Background

An agreement was negotiated in 1999 between the former City of Sudbury and the Sudbury District Energy Corp (SDE) to supply heating to Tom Davies Square (TDS) and heating and cooling to the Sudbury Community Arena. The 20-year contract expires in November 2019. SDE has committed to an extension to January 1, 2020.

At the August 13th, 2019 Finance and Administration Committee Meeting a report entitled "SDEC Agreement" was tabled. That report recommended another 20-year agreement with recently negotiated rates that resulted in net savings of \$660K for heating and cooling Tom Davis Square taking into account comparable rates to self-generate heating and cooling and required capital expenditure to upgrade and maintain boilers and chillers at TDS.

The Committee had several questions that required further analysis. A decision on the agreement was deferred.

This report provides clarification and some further analysis in response to the questions and issues raised at the August 13th meeting.

Link to original report:

http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&agenda=report&itemid=5&id=137

Questions/Issues:

- Implications for a 10-year contract with an option to extend for 10 years
- Implications for costs if we include 199 Larch St and "the Junction" in the future
- Implications if self-generating option is discounted @ 2.6% instead of 3.23%
- Can we purchase SDEC if we are going to be the primary user in Sudbury would it make sense to buy it and run it as a profit centre?

Analysis

Implications of a 10 years agreement with an option to renew

A comparison of the annual costs for heating and cooling for SDE provided energy for a 20-year contract compared to a 10-year contract suggests that the shorter term contract would result in an increased total cost (for heating and cooling) of approximately \$76,200 per year.

The present value comparison for a 10-year agreement with a 10-year renewable option (to provide a 20-year comparison), suggests that the SDEC option would be approximately \$860K more expensive than the self-generating option. There is inherent risk in this option as the present value calculation does not consider changes that could impact the contract for the "optioned" period (years 11 - 20), the rates for these years could potentially be higher than the rates that the City has been able to negotiate.

Implications for costs if we include 199 Larch St and "the Junction" in the future

Discussions have been occurring with SDE regarding the existing cooling function at 199 Larch St, and they have expressed interest in connecting the building to the district loop as there may be mutual benefits in fully utilizing the capacity of the energy systems in that facility.

In addition to the potential for an agreement for 199 Larch St. and the existing cooling function, there may also be potential for additional capital cost avoidance in supplementing or replacing the heating system that will require future replacement/repairs. It is anticipated that the heating system for 199 Larch St. will be near the end of its life cycle in approximately 10 years. Adding this facility to the district loop for heating could potentially be considered at that time.

High level cost estimates could be provided for future developments (i.e "The Junction") based on known factors (square footage). SDE staff have advised that any cost estimates for heating/cooling for future facilities would be based on individual buildings and needs.

Regarding potential for including the "Place des Arts" development in the district energy program, it is reported that the design for that project had been completed with a self-generating design.

Implications of lower interest rates if we debt finance for capital upgrade to self-generate

Lower interest rates, for the corporation, would reflect a lower "discount" rate for a capital project (since we would not likely "borrow" funds to complete the capital work). There would be an annual difference of \$7,797 if the capital investment is discounted at 2.6% over a 20-year period, instead of 3.23% with a self-generating heating/cooling option.

Can we purchase SDEC?

The short answer is "yes". In the right circumstance, and for the right consideration, Toromont Power Systems has responded that they would consider a sale. They would also consider a sale with a contract to operate/maintain. Toromont has provided examples of other Municipalities where they have either sold the direct energy operation to a municipality or sold and were retained to operate the facility. Toromont's Greater Sudbury operations also encompasses an emergency generation system and heating and cooling generation plant at Health Sciences North. The representatives could not provide an order of magnitude regarding a potential price tag for a purchase, as this would require significant analysis on their end as well.

If City Council wished to pursue this option, an in-depth, detailed analysis of the business model and financial implications would be required.