said their light was shining into his daughter's bedroom window and they didn't find it acceptable,' she said, noting she spoke to the department's former director, who said there were 'many light fixtures that were improper and they had to be replaced to ensure the light was going in the right direction.'

'My understanding from the project manager is those lamp replacements are not being paid for twice,' said Mr. Elliott, responding to questions over who was shouldering the blame 'and cost' for ill-installed lights.

'I can conclude today we have received the demand reductions we expected from the project. We've also, on an annual basis, we are saving what we expected from an electricity perspective. There is the shortfall as Councillor Kim pointed out on the maintenance side, but I believe we achieved what we set out to do with respect to saving electricity, saving money on electricity and by definition these are brand new units. We will have less maintenance, but not to the degree we expected.'