



**City of Saint Paul**  
Interdepartmental Memorandum

To: Mayor Melvin Carter  
Members of the City Council

From: District Energy Rate Review Team

John McCarthy, Interim Director, Office of Financial Services  
Michael Solomon, Treasurer, OFS  
Sarah Brown, OFS Treasury  
Mary Guerra, OFS Budget  
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Holly Huston, City Council  
Lisa Veith, City Attorney's Office

Date: October 2, 2019

Subject: Staff Report for Proposed District Energy St. Paul, Inc. Rates,  
Effective for FY 2020

This memorandum provides an analysis of District Energy's proposed cooling and heating rate changes for fiscal year 2020, 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 \$28.57 to \$29.28 per ton per month, an increase of 2.49%

**Energy Rate:**

Decrease from \$0.100 to \$0.098 per ton-hour

**Transition Rate:**

Increase from \$0.386 to \$0.390 per ton-hour at 1200 utilization hours

All other service charges will remain at the 2019 levels as indicated in the attached District Cooling Schedule A.

Comparison of Cooling Rates: 2016 – 2020

	<b>Actual FY 2016</b>	<b>Actual FY 2017</b>	<b>Actual FY 2018</b>	<b>Budget FY 2019</b>	<b>Budget FY 2020</b>
<b>Rates</b>					
Demand (\$/ton/mo)	\$26.69	\$27.41	\$28.15	\$28.57	\$29.28
Energy (\$/ton hr)	\$0.085	\$0.092	\$0.091	\$0.100	\$0.098
Overall cost at 1200 hrs (\$/ton hr)	\$0.352	\$0.366	\$0.373	\$0.386	\$0.390
<b>Increase as %</b>					
Demand (\$/ton/mo)	0.00%	2.70%	2.70%	1.49%	2.49%
Energy (\$/ton hr)	-10.61%	8.56%	-1.05%	9.55%	-2.00%
Overall cost at 1200 hrs	-2.76%	4.05%	1.84%	3.49%	1.04%

The proposed District Cooling *average overall cost* (at 1200 utilization hours) shows an increase of 1.04% from forecasted 2019 to budgeted 2020.

The proposed *demand rate* increase is 2.49%. The demand rate covers operations and maintenance, general and administrative, research and development, debt and capital expenses. Total budgeted demand related costs are expected to increase by \$424,583 (net of capital expenditures).

The *energy rate* shows a decrease back to 2017 budgeted 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 2020 budgeted rate is \$0.098.

The *average overall cost* increase (at 1200 utilization hours) of 1.04% 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 2020 Cost	\$0.390

\*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 \$0.0615 to \$0.0596 per kilowatt hour (-3.09%)

**Two-part rate:**

Demand rate increase from \$5.53 to \$5.63 per kilowatt per month (1.81%)

Energy rate decrease from \$22.50 to \$19.90 per megawatt hour (-11.56%)

All other service charges will remain at the 2019 levels as indicated in the attached District Heating Schedule A.

Comparison of Heating Rates: 2016 – 2020

	Actual FY 2016	Actual FY 2017	Actual FY 2018	Budget FY 2019	Budget FY 2020
<b>Rates</b>					
Demand (\$/kW/mo)	\$5.27	\$5.37	\$5.45	\$5.53	\$5.63
Energy rate	\$25.59	\$24.15	\$23.85	\$22.50	\$19.90
Fuel adjustment rate	(\$4.36)	(\$1.25)	(\$1.64)	\$0.00	\$0.00
Total Energy (\$/MWh)	\$21.23	\$22.90	\$22.21	\$22.50	\$19.90
Single Rate (\$/KWH)	\$0.0584	\$0.0608	\$0.0607	\$0.0615	\$0.0596
<b>Increase as %</b>					
Demand (\$/kW /mo)	0.00%	1.90%	1.49%	1.47%	1.81%
Total Energy (\$/MWh)	-19.06%	7.86%	-3.02%	1.32%	-11.56%
Single Rate (\$/KWH)	-7.88%	4.07%	-0.21%	1.42%	-3.09%

The proposed District Heating *overall single rate* is projected to decrease -3.09% between forecasted 2019 and budgeted 2020.

The proposed *demand rate* represents a 1.81% increase for budgeted 2020. 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 -11.56% decrease in 2020. This decrease 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.

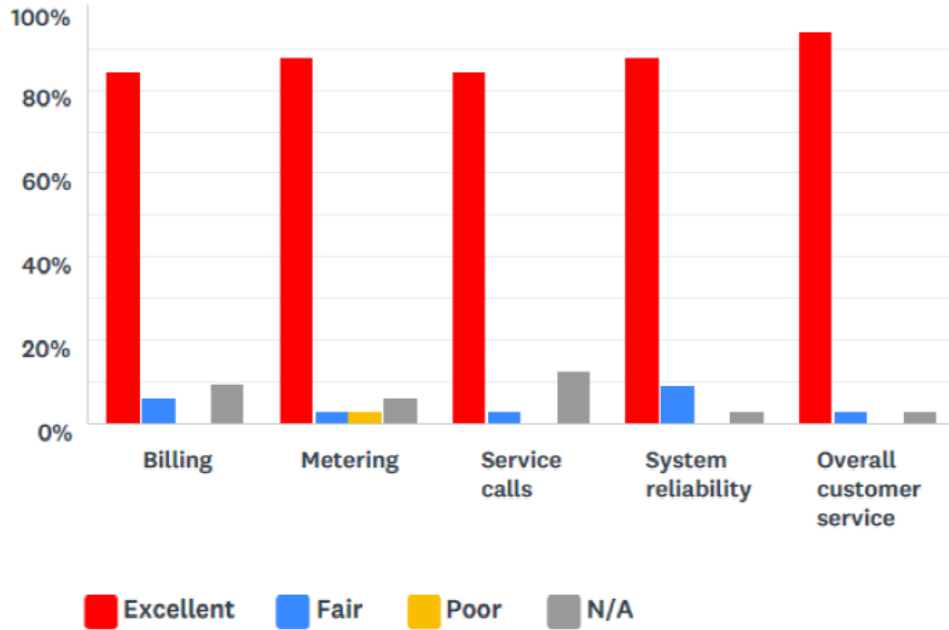
District Heating Comparison to Other Similar Utilities

	<b>Heating Cost*</b> <b>(\$ / MMBtu 1700 Hrs)</b>
Energy Park Utility 2018 Cost	\$21.45
District Heating 2020	\$19.90

\*Excluding City fees and sales tax.

III. Customer Survey

In 2019, District Energy conducted a customer satisfaction survey. Of the survey responses received, 93.9% rated District Energy’s overall customer service as excellent, and 88.2% 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 1.04% is relatively small, staff recommends approval of the rate increase request.

City District Cooling Expenditures by Department:

Department	Description	2014	2015	2016	2017	2018
Police	Building Maint.	93,489.07	92,135.37	90,764.00	90,887.00	92,556.00
Fire	Station Maint.	26,846.95	27,847.81	27,694.00	27,034.00	28,046.00
Real Estate	Real Estate CHA	73,257.51	72,190.04	76,681.00	59,174.00	66,595.00
Library	Maint. Service	54,928.69	47,770.77	51,267.00	52,148.00	63,218.00
Total		248,522.22	239,943.99	246,406.00	229,243.00	250,415.00
% Change		-6.10%	-3.50%	2.69%	-6.97%	9.24%

**District Heating:**

From an internal perspective, looking at the City’s own district heating expense trend for the past five years (see table below), District Energy’s requested rate decrease does not seem unreasonable. The City’s own trends in heating 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 -3.09% is similar to past increases, staff recommends approval of the rate increase request.

City District Heating Expenditures by Department:

<b>Department</b>	<b>Description</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Police	Building Maint.	154,371.54	131,725.31	123,067.00	116,550.00	75,326.00
Fire	Station Maint.	35,336.50	30,837.65	29,531.00	32,408.00	33,981.00
Real Estate	Real Estate CHA	81,776.58	67,431.12	59,083.00	79,390.00	108,619.00
Library	Maint. Service	47,343.66	36,714.71	36,140.00	43,921.00	50,599.00
Total		318,828.28	266,708.79	247,821.00	272,269.00	268,525.00
% Change		-4.85%	-16.35%	-7.08%	9.87%	-1.38%