



**City of Saint Paul**  
Interdepartmental Memorandum

To: Mayor Melvin Carter  
Members of the City Council

From: District Energy Rate Review Team

Todd Hurley, Director, Office of Financial Services  
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Sarah Brown, OFS Treasury  
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Holly Huston, City Council  
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Date: October 3, 2018

Subject: Staff Report for Proposed District Energy St. Paul, Inc. Rates,  
Effective for FY 2019

This memorandum provides an analysis of District Energy's proposed cooling and heating rate changes for fiscal year 2019, 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 \$28.15 to \$28.57 per ton per month, an increase of 1.49%

**Energy Rate:**

The rate will remain at \$0.100 per ton-hour

**Transition Rate:**

Increase from \$0.381 to \$0.386 per ton-hour at 1200 utilization hours

All other service charges will remain at the 2018 levels as indicated in the attached District Cooling Schedule A.

Comparison of Cooling Rates: 2015 – 2019

	<b>Actual FY 2015</b>	<b>Actual FY 2016</b>	<b>Actual FY 2017</b>	<b>Forecast FY 2018</b>	<b>Budget FY 2019</b>
<b>Rates</b>					
Demand (\$/ton/mo)	\$26.69	\$26.69	\$27.41	\$28.15	\$28.57
Energy (\$/ton hr)	\$0.10	\$0.09	\$0.10	\$0.10	\$0.10
Overall cost at 1200 hrs (\$/ton hr)	\$0.36	\$0.35	\$0.37	\$0.38	\$0.39
<b>Increase as %</b>					
Demand (\$/ton/mo)	0.00%	0.00%	2.70%	2.70%	1.49%
Energy (\$/ton hr)	0.00%	-3.20%	6.50%	2.04%	0.00%
Overall cost at 1200 hrs	0.00%	-0.80%	3.60%	2.42%	1.31%

The proposed District Cooling *average overall cost* (at 1200 utilization hours) shows an increase of 1.31% from forecasted 2018 to budgeted 2019.

The proposed *demand rate* increase is 1.49%. 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 \$548,113 (net of capital expenditures).

The *energy rate* is projected to remain flat at 2018 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 2019 budgeted rate is \$0.100.

The *average overall cost* increase (at 1200 utilization hours) of 1.31% is due to two factors. On the *demand rate* side, an increase in debt service costs, and operation and maintenance costs, are contributing to the increase. On the *energy rate* side, increases in the cost of electricity is contributing to the rate increase.

District Cooling Comparison to Similar Utility Provider

	<b>Cooling Cost*</b> <b>(\$ / Ton-Hour 1200 Hrs)</b>
Energy Park Utility 2018 Cost	\$0.295
District Cooling 2019 Cost	\$0.386

\*Excluding City fees and sales tax.

II. District Heating Rates:

District Heating proposes the following changes to Schedule A:

**Single rate & Transition Rate:**

Decrease from \$0.0623 to \$0.0615 per kilowatt hour (-1.28%)

**Two-part rate:**

Demand rate increase from \$5.45 to \$5.53 per kilowatt per month (1.49%)

Energy rate decrease from \$23.85 to \$22.50 per megawatt hour -5.66%

All other service charges will remain at the 2018 levels as indicated in the attached District Heating Schedule A.

Comparison of Heating Rates: 2015 – 2019

	Actual FY 2015	Actual FY 2016	Actual FY 2017	Forecast FY 2018	Budget FY 2019
<b>Rates</b>					
Demand (\$/kW/mo)	\$5.27	\$5.27	\$5.37	\$5.45	\$5.53
Energy rate	\$25.59	\$25.59	\$24.15	\$23.85	\$22.50
Fuel adjustment rate	\$0.64	(\$4.39)	(\$1.24)	\$0.00	\$0.00
Total Energy (\$/MWh)	\$26.23	\$21.20	\$22.91	\$23.85	\$22.50
Single Rate (\$/KWH)	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06
<b>Increase as %</b>					
Demand (\$/kW /mo)	0.00%	0.00%	1.90%	1.49%	1.47%
Total Energy (\$/MWh)	-2.20%	-19.18%	8.07%	4.10%	-5.66%
Single Rate (\$/KWH)	-0.90%	-7.90%	6.30%	0.32%	-1.28%

The proposed District Heating *overall single rate* is projected to decrease -1.28% between forecasted 2018 and budgeted 2019.

The proposed *demand rate* represents a 1.47% increase for budgeted 2019. The rate has remained relatively flat since 2013. The demand rate covers operations and maintenance, general and administrative, research and development, debt and capital expenses.

The budgeted *total energy rate* represents a -5.66% decrease in 2019. This comes after an 4.10% increase in 2018. The budgeted 2019 total energy rate is \$22.50, compared to the 2018 forecasted rate of \$23.85. This decrease is largely driven by 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 2019 the overall rate decrease of -1.28% was due to a budgeted decrease in the *energy rate*.

District Heating Comparison to Other Similar Utilities

	<u>Heating Cost*</u> <u>(\$ / MMBtu 1700 Hrs)</u>
Energy Park Utility 2018 Cost	\$21.45
District Heating 2019	\$18.03

\*Excluding City fees and sales tax.

III. Customer Survey

In spring 2016, District Energy conducted a customer satisfaction survey. Of the survey responses received, 94% rated District Energy’s overall customer service as excellent, and 84% 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 Energy’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 1.31% is relatively small, staff recommends approval of the rate increase request.

City District Cooling Expenditures by Department:

Department	Description	2013	2014	2015	2016	2017
Police	Building Maint.	83,283.31	93,489.07	92,135.37	90,764.00	90,887.00
Fire	Station Maint.	26,680.31	26,846.95	27,847.81	27,694.00	27,034.00
Real Estate	Real Estate CHA	79,954.43	73,257.51	72,190.04	76,681.00	59,174.00
Library	Maint. Service	74,746.66	54,928.69	47,770.77	51,267.00	52,148.00
Total		264,664.71	248,522.22	239,943.99	246,406.00	229,243.00
% Change		-6.60%	-6.10%	-3.50%	2.69%	-6.97%

**District Heating:**

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City District Heating Expenditures by Department:

Department	Description	2013	2014	2015	2016	2017
Police	Building Maint.	153,961.04	154,371.54	131,725.31	123,067.00	116,550.00
Fire	Station Maint.	40,018.17	35,336.50	30,837.65	29,531.00	32,408.00
Real Estate	Real Estate CHA	92,314.52	81,776.58	67,431.12	59,083.00	79,390.00
Library	Maint. Service	48,778.48	47,343.66	36,714.71	36,140.00	43,921.00
Total		335,072.21	318,828.28	266,708.79	247,821.00	272,269.00
% Change		6.3%	-4.8%	-16.3%	-7.1%	9.9%