HALIFAX
REGIONAL MUNICIPALITY

P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 10.2.1

Halifax Regional Council
January 29, 2013

TO: Mayor Savage and Members of Halifax Regional Council

Original signed

SUBMITTED BY: Councillor Walker, Acting Chair, Audit and Finance Standing Committee

DATE: January 18, 2013

SUBJECT: East Port District Energy Project

ORIGIN

The January 16, 2013 Motion of the Audit and Finance Standing Committee.

LEGISLATIVE AUTHORITY

December 11, 2012 motion of Regional Council that any proposal to Halifax Regional Council, outside the annual budget or tender process, be referred to the Audit and Finance Standing Committee for review and recommendation to Regional Council including but not limited to; new programs or services not yet approved or funded; programs or services that are being substantially altered; proposed changes in any operating or project budget items; committing funds where there is insufficient approved budget; new or increased capital budget due to cost sharing; or creation or modification of reserves and withdrawals not approved in the approved budget.

RECOMMENDATION

The Audit and Finance Standing Committee recommends that Halifax Regional Council;

1. Recognize the unique opportunity to enable a district energy system for the municipality and identify the East Port District Energy Project as a 2013-14 capital project and authorize that the project be taken to the next stage of development as per the instructions of the Environment and Sustainability Standing Committee outlined in Attachment 1 of this report.

2. Approve investing up to $300,000 in 2013-14 to enable the due diligence required to fully explore the proposed district energy project, and request the Government of Nova Scotia to cost-share on this investment.

Recommendations continued on Page 2

RECOMMENDATIONS CONTINUED

3. Due to the urgency of project timing, instruct staff to propose options for immediate interim funding for the project.

BACKGROUND

Staff were requested by the Environment and Sustainability Standing Committee to review a proposal by East Port Energy to provide district energy infrastructure to downtown Halifax.

There is urgency behind this project given the impending infrastructure decisions of important partners and stakeholders.

The origins of the above recommendation, pertaining to the necessary resources being requested by staff, can be found in the attached report to the Audit & Finance Committee dated January 13, 2013.

DISCUSSION

Members of the Audit and Finance Standing Committee, along with other Councillors in attendance, indicated their support for innovation, downtown renewal, the reduction of greenhouse gas emissions and additional sources of revenue for HRM and view this project as a unique opportunity to advance these ends.

However, members also indicated the need for a higher level of detail in order to commit such a large sum of money which will not be redeemable if the project does not proceed.

Staff indicated a need for external resources to undertake the analysis necessary to provide Regional Council with adequate information to make a final determination regarding the project.

Given that this project dovetails with the Province's environmental objectives, and that the Province has already indicated support for it, the above recommendation was passed with the caveat that staff make enquiries with the provincial government to partially fund the specialist expertise required to answer outstanding questions.

FINANCIAL IMPLICATIONS

As outlined in the January 13, 2013 report to the Audit and Finance Standing Committee meeting of January 16, 2013.

COMMUNITY ENGAGEMENT

The Audit and Finance Standing Committee is open to the public who are given due notice of its meeting time and location.

ENVIRONMENTAL IMPLICATIONS

Details of the environmental implications were provided in the August 30, 2012 staff report to the Environment & Sustainability Standing Committee.

ATTACHMENTS

1. Direction regarding the project provided by the Environment and Sustainability Standing Committee at their meeting of January 10, 2013.
2. Report to the Audit & Finance Standing Committee dated January 13, 2013
3. Information report to the Environment & Sustainability Standing Committee dated January 2, 2013

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: Matt Godwin, Legislative Assistant, 490-6521

Original signed

Financial Approval by: ______________________________
Greg Keefe, Director of Finance and Information Technology/CFO, 490-6308

ATTACHMENT 1

EXTRACT – RECOMMENDATION FROM THE JANUARY 10, 2013 MEETING OF THE ENVIRONMENT AND SUSTAINABILITY STANDING COMMITTEE:

Analyse the proposal and develop options for Council with the objective of:

- Ensuring the project has technical merit;
- Minimizing the financial risks to the taxpayers; and
- Providing sufficient return on any investment to prevent the general tax rate from subsidizing the project.

1) Instruct staff

a. To work with East Port Energy and proposed partners (Emera and Alta Gas), and the Province of Nova Scotia to confirm the project scope and timeline, to identify equity/governance models and to draft a partnership and governance agreement that takes into account HRM's interests
b. Produce draft documents necessary to advance the project including a development and management agreement between the parties and other documents as are reasonably required;
c. Begin work to get enabling legislation as required for }IRM investment and provincial district energy regulations in place including the ability to borrow funds for this project;
d. Report back within one month with respect to a draft partnership and governance agreement and identify project milestones for Council's consideration in 2013/14 based on the tasks outlined above.

Attachment 2

HALIFAX
REGIONAL MUNICIPALITY

P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Audit & Finance Standing Committee
January 16, 2013

TO: Chair and Members of the Audit & Finance Standing Committee

SUBMITTED BY: Original signed

Councillor Barry Dalrymple, Chair, and Members of the Environment and Sustainability Standing Committee

DATE: January 13, 2013

SUBJECT: **East Port District Energy Project**

ORIGIN

On April 17, 2012, Regional Council requested that following HRM's meeting with stakeholders, the information on the East Port District Energy project be forwarded to the Environment and Sustainability Standing Committee for review and recommendation.

On June 7, 2012, the Environment and Sustainability Standing Committee requested that staff report on the role HRM should play in fostering district energy projects and provide information on district energy best practices from other Canadian Municipalities.

On September 6, 2012, the Environment and Sustainability Standing Committee requested a supplementary report from staff addressing issues and opportunities raised in East Port Energy's September 6, 2012 presentation, including discussion with the potential partners on this project.

On January 10, 2012, the Environment and Sustainability Standing Committee considered this matter and approved a resolution.

RECOMMENDATION

The Environment and Sustainability Standing Committee recommend that the Audit and Finance Standing Committee recommend to Regional Council that HRM recognize the unique opportunity to enable a district energy system for the municipality and identify the East Port District Energy Project as a 2013-14 capital project to be taken to the next stage of development as per the specific instructions of the Environment and Sustainability Standing Committee listed below:

Council will ask staff to analyse the proposal and develop options for Council with the objective of:

- Ensuring the project has technical merit;
- Minimizing the financial risks to the taxpayers; and
- Providing sufficient return on any investment to prevent the general tax rate from subsidizing the project.

In advancing the project, Council will undertake to:
1) Instruct staff
a. To work with East Port Energy and proposed partners (Emera and Alta Gas), and the Province of Nova Scotia to confirm the project scope and timeline, to identify equity/governance models and to draft a partnership and governance agreement that takes into account HRM's interests ;
b. Produce draft documents necessary to advance the project including a development and management agreement between the parties and other documents as are reasonably required;
c. Begin work to get enabling legislation as required for HRM investment and provincial district energy regulations in place including the ability to borrow funds for this project;
d. Report back within one month with respect to a draft partnership and governance agreement and identify project milestones for Council's consideration in 2013/14 based on the tasks outlined above.
2) Approve investing up to $300,000 in 2013-14 to enable the due diligence required to fully explore the proposed district energy project. Due to the urgency of project timing, instruct staff to propose options for immediate interim funding for the project;

In order to facilitate consideration of this motion, the Environment and Sustainability Standing Committee requests that this motion be forwarded to the Audit and Finance Standing committee meeting of January 16, 2013 for consideration and recommendation to Regional Council on January 29, 2013.

BACKGROUND

East Port Energy, a consulting firm based in HRM and a division of East Port Properties, has approached HRM with a proposal to develop a district energy project for downtown Halifax. The proposal is to construct a facility that would provide electrical power from a natural gas boiler and recycle the waste heat from the boiler to provide hot water for district energy heating. As well, the facility would use sea water for district energy cooling. The heating and cooling water would then be distributed to commercial customers in downtown Halifax.

East Port Energy has proposed that the HRM be an equity partner in the project with a 25% equity stake. Given the scale of the project, the proposed equity share would imply a $28 million to $37 million investment by HRM. The other equity partners would be Emera (50%) and Alta-Gas (25%). The Province of Nova Scotia is expected to assist in the project by providing interim financing during the construction and start-up phase of the project. The Province would also be a key partner in the development of legislative changes that may be required.

In the initial East Port proposal, the returns are estimated to be 9% to 10% for the private investors, while HRM's returns would be capped at only 4.0%, plus property tax and encroachment fee revenue. As outlined in the August 30, 2012 staff report, this return is expected to cover HRM's interest costs and direct incremental project expenses, but would not provide sufficient returns to repay the original investment. As an investment alone, the proposal would not meet the requirements of HRM's current Investment Policy.

There are also legislative and governance issues that would need to be addressed. For example, there is no precedence or legislation to outline how HRM could partner with for-profit corporations on such a system. There is also no legislation permitting HRM to borrow funds for construction of facilities primarily owned by private sector entities. With respect to governance, HRM would be a minority shareholder with the future direction of the entity almost entirely outside of its control. As such, HRM Council would be unable to direct the activities of the corporation and would be fully subject to the business decisions of the Board of Directors.

For these reasons, staff recommended in the August 30, 2012 report that HRM not invest in the project and limit its involvement to providing expedited and efficient support with respect to municipal mandated services and requirements such as easements, permits, planning, project and utility coordination, and any other regular municipal service required.

DISCUSSION

As directed by the Environment and Sustainability Standing Committee, staff re-examined the financial issues which appear to be a barrier to HRM participating as an equity partner. One of the assumptions used by East Port in their financial model was that property taxes and encroachment fees payable to HRM would average close to $1 million annually over the twenty year debt financing period. Staff has now confirmed that there would be no significant increase in property taxes attributable to this project because Section 18(2) of the Nova Scotia Power Privatization Act exempts Nova Scotia Power (a subsidiary of Emera) from taxation by a municipality, with the exception of deed transfer tax. Also, HRM would not be able to tax the distribution pipes as they would be in the street right-of-way. With respect to encroachment fees, the nominal amounts HRM is charging in new agreements are only a small fraction of what East Port assumed in their financial model.

Removing almost $1 million in annual on-going operating expenses from the financial model allows HRM's return to increase from 4.0% to 8.5% without compromising the returns required by the private investors under the "Reduced Build" scenario of the financial model. This rate of return would be adequate to cover HRM's interest costs and direct incremental project expenses, and still provide sufficient returns to repay the original investment. Therefore, a capped return of 8.5% should be required as a condition for HRM to become an equity partner in this project.

East Port's financial model assumes a list of specified potential customers will link up to the new district energy service. The failure of some of these customers to do so would significantly impact investor returns. This is a significant risk inherent in this project. Staff reviewed the list of potential customers under the "Reduced Build" scenario of the financial model with East Port to determine the likelihood of each customer linking up. The "Reduced Build" scenario is an appropriate scale for the projected client base at start up. The total project cost is estimated to be $112.7 million for the "Reduced Build" and $148.5 million for the "Full Build" scenario. The "Reduced Build" has a smaller distribution network, with 2,100 metres of piped system vs 4,100 for the "Full Build" scenario. Factors considered were new construction (i.e. Central Library, Nova Centre) and need for replacement of existing heating and cooling systems in the near future (i.e. Dalhousie University).

Sensitivity to District Energy Client Base and Tax Treatment

Revenues from the proposed project would be affected by the number and size of the client base connecting to the new district energy system. The business case is developed on a conservative estimate of eleven (11) customers connecting to the new system. A sensitivity analysis was done, using the financial model developed for the project by East Port Energy. A "worst case" analysis was done looking at the impact of signing up only three customers to the system – Dalhousie's Sexton Campus, the new Central Library and the Nova Centre – over the 25-year period. East Port Energy would only recommend that the project proceed with a minimum number of energy contracts in place. This scenario showed lower than desired returns for private investors, and a break-even result for HRM, assuming payback of equity over 20 years at a 4% interest rate. This is in contrast to the 11-customer "reduced build" scenario, which indicated an $8+ million net present value. [Note: this cash flow analysis assumes a rebate of HRM income taxes paid; should the rebate not happen, the net present value would reduce below $3 million.]

While HRM's participation in this project as an equity partner may be financially feasible with a capped return of 8.5%, there are still legislative and governance issues to consider. Considering the magnitude of the investment required this would be a very significant move into a new line of business for which HRM has little expertise. Legislative changes would also be required to permit HRM to partner with the private sector on a project such as this, and to debt finance an asset that would be majority owned by the private sector. As a minority shareholder, HRM Council would be unable to direct the activities of the corporation and would be subject to the business decisions of its Board of Directors.

To complete the work as directed by the Environment and Sustainability Standing Committee, staff will need to hire external resources as there are not sufficient resources to complete the work in the required time; neither do staff have sufficient experience nor expertise in negotiating a partnership arrangement as proposed.

BUDGET IMPLICATIONS

As outlined in this report, a capped return of 8.5% would be sufficient to cover interest costs, direct project expenses, and debt payments for the "reduced build" scenario, even with a minimal district energy client base. While HRM would experience negative cash flows due to carrying costs for the first two to five years (until construction completion), these would be recovered from projected energy sales revenues that follow. The cumulative carrying costs (of less than $2 million) in the first five years of the project will be funded in the project budget following confirmation of these amounts in the next phase of work. The financial model indicates a $25-million debenture requirement for the 11-customer "reduced build" scenario, at the end of year five, which HRM could finance over 20 years.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

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

COMMUNITY ENGAGEMENT

Community engagement will follow any decision by Council to proceed with the project.

ENVIRONMENTAL IMPLICATIONS

Details of the environmental implications were provided in the August 30, 2012 staff report to the Environment and Sustainability Standing Committee.

ALTERNATIVES

The Audit and Finance Standing Committee could decide not to recommend to Council that HRM not provide funding for this project. In that case, all work would need to be performed by internal staff. This would create significant risk to the project time lines and/or outcomes. As well, staff do not have sufficient expertise in negotiating such specialized arrangements.

ATTACHMENTS

N/A

A copy of this report can be obtained online at http://www.halifax.ca/boardscom/SCenv/index.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: Andre MacNeil, Senior Financial Consultant, Finance & ICT, 490-5529
Gordon Roussel, Senior Financial Consultant, Finance & ICT, 490-6468

Original Signed

Report Approved by: Bruce Fisher, Manager, Financial Policy & Planning, Finance & ICT, 490-4493

HALIFAX
REGIONAL MUNICIPALITY

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Halifax, Nova Scotia
B3J 3A5 Canada

Attachment 3

Environment & Sustainability Standing Committee
January 10, 2013

TO: Chair and Members of Environment & Sustainability Standing Committee

Original Signed

SUBMITTED BY: ______________________________
Greg Keefe, Director of Finance & ICT/CFO

DATE: January 2, 2013

SUBJECT: **East Port District Energy Project**

INFORMATION REPORT

ORIGIN

On April 17, 2012, Regional Council requested that following HRM's meeting with stakeholders, the information on the East Port District Energy project be forwarded to the Environment and Sustainability Standing Committee for review and recommendation.

On June 7, 2012, the Environment and Sustainability Standing Committee requested that staff report on the role HRM should play in fostering district energy projects and provide information on district energy best practices from other Canadian Municipalities.

On September 6, 2012, the Environment and Sustainability Standing Committee requested a supplementary report from staff "addressing issues and opportunities raised in East Port Energy's September 6, 2012 presentation, including discussion with the potential partners on this project."

BACKGROUND

East Port Energy, a consulting firm based in HRM and a division of East Port Properties, has approached HRM with a proposal to develop a district energy project for downtown Halifax. The proposal is to construct a facility that would provide electrical power from a natural gas boiler and recycle the waste heat from the boiler to provide hot water for district energy heating. As well, the facility would use sea water for district energy cooling. The heating and cooling water would then be distributed to commercial customers in downtown Halifax.

East Port Energy has proposed that the HRM be an equity partner in the project with a 25% equity stake. Given the scale of the project, the proposed equity share would imply an investment between $25 million to $37 million by HRM. The other equity partners would be Emera (50%) and Alta-Gas (25%). The Province of Nova Scotia is expected to assist in the project by providing interim financing during the construction and start-up phase of the project. The Province would also be a key partner in the development of required legislative changes.

In the initial East Port proposal, the returns are estimated to be 9% to 10% for the private investors, while HRM's returns would be capped at only 4.0%, plus property tax and encroachment fee revenue. As outlined in the August 30, 2012 staff report, this return is expected to cover HRM's interest costs and direct incremental project expenses, but would not provide sufficient returns to repay the original investment. As an investment alone, the proposal would not meet the requirements of HRM's current Investment Policy.

There are also legislative and governance issues that would need to be addressed. For example, there is no precedence or legislation to outline how HRM could partner with for-profit corporations on such a system. There is also no legislation permitting HRM to borrow funds for construction of facilities primarily owned by private sector entities. With respect to governance, HRM would be a minority shareholder with the future direction of the entity almost entirely outside of its control. As such, HRM Council would be unable to direct the activities of the corporation and would be fully subject to the business decisions of the Board of Directors.

For these reasons, staff recommended in the August 30, 2012 report that HRM not invest in the project and limit its involvement to providing expedited and efficient support with respect to municipal mandated services and requirements such as easements, permits, planning, project and utility coordination, and any other regular municipal service required.

DISCUSSION

As directed by the Environment and Sustainability Standing Committee, staff re-examined the financial issues which appear to be a barrier to HRM participating as an equity partner. One of the assumptions used by East Port in their financial model was that property taxes and encroachment fees payable to HRM would average close to $1 million annually over the twenty year debt financing period. Staff has now confirmed that there would be no significant increase in property taxes attributable to this project because Section 18(2) of the Nova Scotia Power Privatization Act exempts Nova Scotia Power (a subsidiary of Emera) from taxation by a municipality, with the exception of deed transfer tax. Also, HRM would not be able to tax the distribution pipes as they would be in the street right-of-way. With respect to encroachment fees, the nominal amounts HRM is charging in new agreements are only a small fraction of what East Port assumed in their financial model.

Removing almost $1 million in annual on-going operating expenses from the financial model allows HRM's return to increase from 4.0% to 8.5% without compromising the returns required by the private investors under the "Reduced Build" scenario of the financial model. This rate of return would be adequate to cover HRM's interest costs and direct incremental project expenses, and still provide sufficient returns to repay the original investment. Therefore, a capped return of 8.5% should be required as a condition for HRM to become an equity partner in this project.

East Port's financial model assumes a list of specified potential customers will link up to the new district energy service. The failure of some of these customers to do so would significantly impact investor returns. This is a significant risk inherent in this project. Staff reviewed the list of potential customers under the "Reduced Build" scenario of the financial model with East Port to determine the likelihood of each customer linking up. The "Reduced Build" scenario is an appropriate scale for the projected client base at start up. The total project cost is estimated to be $112.7 million for the "Reduced Build" and $148.5 million for the "Full Build" scenario. The "Reduced Build" has a smaller distribution network, with 2,100 metres of piped system vs 4,100 for the "Full Build" scenario. Factors considered were new construction (i.e. Central Library, Nova Centre) and need for replacement of existing heating and cooling systems in the near future (i.e. Dalhousie University).

Sensitivity to District Energy Client Base and Tax Treatment

Revenues from the proposed project would be affected by the number and size of the client base connecting to the new district energy system. The business case for the "Reduced Build" was developed on a conservative estimate of eleven (11) customers connecting to the new system. A sensitivity analysis was done, using the financial model developed for the project by East Port Energy. A "worst case" analysis was done looking at the impact of signing up only three customers to the system – Dalhousie's Sexton Campus, the new Central Library and the Nova Centre – over the 25-year period. East Port Energy would only recommend that the project proceed with a minimum number of energy contracts in place. This scenario showed lower than desired returns for private investors, and a break-even result for HRM, assuming payback of equity over 20 years at a 4% interest rate. This is in contrast to the 11-customer "reduced build" scenario, which indicated an $8+ million net present value. [Note: this cash flow analysis assumes a partial rebate of income taxes paid by the District Energy firm for HRM's share of the firm; should the rebate not happen, the net present value would reduce below $3 million.]

While HRM's participation in this project as an equity partner may be financially feasible with a capped return of 8.5%, there are still legislative and governance issues to consider. Considering the magnitude of the investment required this would be a very significant move into a new line of business for which HRM has little expertise. Legislative changes would also be required to permit HRM to partner with the private sector on a project such as this, and to debt finance an asset that would be majority owned by the private sector. As a minority shareholder, HRM Council would be unable to direct the activities of the corporation and would be subject to the business decisions of its Board of Directors.

Options

The Environment and Sustainability Standing Committee could recommend to Council that HRM not proceed any further with this project. As indicated in this and the August 30th staff report, there are sufficient legislative and governance issues to justify such a decision. The Committee could recommend that Council provide expedited and efficient support with respect to municipal services and requirements such as easements, permits, planning, project and utility coordination, and any other regular municipal service required. Given the reduced property taxation, from what was originally thought by the proponents, the project would have improved viability as a private sector (only) venture.

The Environment and Sustainability Standing Committee could recommend to Council that the HRM take the project to the next stage of development. If this were the desired direction, staff would:

- work with East Port Energy and proposed partners to confirm the project scope, timeline and the equity/governance options;
- analyse the proposal and develop options for Council with the objective of:
    - Ensuring the project has technical merit;
    - Minimizing the financial risks to the taxpayers;
    - Providing sufficient return on any investment to prevent the general tax rate from subsidizing the project;
- work with the Province of Nova Scotia to prepare necessary changes to legislation and practices, including the ability to borrow funds for the project.

Financial Summary

As outlined earlier in this report, should HRM choose to be an equity partner, a capped HRM return of 8.5% should be sufficient to cover interest costs, direct project expenses, and debt payments for the "reduced build" scenario, even with a minimal district energy client base. While HRM would experience negative cash flows due to carrying costs for the first two to five years (until construction completion), these would be recovered from projected energy sales revenues that follow. The cumulative carrying costs (of less than $2 million) in the first five years of the project would need to be borrowed internally or from an external line of credit. The financial model indicates that a $25-million debenture would be required for the 11-customer "reduced build" scenario, at the end of year five, which HRM could finance over 20 years.

Remaining Risks

The level of financial risk cannot be known fully until the governance details of the new district energy entity are worked out and energy sales contracts (with NSPI and downtown building owners) are drafted. For HRM, currently, project risks include:

- Governance structure including minority rights, dividend terms, buy-out provisions, etc.;
- Tax treatment of new entity, e.g. HRM tax rebate
- District Energy client base
- Energy Sales Agreements and future energy prices
- Future debenture rates (in 5 years +/-)
- Changes to environmental policy/regulations

BUDGET IMPLICATIONS

There are no budget implications of this report or the prior staff recommendation of not proceeding as an equity partner on this project. However, the financial implications of moving forward with the project are significant, as described in Discussion section of this report.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

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

COMMUNITY ENGAGEMENT

Community engagement will follow any decision by Council to proceed with the project.

ENVIRONMENTAL IMPLICATIONS

Details of the environmental implications were provided in the August 30, 2012 staff report to the Environment and Sustainability Standing Committee.

ATTACHMENTS

Attachment 1 - Estimated Project Cash Flows, Years 1 to 5
Attachment 2 - Estimated Project Cash Flows, Years 6 to 25

A copy of this report can be obtained online at http://www.halifax.ca/boardscom/SCenv/index.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: Andre MacNeil, Senior Financial Consultant, Finance & ICT, 490-5529
Gordon Roussel, Senior Financial Consultant, Finance & ICT, 490-6468

Original signed

Report Approved by: Bruce Fisher, Manager, Financial Policy & Planning, Finance & ICT, 490-4493

Attachment 1

Projected District Energy Cash Flows, Years 1 to 5
Without Property Taxes or Encroachment Fees, HRM Cap at 8.5% (all values in $,000)

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Cash flow to all shareholders	-681	-1,912	156	-3,083	-91,777
Cash flow to HRM	**-170**	**-478**	**39**	**-771**	**-22,944**
Cumulative Debt	-170	-655	-642	-1,439	-24,440
			Debenture Requirement		24,440

4% Carrying Cost

Attachment 2

Projected District Energy Cash Flow, Years 6 to 25

Without Property Taxes or Encroachment Fees, HRM Cap at 8.5% (all values in $,000)

	20-year average	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
Cash flow to all shareholders	8,883	11,180	11,196	11,212	10,362	9,083	8,951	8,848	8,627	8,558	8,502
Cash flow to HRM	2,043	2,071	2,071	2,071	2,071	2,071	2,071	2,071	2,071	2,071	2,071
Income Tax Rebate	550	0	0	0	217	540	577	608	618	639	656
Total Adjusted Cash Flow	**2,593**	**2,071**	**2,071**	**2,071**	**2,287**	**2,611**	**2,648**	**2,678**	**2,689**	**2,710**	**2,727**
Estim. Debenture Payments	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798
Net Project Cash Flow*	**794**	**273**	**273**	**273**	**489**	**813**	**850**	**880**	**891**	**912**	**929**

Table Continued (Years 16 to 25)	Yr 16	Yr 17	Yr 18	Yr 19	Yr 20	Yr 21	Yr 22	Yr 23	Yr 24	Yr 25
Cash flow to all shareholders	8,455	8,415	8,382	8,353	8,329	8,308	8,291	8,106	8,090	6,411
Cash flow to HRM	2,071	2,071	2,071	2,071	2,071	2,071	2,071	2,026	2,022	1,603
Income Tax Rebate	672	685	697	708	718	727	736	726	733	735
Total Adjusted Cash Flow	**2,743**	**2,756**	**2,768**	**2,779**	**2,789**	**2,798**	**2,807**	**2,753**	**2,756**	**2,338**
Estim.Debenture Payments	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798	-1,798
Net Project Cash Flow*	**945**	**958**	**970**	**981**	**991**	**1,000**	**1,009**	**955**	**958**	**540**

4% Assumed Debenture Rate

** not including potential HRM oversight/admin costs*