

Halifax Regional Council
August 7, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


Councillor Andrew Younger, Chair
Energy and Underground Services Advisory Committee

DATE: July 18, 2007

SUBJECT: Alderney 5 Energy Project

ORIGIN

Meeting of the Energy and Underground Services Advisory Committee of July 18, 2007.

RECOMMENDATION

It is recommended that Regional Council:

1. Authorize an increase in the Gross Capital budget in the amount of \$2,689,143 as per the Budget Implications section of the report dated July 11, 2007.
2. Authorize an unbudgeted withdrawal of \$1,034,286 from the Capital Replacement Reserve (Q130) to be repaid from energy savings as per the Budget Implications section of the report dated July 11, 2007.
3. Authorize HRM to enter into a contract with High Performance Energy Systems for energy retrofits of the Alderney 5 buildings subject to the key terms and conditions as per the Background section of this report and subject to provincial ministerial approval of the capital lease component.

BACKGROUND

At the July 18, 2007 meeting of the Energy and Underground Services Advisory Committee, staff presented their report, dated July 11, 2007, attached as Attachment 1 to this report, requesting approval of the three recommendations for the Alderney 5 Energy Project as outlined on the cover page of this report.

DISCUSSION

The Energy and Underground Services Advisory Committee approved the three recommendations before them and further recommended that the report be forwarded to Regional Council for approval.

BUDGET IMPLICATIONS

As outlined in the attached staff report.

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

As outlined in the attached staff report.

ATTACHMENTS

1. Staff report dated July 11, 2007.
2. Excerpt of the Energy and Underground Advisory Committee draft minutes of July 18, 2007.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.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 Chris Newson, Legislative Assistant, Municipal Clerk's Office



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Energy and Underground Services Committee
July 18, 2007

TO: Andrew Younger, Chair and Members of Energy and Underground Services Committee

A handwritten signature in dark ink, appearing to read "Mike Labrecque", written over a horizontal line.

SUBMITTED BY: _____
Mike Labrecque, P.Eng, Director Transportation & Public Works

DATE: July 11, 2007

SUBJECT: Alderney 5 Energy Project

ORIGIN

- March 7, 2006 HRM Council Award - RFP 06-020 Alderney 5 Energy Project Engineering.
- February 17, 2006 briefing to Energy and Underground Services Committee.

RECOMMENDATION

It is recommended the Energy and Underground Service Committee recommend to HRM Council that they:

1. Authorize an increase in the Gross Capital budget in the amount of \$2,689,143 as per the Budget Implications section of this report.
2. Authorize an unbudgeted withdrawal of \$1,034,286 from the Capital Replacement Reserve (Q130) to be repaid from energy savings as per the Budget Implications section of this report.
3. Authorize HRM to enter into a contract with High Performance Energy Systems for energy retrofits of the Alderney 5 buildings subject to the key terms and conditions as per the Background section of this report and subject to provincial ministerial approval of the capital lease component.

BACKGROUND

Corporately, HRM buildings and facilities consume approximately \$6.9 million in utilities per year (oil, natural gas, propane, electricity). Upgrades to aging and inefficient mechanical and electrical infrastructure is the most cost effective strategy for reducing energy costs and reducing GHG emissions from this significant sector.

A unique partnership opportunity has presented itself to leverage HRM re-capitalization investment matched with a Federal technology investment fund and private equity in a world-first renewable energy cooling technology. This will also demonstrate HRM Council's leadership and commitment in promoting and using environmentally and economically sustainable energy solutions.

Alderney 5 Existing Conditions

There exists a potential to reduce the \$750,000 in utility operating costs and risks associated with the Alderney 5 Complex (Alderney Gate, Alderney Library, Alderney Landing, Dartmouth Ferry Terminal, and Dartmouth City Hall). By rationalizing old and redundant heating and cooling systems, the complex will be able to optimize energy usage and deploy a world class building technology. Currently there are separate boilers, oil tanks and CFC refrigerant based air conditioning systems in all the properties.

Environmental and Economic Potential of the Geothermal Cold Storage Technology

In 1989 the Montreal Protocol was ratified. This international treaty enforces a ban on ozone depleting refrigerants. The treaty involves a multi step process of phase-out dates for different types of ozone depleting refrigerants. CFC based refrigerants are much more efficient than current refrigerants, but are also highly potent greenhouse gases when released to the atmosphere. Similar to the majority of building owners, HRM has all of these types of refrigerants currently in use on the Alderney 5 site (CFC-11 & HCFC-22). Due to the long life span of air conditioning equipment, the high cost of replacement with unattractive alternatives and relatively low refrigerant leakage rates, issues around refrigerant management are typically deferred until phase out dates are fully realized. Building owners will start to see significantly increased refrigerant management costs from 2010 onwards as the next significant phase-out date approaches. In Canada there has been a 48% increase in air conditioning use due in part to the 25% increase in cooling degree days since 1990. The CFC change out market is worth \$50 billion in Canada alone. It is proposed that this project will demonstrate a viable alternative using a geothermal energy storage technology that could be easily applied in major North American and global markets by significantly reducing electricity demand.

Demonstration of World Class Cooling Technology

The borehole technology, ACES™ (Advanced Coaxial Energy Storage), has been developed, patented and prototype tested by a local firm, High Performance Energy Systems, in partnership with Environment Canada over a ten year period. High Performance Energy Systems R&D has also been complemented by International Energy Agency work, and will also be supported by HPES academic partnerships and an ongoing International Energy Agency affiliation. The Alderney 5 project site would be the first commercial scale deployment of this cold energy storage technology, and is expected to be a showcase demonstration site of sustainable cooling using 100% renewable energy.

Energy storage technologies overcome the temporal mismatch between energy supply and demand, and are especially useful for renewable energy technologies.

The private partner, High Performance Energy Systems, will install a seawater cooling (and charging) system that will be coupled with a geothermal borehole cold storage system (ACES™). The borehole storage system will store cold renewable energy harvested during winter months using a new (and patented) borehole design that is 300% more efficient than current boreholes. The stored cold energy will be used to provide peak air conditioning needs in August and September when the harbour temperature is typically too warm. It is

Alderney 5 Energy Project
EUGS Report

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July 18, 2007

expected after several seasons of charging and discharging the HRM properties might not require any back-up mechanical refrigeration and 100% of the air conditioning needs will be provided by renewable, naturally available cold energy.

Project Development History

On March 7, 2006 HRM Regional Council approved an award of RFP 06-020 to SNC-Lavalin-HPES and the creation of capital account CB300881, and an increase in the gross capital budget for \$472,000 for the Alderney 5 Energy Project. The detailed feasibility study confirmed the opportunity to use the new cooling technology coupled with lower risk building retrofits.

The funding sources (potential and secured) information with a 2008/09 budget and actual spending update is presented below.

Funding Sources

Source	H a l i f a x R e g i o n a l Council Report March 7, 2006	Approved Budget	Actual Funding at July 12, 2007
Sustainable Community Reserve Q127	\$ (150,000)	\$ (150,000)	\$ (82,874)
Nova Scotia Department of Energy	(25,000)	(25,000)	(25,000)
FCM GMF application	(223,000)		
Natural Resources Canada Energy Innovators Program ERA (P)	(24,000)		
Environment Canada	(50,000)	(50,000)	(50,000)
Total	\$ (472,000)	\$ (225,000)	\$ (157,874)

Note: Funding from Environment Canada was received through the Province of Nova Scotia

Detailed cost sharing funding applications were submitted to Sustainable Development Technology Canada (SDTC), the Federation of Canadian Municipalities' Energy RFP, ACOA's Atlantic Innovation Fund and Technology Early Actions Measures (TEAM) Canada. Due to private/public sector partner criteria, intellectual property rights and funding eligibility, High Performance Energy Systems was the lead proponent on all the applications (except the FCM submission). HPES has been successful in securing \$1 million in TEAM Federal funding, which will expire by March 31, 2008. The possibility of future SDTC funding is still also likely in the event the system is expanded to other Dartmouth waterfront properties. Due to the unique technology, operating risk and funding partnership, staff is recommending that a design-build approach is more suitable to the implementation of this project (versus design-bid-build).

DISCUSSION

Project Scope

The detailed feasibility study narrowed the recommended energy project to five major components. A schematic diagram of the project is attached in Appendix A.

Project Component	Description	Construction Timeline
Mini District Energy System	Heating and cooling pipes will connect all buildings to one central energy center in Alderney Gate.	September 2007 - May 2008
Gas conversion and High Efficiency Boilers	The existing boilers in Alderney Gate will be converted to natural gas. As well, two new high efficiency gas boilers to supply the entire complex will be added.	September 2007 - Jan. 2008
Lighting Retrofit	An extensive lighting retrofit is planned for the complex. This will reduce electricity use for lighting by 50% and the associated cooling load requirements (and size of the borehole storage field).	September 2007 - June 2008
Seawater Cooling	A seawater intake will be installed and piped through a heat exchanger so cold fresh water can be used for air conditioning. The seawater intake system will also be used to "charge" the cold storage borehole field (ACES™) during winter months.	October 2007 - May 2008
ACES™ - Advanced Coaxial Energy Storage System	A borehole field consisting of 100 boreholes, 4 ½" in diameter, 600 feet deep each will be drilled to store winter harvested cold energy in the rock mass and extracted for direct air conditioning use during peak summer months via circulating water.	October 2007 - Sept. 2008

Project Benefits

As identified in the detailed feasibility study, it is expected there will be an initial \$250,000 reduction in utility costs with the completion of the project. The total project will cost \$3,600,000 + HST with \$1 million from HRM, \$1 million from TEAM (Federal), and \$1.6 million from High Performance Energy Systems. It is expected there will be reduced maintenance with the energy center centralization and the move away from mechanical compressors for air conditioning. An additional benefit of this project is the opportunity to avoid future capital costs, including boiler/oil tank replacements (\$330,000) and air conditioning equipment replacements (\$500,000).

A summary of the Project Benefits is shown in the table below.

Project Benefit	Description	Savings Value (Estimated)
Energy Savings	The project will realize a significant reduction in utility costs. These savings will be applied to the HRM Reserve repayments and Capital Lease payment	\$250,000 / year
Future Avoided Capital Costs	The project will create new heating and cooling supply systems for the complex, avoiding the need to replace boilers, oil tanks and air conditioning equipment.	Years 1-5 = \$215,000 Years 6-10 = \$495,000 Years 10-20 = \$120,000
Environmental	<p>There will be a significant reduction in greenhouse gases with the 40% reduction in energy use.</p> <p>The project will convert the facilities to natural gas use, removing the liability and risks associated with oil heating.</p> <p>The project will displace the need to use ozone depleting refrigerants for air conditioning.¹</p>	<p>900 tonnes of CO₂e/year²</p> <p>5 underground oil tanks will no longer be required. 410,000 litres of oil usage will be eliminated.</p> <p>Use of 900 kg of CFC based refrigerants will be eliminated</p>
Environmental Technology Innovation and Operating Risk Management	<p>The municipality will act as a catalyst for the deployment of a world first geothermal cold storage technology with high market value.</p> <p>The operating risk of the new technology will be assumed by HPES.</p>	The private partner, High Performance Energy Systems is a local firm, and will use the Alderney 5 site as a showcase demonstration project for commercial export opportunities.

1. Removal of the existing chillers and oil tanks is not included in the scope of the project.

2. Through the project/technology funding agreement with TEAM these reductions will be fully audited and certified CO₂ credits owned by the Municipality.

High Performance Energy Systems will be responsible for the complete design, installation, and operation of the borehole energy storage field, as well as the overall project capital cost building risk. As outlined in the key terms and conditions summary, HRM will purchase cold energy from High Performance Energy Systems through a long term Capital Lease agreement of approximately 20 years, after which HRM will own the building improvement assets, as well as be responsible for maintaining and operating the system.

KEY BUSINESS TERMS AND CONDITIONS OF HIGH PERFORMANCE ENERGY SYSTEMS CONTRACT	
Total Project Capital Funding	<p>Halifax Regional Municipality</p> <p>\$1,000,000 HRM contribution \$1,600,000 High Performance Energy Systems (HRM-HPES Capital Lease) \$89,143 HST \$2,689,143 Total capital funding</p> <p>High Performance Energy</p> <p>\$1,000,000 Technology Early Action Measures Canada, HPES-TEAM Agreement</p>
HRM-HPES Capital Lease Value for Heating Plant	\$1,600,000 + HST
Start Date	Capital Lease payments shall commence when HPES can provide renewable cold energy to complex. This is anticipated in June 2008.
Basis for Capital Lease Payments	Cold energy supplied will be metered. Lease payments will be based on quantity of cold energy delivered. Payments will be variable depending on air conditioning need, and ability of HPES system to deliver cold energy. Lease payments will be deducted from the principal and interest. An anticipated payment schedule is shown in Appendix B.
Term of Capital Lease	The term of the contract will be variable due to variable payments based on air conditioning need. A 20 year term is anticipated.
Interest Rate	6%
Special Terms and Conditions	<ol style="list-style-type: none"> 1. Ownership of Cooling System will revert to HRM after 10 years. 2. Terms include expansion option subject to confidentiality. 3. Terms include HPES buy-out after any year subject to financing charges. 4. The Capital Lease is subject to Province of Nova Scotia Ministerial Approval under s.88(4) of the Municipal Government Act (required for municipal leases in excess of one year, and total lease commitment over \$100,000).

BUDGET IMPLICATIONS

Capital project CB300881 - Alderney 5 Energy Project will increase in the amount of \$2,689,143. This includes HRM's funding share of cooling assets in the amount of \$1,000,000, a lease to own the heating assets with private partner High Performance Energy Systems in the amount of \$1,600,000 and applicable HST for \$89,143. There will be an increase in net budget for \$1,689,143.

The private partner, High Performance Energy Systems, is the proponent of external funding from a Federal Technology Early Action Measures Grant in the amount of \$1,000,000 supplementary funding for the cooling system component. There are no budget implications at this time. Complete ownership of the cooling system asset will revert to HRM after 10 years.

Budget Summary:	Capital Account No.CB300881	
	Cumulative unspent balance	\$0
	Add: HRM cooling system (Q130)	\$1,000,000
	HRM-HPES Capital Lease	\$1,600,000
	HST	<u>\$89,143</u>
	Balance	\$2,689,143

The uncommitted balance in Capital account No. CB300881 will be used for other project related expenditures.

HRM's funding share in the amount of \$1,000,000 with HST of \$34,286 will be funded from the Capital Replacement Reserve (Q130). The withdrawal from the Capital Replacement Reserve (Q130) will be repaid in the annual amount of \$127,333, at 4.32% interest, over 10 years from the energy savings in the Facilities Operations and Alderney Gate Facility Management cost centers. A detailed description of the energy savings accounts is shown under Appendix C.

Finance confirms funding available for withdrawal of \$1,000,000 plus HST of \$34,286 from the Capital Replacement Reserve (Q130).

A request for funding has been brought forward to the Federation of Canadian Municipalities (FCM) for this project and a response is expected in mid September. If HRM is successful, any funding received through a conditional grant or repayable loan will be used to reduce the \$1,000,000 repayable loan from Capital replacement Reserve (Q130).

The 20 year lease with private partner High Performance Energy Systems is capital in nature and will result in an aggregate future commitment estimate of \$3,060,832. This is comprised of a liability of \$1,600,000, aggregate interest of \$1,405,974 at 6% over 20 years and HST of \$54,858. It is anticipated that interest expense calculated at 6% will commence in June 2008. The lease agreement is structured to tie payments to performance. The energy savings expected will then fund the lease payments.

The minimum lease payments are based on passage of time and usage factors. The expected usage component is reasonably estimable at the inception of the lease and has been included in the minimum lease payments. If the actual usage subsequently exceeds the expected usage, that portion will be classified

as a contingent rental and charged to expense as incurred over the term of the lease. ⁽¹⁾

A detailed estimated lease payment schedule is shown in Appendix B.

**Private partner High Performance Energy Systems
Capital Lease**

Period	Estimated annual lease payments	Total estimated lease payments
June 1 2008 - May 30 2012	\$ 100,000	\$ 400,000
June 1 2012 - May 30 2017	\$ 126,000	\$ 630,000
June 1 2017 - May 30 2022	\$ 154,000	\$ 770,000
June 1 2022 - May 30 2028	\$ 182,000	\$ 1,092,000
2028	\$ 113,975	\$ 113,975
Total estimated lease payments (excludes HST)		\$ 3,005,975
HST on principal of \$1,600,000		\$ 54,858
Total estimated lease payments (includes HST)		\$ 3,060,832

Note: The 12 month period is estimated to start June 1, 2008.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the approved Operating budget, policies and procedures regarding withdrawals from the utilization of Capital and Operation reserves, as well as any relevant legislation. It does not comply with the approved Capital and Reserves budget. Approval of this report will increase both the gross Capital Budget and the Reserve withdrawal budget. This report does not comply with the Multi-Year Financial Strategy, as the recommended funding for this project is outside the Debt Policy contained within the Multi-Year Financial Strategy.

ALTERNATIVES

1. EUGS could choose not to recommend that Council award the contract to High Performance Energy Systems. This would forgo the significant operating and capital savings associated with the project. This option is not recommended.
2. EUGS could choose to recommend that Council award an alternate \$1,000,000 construction contract for the standard energy retrofit measures to High Performance Energy Systems with funding from the Capital Replacement Reserve. This would cancel the installation of the seawater cooling and underground energy storage system components, and forgo the potential operating and capital cost avoidance savings with the cooling technology. This would also forgo the \$1,000,000 Federal funding contribution to the project from TEAM. This option is not recommended.

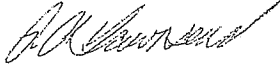
¹ In accordance with PSG-2 Leased Capital Assets CICA Public Sector Guidelines


ATTACHMENTS

Appendix A - Project Scope Schematic
Appendix B - Anticipated Capital Lease Payments
Appendix C - Account Structure - Energy Savings

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

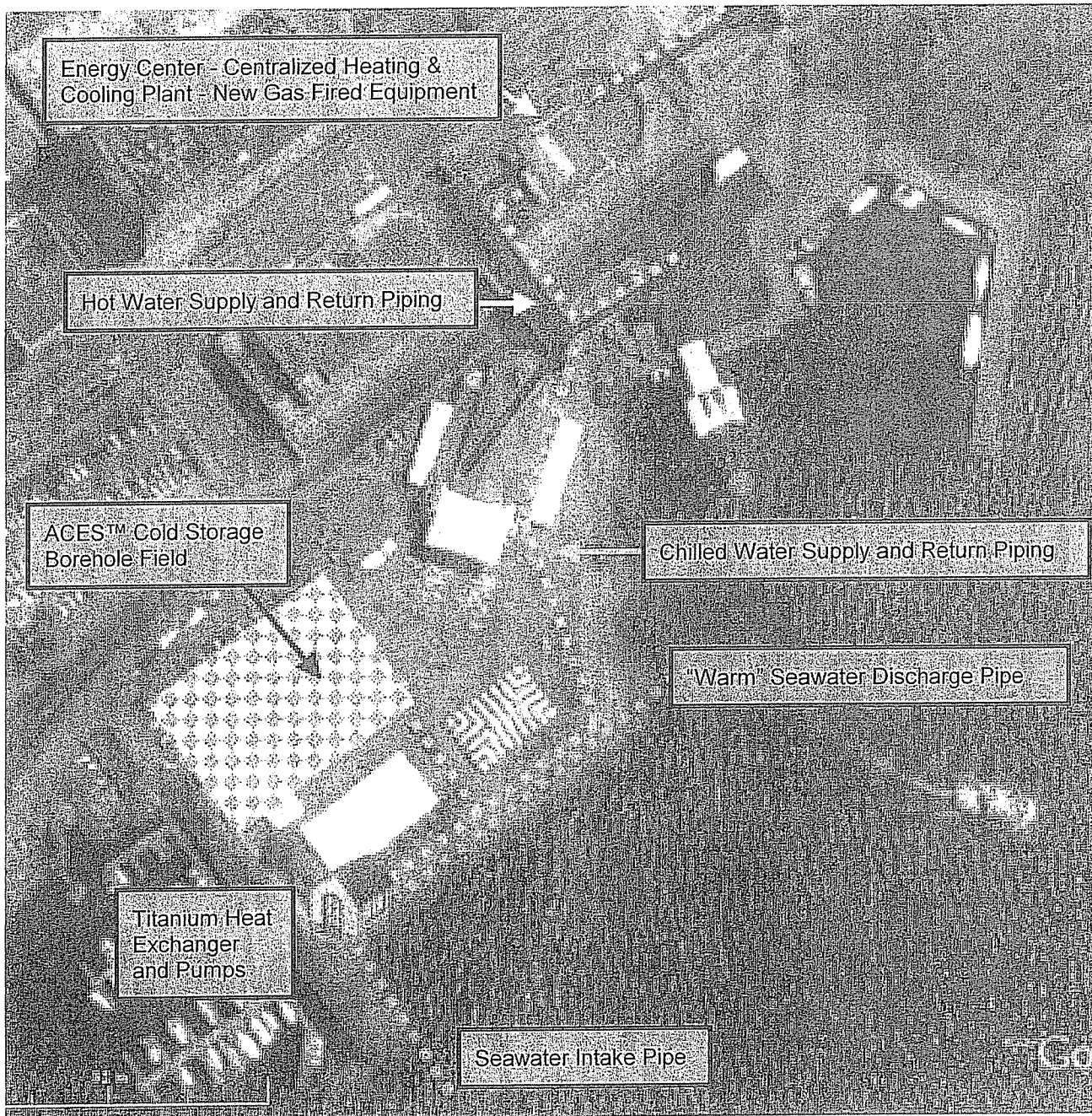
Report Prepared by: Julian Boyle, P.Eng., Energy Auditor, TPW, 490-7115

Report Approved by: 
Phillip Townsend., Manager, Capital Projects TPW, 490-7166

Financial Approval by: 
Cathie O'Toole, Acting Director Financial Services, 490-6308

APPENDIX A

Project Scope Schematic - Alderney 5 Site



HRM facilities included in project:

1. Alderney Gate Office Tower
2. Alderney Library
3. Dartmouth City Hall Building
4. Dartmouth Ferry Terminal
5. Alderney Landing Theatre and Market

APPENDIX B

Anticipated Payment Schedule to High Performance Energy Systems

Equipment under Capital Lease; Alderney Gate Natural Gas Boiler Conversions
 Alderney Gate Natural Gas Boiler Additions
 Alderney Gate Hot Water and Cold Water Piping Networks

Capital Lease Principal = \$1,600,000

Capital Lease Start Date = Date of substantial completion, anticipated June 2008

Capital Lease Interest Rate = 6%

	A	B	C	D	E = Ax12 + B x D	
Contract Year	Fixed Monthly Meter Charge	Block 1 Renewable Cold Energy Supply Rate, <1600MBtuh/yr \$/MBtuh	Block 2 Renewable Cold Energy Supply Rate, >1600MBtuh/yr \$/MBtuh	Anticipated Yearly Renewable Cold Energy Delivered MBtuh	Anticipated Total Yearly Capital Lease Payments	Annual Anticipated Lease Buy-Out
1	\$5,000	\$25	\$12.50	1,600	\$100,000	\$1,595,888
2	\$5,000	\$25	\$12.50	1,600	\$100,000	\$1,591,523
3	\$5,000	\$25	\$12.50	1,600	\$100,000	\$1,586,888
4	\$5,000	\$25	\$12.50	1,600	\$100,000	\$1,581,968
5	\$6,500	\$30	\$12.50	1,600	\$126,000	\$1,550,017
6	\$6,500	\$30	\$12.50	1,600	\$126,000	\$1,516,095
7	\$6,500	\$30	\$12.50	1,600	\$126,000	\$1,480,081
8	\$6,500	\$30	\$12.50	1,600	\$126,000	\$1,441,846
9	\$6,500	\$30	\$12.50	1,600	\$126,000	\$1,401,252
10	\$7,500	\$40	\$12.50	1,600	\$154,000	\$1,329,372
11	\$7,500	\$40	\$12.50	1,600	\$154,000	\$1,253,059
12	\$7,500	\$40	\$12.50	1,600	\$154,000	\$1,172,038
13	\$7,500	\$40	\$12.50	1,600	\$154,000	\$1,086,021
14	\$7,500	\$40	\$12.50	1,600	\$154,000	\$994,698
15	\$9,000	\$46.25	\$20	1,600	\$182,000	\$868,967
16	\$9,000	\$46.25	\$20	1,600	\$182,000	\$735,482
17	\$9,000	\$46.25	\$20	1,600	\$182,000	\$593,764
18	\$9,000	\$46.25	\$20	1,600	\$182,000	\$443,305
19	\$9,000	\$46.25	\$20	1,600	\$182,000	\$283,566
20	\$9,000	\$46.25	\$20	1,600	\$182,000	\$113,975
21+	\$9,000	\$46.25	\$20	1,600	\$113,975	\$0

APPENDIX C
Account Structure - Energy Savings

FACILITY OPERATIONS

Cost savings are expected to occur in Cost Center W200 Facility Operations under cost element 6606 heating fuel and cost element 6607 electricity.

The following work orders contain heating fuel and electricity data for the following facilities;
40274326 - Dartmouth Ferry Terminal
40274329 - Old Dartmouth City Hall
40274937 - Other Alderney Gate

ALDERNEY GATE FACILITY MANAGEMENT

Cost savings are expected to occur in Cost Center W203 Alderney Gate Facility Management under cost element 6606 heating fuel and cost element 6607 electricity.

HRM is currently paying for the fuel oil for Alderney Landing and deducting those costs from the operating subsidy. In the future, this portion of the operating subsidy, \$40,000, will be transfer to the TPW Alderney Gate operating account when the heating phase of the project is complete and Alderney Landing is being supplied heat from the new natural gas boilers.

If approved two work orders will be created to collect this data for the Alderney Gate Facility Management and Alderney Gate Landing.

5. NEW BUSINESS

5.1 Alderney 5 - Energy Project Brief

- A copy of the PowerPoint presentation was before the Committee.
- A Staff Report dated July 11, 2007 was before the Committee.
- A copy of a letter, dated July 11, 2007, from Ms. Maria Dober, Acting Director, Environmental Protection Operations Directorate - Atlantic, was circulated to the Committee at this time.

Mr. Julian Boyle, Energy Auditor, Capital Projects, Real Property Asset Management, Transportation and Public Works, presented the report.

Deputy Mayor Uteck entered the meeting at 10:04 a.m.

Councillor Kent entered the meeting at 10:11 a.m. Quorum was obtained at this time.

During the ensuing discussion on the matter, staff provided the following response to questions/concerns of the Committee:

- The capital costs to HRM after ten years will be minimal. The pumps are small and the borehole systems have a life expectancy of 50 to 100 years. The project has a relatively low capital investment/operating risk for HRM.
- "*..other related expenditures*", referred to on page 7 of the staff report, would be projects within the scope of the Alderney 5 Project such as the temporary displacement of the Alderney Landing parking area and compensation for revenue loss associated with that displacement.

Councillor Younger referred to the letter from Ms. Maria Dober, dated July 11, 2007, which reconfirms Environment Canada's support for the Alderney 5 Energy Project.

- The seawater exchange (pumphouse) will be located off the breakwall.
- Fresh water will go to the boreholes. Seawater will be discharged into the harbour.
- All heating will be centralized from the mechanical room. The same amount of heat will be provided without the need for underground oil tanks.
- HRM will keep the carbon credits.
- The proto-type was tested on the North West Arm by a local firm.

In response to Councillor Smith's suggestion to increase HRM's rate class, in order to obtain the best rates for natural gas, by having more HRM facilities hooked up to natural gas, Ms. Cathie O'Toole, Acting Director, Finance Services, commented that

staff will look into the tariff and rate structures in regard to natural gas. She explained that the rates are approved by the Nova Scotia Utility and Review Board (NSUARB) which has criteria/definitions for what constitutes a customer. The number of GJ (gigajoules) per customer determines the rate class.

- FCM (Federation of Canadian Municipalities) did provide pre-approval for the project. Confirmation should be received by mid-September.
- Currently, funding for the project will be through HRM's reserve funds. HRM will be reimbursed through the energy savings.

MOVED BY Councillor Smith, seconded by Deputy Mayor Uteck that the Energy and Underground Services Advisory Committee recommend that Regional Council:

1. **Authorize an increase in the Gross Capital budget in the amount of \$2,689,143 as per the Budget Implications section of the report dated July 11, 2007.**
2. **Authorize an unbudgeted withdrawal of \$1,034,286 from the Capital Replacement Reserve (Q130) to be repaid from energy savings as per the Budget Implications section of the report dated July 11, 2007.**
3. **Authorize HRM to enter into a contract with High Performance Energy Systems for energy retrofits of the Alderney 5 buildings subject to the key terms and conditions as per the Background section of this report and subject to provincial ministerial approval of the capital lease component.**

MOTION PUT AND PASSED.