

---

**FINANCE AND CIVIC DEVELOPMENT COMMITTEE**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: 2011/2012 ENERGY SERVICES - BUILDING PERFORMANCE  
IMPROVEMENTS**

**RECOMMENDATIONS:**

1. THAT Council authorize staff to retain MCW Custom Energy Solutions to conduct the design concept phase of the 2011/2012 Building Performance Improvements Project, as outlined in this report.
2. THAT Council allocate \$100,000 (inclusive of 12% HST) from the Gaming Funds Reserves to meet the financial commitment of the Phase 1 program.

**REPORT**

The Finance and Civic Development Committee, at its meeting held on 2011 June 21, received and adopted the *attached* report seeking authority to retain MCW Custom Energy Solutions to undertake the design phase of the 2011/2012 Building Performance Improvements Project.

Respectfully submitted,

Councillor D. Johnston  
Chair

Councillor N. Volkow  
Vice Chair

Councillor C. Jordan  
Member

Copied to:	City Manager Director Engineering Director Finance Director Parks, Recr. & Cult. Services Fire Chief Purchasing Manager
------------	--

**TO:** CHAIR AND MEMBERS  
FINANCE AND CIVIC DEVELOPMENT  
COMMITTEE

**DATE:** 2011 June 16

**FROM:** DIRECTOR ENGINEERING

**FILE:** 4200 01

**SUBJECT:** 2011/2012 ENERGY SERVICES - BUILDING PERFORMANCE  
IMPROVEMENTS

**PURPOSE:** To seek authority to retain MCW Custom Energy Solutions to undertake the design phase of the 2011/2012 building performance improvements project.

---

**RECOMMENDATION:**

1. **THAT** the Finance and Civic Development Committee recommend to Council that staff be authorized to retain MCW Custom Energy Solutions to conduct the design concept phase of the 2011/2012 Building Performance Improvements Project as outlined in this report, and;
2. **THAT** Council allocate \$100,000 (inclusive of 12% HST) from the Gaming Funds Reserves to meet the financial commitment of the Phase 1 program.

**REPORT****1.0 BACKGROUND**

The City completed a successful energy performance improvement program in 2006 and a number of City facilities were retrofitted to reduce energy use under this program. Since the completion of the 2006 program, monitoring of actual energy savings were conducted on an annual basis to confirm the effectiveness of the measures undertaken. The annual monitoring reports concluded that the 2006 program has been successful with annual savings of approximately \$450,000, exceeding the estimated amount by an average 15%.

Since the completion of the 2006 program, the City has also initiated other retrofit projects including lighting upgrades, control improvements and upgraded insulation to provide greater energy efficiency in City facilities and operations. In 2010, the City established an energy saving coordinator position with 50% cost sharing from BC Hydro to work towards the energy conservation and efficiency goal and to advance the City's energy management initiatives.

To: Chair and Members, Finance and Civic Development  
Committee  
From: Director Engineering  
Re: 2011/2012 Energy Services  
2011 June 16 ..... Page 2

## **2.0 2011/2012 BUILDING PERFORMANCE IMPROVEMENTS PROJECT**

With the completion of the high priority energy saving initiatives with an average of 10 year payback period, staff are advancing a plan to evaluate other energy saving opportunities. To this end, the 2011 Annual Financial Plan recently adopted by Council includes provision of \$1.5 Million for a two-year program of energy conservation initiatives to be funded from Gaming Funds Reserves. Staff have identified 15 City facilities that have the highest potential for further energy saving. These proposed improvements include lighting, insulation and boiler improvements with an average payback of just less than 15 years.

A *Request for Proposal* (RFP) to conduct detailed energy audits and concept design of these 15 City facilities was issued in 2011 May to the following pre-qualified energy service contractors:

- Ameresco Canada Inc.
- Honeywell Limited
- MCW Custom Energy Solutions

The proposals were reviewed with regard to project team experience and background, work methodology, references, project management and technical capabilities, in addition to an understanding of the unique nature of the project. The review conducted by Engineering and Purchasing staff concluded that the MCW Custom Energy Solutions proposal provides the best overall value to the City. MCW has also successfully completed similar performance improvement projects for District of North Vancouver, ICBC, BC Housing Management Commission and UBC.

Based on the detailed information submitted by MCW, the proposed work program will include two phases:

- Phase 1 – Energy Audits and Detailed Concept Development
- Phase 2 – Detailed Design and Program Implementation

At the completion of the Phase 1 program, a report will be produced by MCW detailing results of the energy audit, utility analysis and the recommended energy conservation measures for the 15 facilities selected by staff plus an additional 30 facilities for cost effective analysis and comparison. The cost of the Phase 1 program is estimated to be \$92,000 plus HST. The City will be required to pay MCS for the cost of the Phase 1 program only if the City decides to not proceed with the Phase 2 program. Upon the completion of the Phase 1 program, staff will present the results of the analysis and recommendations to Council for consideration and approval. If Council chooses to retain MCW for the Phase 2 program, MCW will absorb the Phase 1 cost and utilize the detailed information for the Phase 2 work.

To: Chair and Members, Finance and Civic Development  
Committee  
From: Director Engineering  
Re: 2011/2012 Energy Services  
2011 June 16..... Page 3

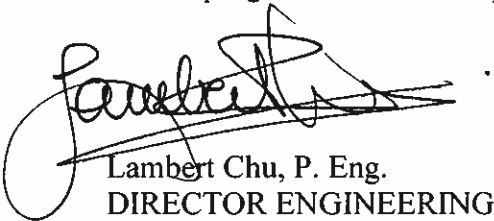
MCW has an unparalleled record in the industry for achieving and over-performing with actual reconciled energy savings vs. contracted savings. The proposal submitted by MCW offers a performance guarantee option to ensure the City, in case of under-performance, receives the cost savings identified in the Phase 1 program. The estimated Savings Guarantee Premium ranges between 2% and 4% of the construction costs. Without the benefit of the detailed study, it is estimated that the proposed program will yield an annual energy savings of approximately \$103,000, equivalent to approximately 370 tonnes of reduced GHS emissions from the 15 facilities.

### 3.0 CONCLUSION

Since 2004, the City has undertaken many energy conservation projects in City facilities. For 2011 and 2012, staff have identified 15 City facilities for further energy performance improvements and have included this 2-year project in the 2011 Annual Financial Plan. The estimated value of this project is approximately \$1.5 Million and a RFP was issued in 2011 May to select a qualified firm to undertake the project.

Having reviewed the proposals submitted through the RFP process, staff conclude that the proposal submitted by MCW Custom Energy Solutions provides the best overall value to the City. It is recommended that staff be authorized to retain MCW for the Phase 1 - design concept work program and that Council approve the allocation of \$100,000 from the Gaming Fund to meet the financial commitment of the Phase 1 program. As part of the Phase 1 program, staff will explore funding opportunity through BC Hydro and NRC programs. Should external financial assistance be made available to the City, it would further reduce the payback period and enhance the cost/benefit of the program.

Staff will bring back a report to the Committee and Council at the conclusion of the Phase 1 program to provide further details on the design and cost/benefit of the Phase 2 program for Council approval prior to proceeding with the Phase 2 program.



Lambert Chu, P. Eng.  
DIRECTOR ENGINEERING

AAS/LSC:br

Copied: City Manager  
Director Finance  
Director Parks, Recreation and Cultural Services  
Fire Chief  
Purchasing Manager