



To: General Purposes Committee Date: January 15, 2007
 From: Robert Gonzalez, P.Eng. File: C3-0970-01-2007
 Director, Engineering Xr: 06-2045-01
 Re: Energy Management Grant - Natural Resources Canada

Staff Recommendation

1. That the 2007 Capital Budget be amended for the new capital submission "Energy Management Improvements" with a total project budget of \$866,300.
2. That funding of \$866,300 through the Enterprise Fund be approved as the funding source for the "Energy Management Improvements" capital project.

Robert Gonzalez, P.Eng.
 Director, Engineering
 (4150)

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ROUTED TO: Budgets Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Arenas and Aquatics..... Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER 			
REVIEWED BY TAG	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	REVIEWED BY CAO	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

Origin

The City annually pursues grant funding for energy management upgrades through the Canadian Building Incentive Program administered by Natural Resources Canada (NRCan). The City has just received notification that the complete energy management program has been approved for grant funding estimated at \$109,200.

The purpose of this report is to request Council authority to add a new capital project to the 2007 Capital Program to enable the City to take advantage of the NRCan grant funding.

Analysis

The City was recognized by the Federal Government as an Energy Innovator in January 2005. As a registered Energy Innovator the City has access to Federal Government sponsored grant programs promoting energy efficiency and conservation. Staff submitted an application for the NRCan grant on February 2, 2006 for energy improvements at Brighthouse Library, Centennial Pool, Minoru Pool, and the Richmond Ice Centre. With the leadership changes in the Federal Government at the time, the NRCan grant program was put on hold and staff were advised that it may or may not be revived.

Richmond was contacted by NRCan late this year indicating that the remaining funding for this program might in fact be released. Staff revised the application forms to ensure the energy management projects were current and on December 4, 2006 the City received contracts for signature from NRCan. Unfortunately the deadlines for completion of work have not changed. Under the terms of the agreement the City must expend 25% of capital project costs by March 17, 2007 to meet the conditions set out in the grant agreement. Staff believe that the requirement surrounding the timeline is achievable if this capital project were approved at this time by utilizing operating funds in the interim to fund this project until surplus funds are approved later in 2007. According to the grant agreement, the project must be complete within one calendar year.

In prior years, the City had been successful in acquiring energy management grants through NRCan typically for small amounts and funding the City's contribution through the Facility Management operating budget. Given that Richmond's entire program was approved for grant funding, it is not possible to fund the required capital improvements through the operating budget. In addition, although unconfirmed at this time, staff are pursuing other complementary grants for this same program from other organizations such as BC Hydro.

Minoru Aquatic Centre is nearing the end of its functional lifespan, and will likely be considered for replacement prior to 2015. However, the projected energy savings will more than offset the capital costs of this energy initiative in approximately 5 years, with significant savings in energy cost prior to any likely facility replacement. The City's current lease for the Richmond Ice Centre expires in 2019 and no decision has been made for lease renewal or a replacement facility. In any event, given the project's payback estimates at today's gas prices, the City would save \$68,600 during the final 2 years of the current lease alone.


Attachment 1 summarizes the improvements, estimated capital requirements, anticipated savings and simple payback. Should energy costs continue to rise, the payback outlined in Attachment 1 will shorten.

Financial Impact

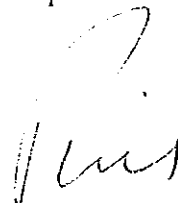
The financial impact to the City is the addition of an \$866,300 capital project to the 2007 capital program to be funded by a loan from the Enterprise Fund. Repayment of the loan will come from natural gas energy savings estimated at \$103,200/year at current utility cost. This project has a simple payback of 7.3 years. Should gas and electricity rates escalate, as is anticipated, the payback for this project will be shortened accordingly.

Conclusion

The City has an opportunity to take advantage of grant funding from NRCan for energy management improvements at various facilities. In addition given the trend of the current government in power to eliminate many of the federally funded programs, this may be our only opportunity to received this funding initiative. Given the timeframe allowed for the project to begin and the short payback, staff recommend that this project be added by an amendment to the 2007 Capital Budget to be funded by a loan from the Enterprise Fund.



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Phil Hogg
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Program Summary

Facility	Description	Est. Capital Cost	Est. Grant Funding	Est. Annual Energy Savings	Simple Payback (years)
Brighthouse Library	Dehumidification System Upgrade	\$ 53,000	\$ 7,500	\$ 8,900	5.1
Centennial Pool	Dehumidification and Heat Recovery System Upgrade	\$ 183,700	\$ 31,400	\$ 29,200	5.2
Minoru Aquatic Centre	Dehumidification and Heat Recovery System Upgrade	\$ 210,000	\$ 34,500	\$ 30,800	5.7
Richmond Ice Centre	Heat Recovery System Upgrade	\$ 339,000	\$ 35,800	\$ 34,300	8.9
	Sub - Total	\$ 785,700	\$ 109,200	\$ 103,200	6.6
	Total (incl. O/H & Cont)	\$ 866,300	\$ 109,200	\$ 103,200	7.3

Required Project Funding

Estimated Capital Cost	\$ 785,700
5% Overhead	\$ 39,300
5% Contingency	\$ 41,300
Total Project Cost	\$ 866,300