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PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Halifax Regional Council
March 21, 2006

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


Wayne Anstey, Acting Chief Administrative Officer

DATE: March 13, 2006

SUBJECT: **Purchase of LED Traffic Signals**

ORIGIN

Application from Nova Scotia Dept. of Energy.

RECOMMENDATIONS

It is recommended that:

1. Regional Council accept the cost shared funding from the Nova Scotia Department of Energy in the amount of \$150,018.00 plus HST and allocate these funds as indicated under the Budget Implications section of this report.
2. Approve an increase to the Gross Capital Budget to Capital Account No. CTU00561, Traffic Signal Installation, by the amount of \$150,018.00 plus net HST, with no change to the Net Budget, to reflect cost sharing as per the Budget Implications section of this report.
3. Authorize the purchase of LED Traffic Signals from an existing price agreement contract with established unit prices from Electromega Limited for the amount of \$310,324.23 including net HST, with funding from Capital Account No. CTU00561, Traffic Signal Installation, with funding as per the Budget Implications section of this report.

BACKGROUND

LED traffic signals reduce energy consumption and greenhouse gas (GHG) emissions by approximately 90%. In February 2005, the NS Department of Energy, HRM, and NSPI organized a seminar for municipalities on LED traffic signals to inform participants of the many benefits for using LEDs. In February/March 2005, the NS Department of Energy offered a LED Traffic Signal Conversion Assistance Project providing 50% funding for LED traffic signals for municipalities. HRM was successful in obtaining \$68,000 through this program which was 60% of the available funds. HRM's success in leveraging \$68,000 provided a total of \$136,000 which was used to purchase enough LED traffic signals to convert 25-30 intersections. In February 2006, the NS Department of Energy once again offered the LED Traffic Signal Conversion Assistance Project and HRM staff was successful in obtaining a maximum Provincial Government commitment of \$150,018 plus net HST or 50% of the cost of the LED traffic signal conversion equipment purchased, whichever is less.

DISCUSSION

HRM has 244 signalized intersections, and approximately 10% are completely LED. By taking advantage of the maximum Provincial Government contribution, it will provide the funds to purchase enough LED traffic signals to convert approximately 102 intersections. In the short term, the LEDs will be installed as part of our regular maintenance and traffic signal upgrade programs. However, staff will identify funding for installation costs for Council consideration in a future Capital Budget. The resulting energy savings per intersection are approximately \$890 per year. Once all 102 intersections are converted, this will result in annual energy savings of \$90,780. Also, the estimated annual GHG emission reductions per intersection are approximately 20 metric tonnes for a total of 2,040 metric tonnes per year once this conversion phase is completed.

BUDGET IMPLICATIONS

Based on an increase to Capital Project CTU00561, Traffic Signal Installation, in the amount of \$155,160 plus net HST, for cost sharing from NS Department of Energy (with no change to the net budget), funding is available in the amount of \$310,874 including net HST. The budget availability has been confirmed by Financial Services.

Budget summary: Capital Account No. CTU00561 - Traffic Signal Installation

Advance Funding 06/07 Budget	\$155,714.00
Plus: Cost sharing from NSDE	<u>\$155,160.00</u>
Funds Available	\$310,874.00
Less LED Traffic Signal Lights	<u>\$310,324.23</u>
Uncommitted Funds	\$ 549.77

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

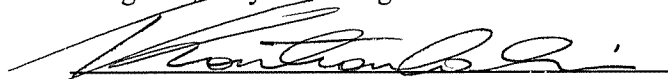
Council may accept a lesser amount of cost shared funding from the NS Department of Energy which will result in the purchase of fewer LED traffic signals. Staff does not recommend this alternative because it does not take full advantage of the funds offered by the Province.

ATTACHMENTS

February 14, 2006 letter to Michael Filippone, HRM from Allan Crandlemire, Director of Energy Management, Markets and Climate Change Division regarding NS Department of Energy LED Traffic Signal Conversion Project funding.

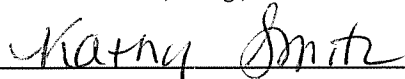
A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:



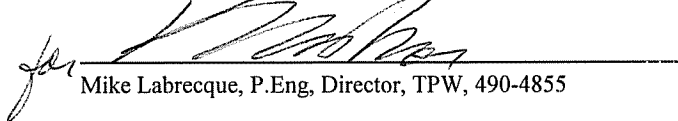
Taso Koutroulakis, P.Eng., Senior Traffic Operations Engineer, 490-4816

Financial Review:



Kathy Smith, Financial Consultant, 490-6153

Report Approved by:



Mike Labrecque, P.Eng, Director, TPW, 490-4855

Department of Energy

Suite 400
5151 George Street
PO Box 2664
Halifax, Nova Scotia
B3J 3P7

902 424-4575 t
902 424-0528 f
www.gov.ns.ca/energy



35-05-0072 (01)

February 14, 2006

Mr. Michael Filippone
Traffic Signal Supervisor
Halifax Regional Municipality
3825 MacKintosh St.
Halifax, Nova Scotia B3J 3A5

Dear Mr. Filippone:

I am pleased to inform you that the Nova Scotia Department of Energy has approved the traffic light hardware purchases requested in your recent application to The Department of Energy's LED Traffic Signal Conversion Project up to maximum provincial government contribution of \$150,018 plus HST or 50% of the cost of the LED traffic signal conversion equipment purchased (whichever is less). A copy of your funding application is attached.

To be eligible for this funding offer, all LED related hardware must be purchased, received by you, invoiced by the supplier and re-billed to the Department of Energy for our 50% contribution prior to March 31, 2006. The Halifax Regional Municipality is responsible for the remaining half of the cost of the equipment purchased and all costs associated with installing it. Installation does not have to be completed before March 31, 2006.

Please send invoices to Brian Hayes (424-8162) and keep him updated on your progress.

Yours truly,

A handwritten signature in black ink, appearing to read "Allan Crandlemire".

Allan Crandlemire
Director
Energy Management, Markets and Climate Change Division

Attachment

cc: Brian Hayes
Energy Engineer