

## MEMORANDUM

January 21, 2019

TO: Members of Council  
FROM: Rick Cox, Director of Recreation, Culture & Parks

### **RE: Operational savings from energy projects**

At the Council Budget Meeting on Monday, January 7, 2019, it was requested that staff provide additional information about how the operational savings from implementing LED lighting replacements and co-generation projects are being used to offset the principal and interest payments associated with the projects. Consumption and cost trend graphs are attached.

#### LED Rink Lights

A project to replace the lighting in both arenas with LED fixtures was completed in early August 2017 just in time for the NHL 150 event. The project had an \$110,000 budget, funded with \$90,000 in debt funded from operational savings and \$20,000 in rebates. The project actually cost \$109,330.39 and achieved \$21,871.10 in rebates, leaving a surplus of \$2,540.71. The first debt repayment was due in 2018 and consisted of \$4,500 in principal and \$2,903.96 in interest.

After the LED project, hydro consumption at the facility for August – December 2017 was down by 132,996 kWh over a similar period in 2016. This translates into a savings of \$21,214.51 at 2017 rates.

#### TCC Co-generation Project

The co-generation project at the Tillsonburg Community Centre is still in the process of achieving final commissioning. The project has a budget of \$2.34 million, funded with \$2,085,000 in user-pay debt and \$255,000 in rebates. The first debt repayment is due in 2019 and consists of \$104,250 in principal and \$72,472.08 in interest for a total of \$176,722.08.

The turbines have been generating hydro to serve the facility's base load since June. Grid-based hydro consumption at the facility for July – December 2018 was down by 66% compared to the same period in 2017. Despite significant unit cost increases, the net savings (reduced hydro cost minus increased gas cost) achieved between July-December 2018 totals over \$116,000. Similar results projected over a full year would save over \$199,000, or \$22,000 more than the P&I cost. However pool heat-recovery implementation was not completed until early December so it is too early yet for utility billings to reflect the full benefit of the project.

The 2019 draft budget allocates \$382,100 for utilities at the TCC. This is a reduction of \$194,000 from the approved 2018 allocation of \$576,100.

Respectfully submitted,



Rick Cox

Director of Recreation, Culture & Parks