



City of Saint Paul
Interdepartmental Memorandum

To: Mayor Christopher Coleman
Members of the City Council

From: Barbara Hillesland
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Todd Hurley, Director of Financial Services
District Energy Rate Review Team

Date: January 20, 2012

Subject: Staff Report for Proposed District Energy St. Paul, Inc. Rates,
Effective for FY 2012

This memorandum provides an analysis of District Energy’s proposed cooling and heating rate changes for fiscal year 2012, in accordance with the procedural requirements specified in District Energy’s franchise agreements.

I. District Cooling Rates:

District Cooling proposes the following changes to Schedule A:

Demand Rate:

Increase from \$26.30 to \$26.69 per ton per month, an increase of 1.5%

Energy Rate:

Increase from \$0.085 to \$0.087 per ton-hour, an increase of 2.1%

All other service charges will remain at the 2011 levels as indicated in the attached District Cooling Schedule A.

Comparison of Cooling Rates: 2008 - 2012

	Actual FY 2008	Actual FY 2009	Actual FY 2010	Forecast FY 2011	Budget FY 2012
Rates					
Demand (\$/ton/mo)	\$24.79	\$25.66	\$25.66	\$26.30	\$26.69
Energy (\$/ton hr)	\$0.078	\$0.084	\$0.084	\$0.085	\$0.087
Overall cost at 1200 hrs	\$0.326	\$0.341	\$0.341	\$0.348	\$0.354
Increase as %					
Demand (\$/ton/mo)	6.5%	3.5%	0.0%	2.5%	1.5%
Energy (\$/ton hr)	2.9%	7.7%	-0.2%	1.2%	2.1%
Overall cost at 1200 hrs	5.6%	4.5%	0.0%	2.2%	1.7%

The proposed District Cooling *average overall cost* (at 1200 utilization hours) shows an increase of 1.7% from forecasted 2011 to budgeted 2012.

The proposed *demand rate* increase is 1.5%. The demand rate covers operations and maintenance, general and administrative, research and development, debt and capital expenses. Total demand related costs are expected to increase by \$115,983 (net of capital expenditures).

The *energy rate* is projected to increase by approximately 2.1% over 2011 levels. The energy rate is a pass through to the customer. The rate is based on the projected cost of electricity, which is the major fuel source for cooling. The 2012 budgeted rate is \$0.087 - compared to the forecasted 2011 energy rate of \$0.085.

The average overall cost increase (at 1200 utilization hours) of 1.7% is due largely to two factors. On the *demand rate* side, an increase in allocated labor costs and plant maintenance costs are contributing to the increase. On the *energy rate* side, increases in the cost of electricity and a plan to use more steam absorption chillers (to offset electricity usage) are both contributing to the rate increase.

District Cooling Comparison to Similar Utility Provider

	<u>Cooling Cost*</u> <u>(\$ / Ton-Hour)</u>
Energy Park Utility 2011 Cost	\$0.30
District Cooling 2012 Cost	\$0.35

*Excluding City fees and sales tax.

II. District Heating Rates:

District Heating proposes the following changes to Schedule A:

Single rate:

Decrease from \$0.0630 to \$0.06279 per kilowatt hour (-0.3%)

Two-part rate:

Demand rate increase from \$5.17 to \$5.27 per kilowatt per month (1.93%)

Energy rate decrease from \$26.59 to \$25.59 per megawatt hour (-3.76%)

All other service charges will remain at the 2011 levels as indicated in the attached District Heating Schedule A.

Comparison of Heating Rates: 2008 - 2012

	Actual FY 2008	Actual FY 2009	Actual FY 2010	Forecast FY 2011	Budget FY 2012
Rates					
Demand (\$/kW/mo)	\$4.57	\$4.71	4.90	\$5.17	\$5.27
Energy rate	\$25.15	\$30.51	\$26.86	\$26.59	\$25.59
Fuel adjustment rate	\$1.13	(\$1.35)	(\$0.14)	(\$0.11)	\$0.00
Total Energy (\$/MWh)	\$26.28	\$29.16	\$26.72	\$26.48	\$25.59
Single Rate (\$/KWH)	\$0.05854	\$0.06264	\$0.0613	\$0.0630	\$0.0628

	Actual FY 2008	Actual FY 2009	Actual FY 2010	Forecast FY 2011	Budget FY 2012
Increase as %					
Demand (\$/kW /mo)	5.1 %	3.1 %	4.0 %	5.5 %	1.9 %
Energy (\$/MWh)	5.0 %	11.0 %	-8.4 %	-0.9 %	-3.8 %
Single Rate (\$/KWH)	5.0 %	6.7 %	-2.1 %	2.8 %	-0.3 %

The proposed District Heating *overall single rate* is projected to decrease 0.3% between forecasted 2011 and budgeted 2012. This comes after a 2.8% increase in 2011.

The proposed *demand rate* represents a 1.9% increase over forecasted 2011. This follows last year's increase of 5.5%. The demand rate covers operations and maintenance, general and administrative, research and development, debt and capital expenses.

The budgeted *energy rate* represents a 3.4% decrease from 2011's forecasted rate. The budgeted 2012 energy rate is \$25.59, compared to the 2011 forecasted rate of \$26.48. This decrease, which is also contributing to the decrease in the overall single rate, is largely driven by a decrease in the cost of fuels used to operate the District Heating system. The energy rate is a pass through to the customer. The rate is based on projected cost of fuels utilized.

For FY-2012 the overall rate decrease of 0.3% was largely due to three factors: 1.) an increase in the *demand rate* due to costs associated with the light rail transit project, 2.) a 1.1% decrease in customer demand mainly due to energy conservation by customers, 3.) forecasted reductions in energy costs, which partially offset the *demand rate* increase.

A large change in projected working capital was noted from FY-2011 (forecasted) and FY-2012 (budget). This change is largely due to distribution system projects associated with the light rail transit project, and funded through revenue bonds in 2009. Additionally in FY-2012 a new revenue bond issue is expected to take place to fund additional capital expenditures and capital reserves. This increase in capital reserve is anticipated to allow District Energy to begin debt repayment ahead of schedule.

District Heating Comparison to Other Similar Utilities

	<u>Heating Cost*</u> <u>(\$ / MMBtu)</u>
EPUC (Energy Park Utility Co.)	\$21.21
District Heating 2011	\$17.41

*Excluding City fees and sales tax.

III. Customer Survey

In May 2011, District Energy conducted a customer satisfaction survey. Of the survey responses received, 86% rated District Energy's overall customer service as excellent, and 89% rated the system reliability as excellent.

IV. Staff Recommendation

District Cooling:

From an internal perspective, looking at the City's own district cooling expense trend for the past five years (see table below), District Cooling's requested rate increase does not seem unreasonable. The City's own trends in cooling costs are likely similar to District Energy's other customers. Given that customer survey results reflect that most customers are satisfied with the service, and given that the average rate increase request at 1.7% is relatively small, staff recommends approval of the District Cooling rate increase request.

City District Cooling Expenditures by Department:

Department	Description	2007	2008	2009	2010	2011
Police	Building Maint.	81,735.77	86,301.85	96,639.44	103,409.49	94,122.77
Real Estate	Real Estate CHA	101,771.54	104,696.35	89,582.35	66,827.51	66,567.23
Library	Maint. Service	61,636.17	71,603.89	75,808.31	76,250.58	61,377.12
Total		245,143.48	262,602.09	262,030.10	246,479.58	222,067.12
% Change		10.0%	7.1%	-0.2%	-5.9%	-9.9%
District Cooling Rate per ton hr		\$0.076	\$0.078	\$0.084	\$0.084	\$0.085

District Heating:

While District Heating is requesting a 1.9% increase in the **demand rate** for 2012, the requested **energy rate** represents a decrease of 3.8% from 2011 rates. The combined impact of these two rates would result in an overall decrease in rates to customers for 2012. Staff recommends approval of the District Heating rate request.