Staff Report for Proposed FY 2022 District Cooling and Heating Rates Page 1 of 5



City of Saint Paul Interdepartmental Memorandum

- To: Mayor Melvin Carter Members of the City Council
- From: District Energy Rate Review Team

John McCarthy, Director, Office of Financial Services Sarah Brown, Treasurer, OFS Neal Younghans, OFS Treasury Madeline Mitchell, OFS Budget Janice Rick, OFS Accounting Holly Huston, City Council Lisa Veith, City Attorney's Office

- Date: September 28th, 2022
- Subject: Staff Report for Proposed District Energy St. Paul, Inc. Rates, Effective for FY 2023

This memorandum provides an analysis of District Energy's proposed cooling and heating rate changes for fiscal year 2023, 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 \$30.85 to \$32.08 per ton per month Energy Rate: Increase from \$0.094 to \$0.096 per ton-hour Transition Rate: Increase from \$0.403 to \$0.417 per ton-hour at 1200 utilization hours

All other service charges will remain at the 2022 levels as indicated in the attached District Cooling Schedule A.

	Actual FY 2019	Actual FY 2020	Actual FY 2021	Budget FY 2022	Budget FY 2023
Rates					
Demand (\$/ton/mo)	\$28.57	\$29.28	\$30.02	\$30.85	\$32.08
Energy (\$/ton hr)	\$0.100	\$0.086	\$0.084	\$0.094	\$0.096
Overall cost at 1200 hrs (\$/ton hr)	\$0.386	\$0.378	\$0.384	\$0.403	\$0.417
Increase as %					
Demand (\$/ton/mo)	1.49%	2.49%	2.53%	2.76%	3.99%
Energy (\$/ton hr)	0.00%	-14.00%	-2.33%	11.90%	2.13%
Overall cost at 1200 hrs	1.31%	-2.07%	1.59%	4.95%	3.47%

Comparison of Cooling Rates: 2019 – 2023

The proposed District Cooling *average overall cost* (at 1200 utilization hours) shows an increase of 3.47% from forecasted 2022 to budgeted 2023.

The proposed *demand rate* increase is 3.99%. 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 \$106,429 (net of capital expenditures).

The *energy rate* shows a small increase. 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 2023 budgeted rate is \$0.096.

The *average overall cost* increase (at 1200 utilization hours) of 3.47% is due to two factors. On the *demand rate* side, an increase in property and equipment, 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

FY2023 Cooling Cost	<u>Cooling Cost*</u> <u>(\$ / Ton-Hour 1200 Hrs)</u>		
Energy Park Utility Company	\$0.338		
District Energy St. Paul - Cooling	\$0.417		

*Excluding City fees and sales tax.

II. District Heating Rates:

District Heating proposes the following changes to Schedule A:

Single rate & Transition Rate:

Increase from \$0.0613 to \$0.0753 per kilowatt hour

Two-part rate:

Demand rate increase from \$5.80 to \$6.03 per kilowatt per month Energy rate increase from \$20.40 to \$32.75 per megawatt hour All other service charges will remain at the 2022 levels as indicated in the attached District Heating Schedule A.

Comparison of Heating Rates: 2019 – 2023
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	Actual FY 2019	Actual FY 2020	Actual FY 2021	Budget FY 2022	Budget FY 2023
Rates					
Demand (\$/kW/mo)	\$5.53	\$5.63	\$5.63	\$5.80	\$6.03
Energy rate	\$22.50	\$19.90	\$19.90	\$20.40	\$32.75
Fuel adjustment rate	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Energy (\$/MWh)	\$22.50	\$19.90	\$19.90	\$20.40	\$32.75
Single Rate (\$/KWH)	\$0.0615	\$0.0596	\$0.0596	\$0.0613	\$0.0753
Increase as %					
Demand (\$/kW /mo)	1.47%	1.81%	0.00%	3.02%	3.97%
Total Energy (\$/MWh)	-5.66%	-11.56%	9.70%	-6.55%	60.54%
Single Rate (\$/KWH)	-1.28%	-3.09%	3.36%	-0.49%	22.84%

The proposed District Heating *overall single rate* is projected to increase 22.84% between forecasted 2022 and budgeted 2023.

The proposed *demand rate* represents a 3.97% increase for budgeted 2023. 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 60.54% increase in 2023. This increase is largely driven by a increase 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

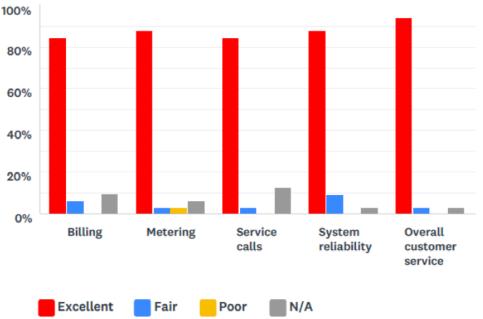
FY 2023 Heating Cost	Heating Cost*				
<u></u>	<u>(\$ / MMBtu 1700 Hrs)</u>				
Energy Park Utility Company	\$25.45				
District Energy St. Paul - Heating	\$22.07				

*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.

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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 3.47% is relatively small, staff recommends approval of the rate increase request.

Department	Description	2017	2018	2019	2020	2021
Police	Building Maint.	90,887.00	92,556.00	83,465.59	100,291.82	86,629.94
Fire	Station Maint.	27,034.00	28,046.00	28,246.71	30,634.89	30,239.74
Real Estate	Real Estate CHA	59,174.00	66,595.00	65,294.62	67,985.37	75,016.01
Library	Maint. Service	52,148.00	63,218.00	53,543.24	57,766.90	55,680.98
Total		229,243.00	250,415.00	230,550.16	256,678.98	247,566.67
% Change		-6.97%	9.24%	-7.93%	11.33%	-3.55%

<u>City District Cooling Expenditures by Department:</u>

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. Although the average rate increase request is for 22.84%, it is related to increased energy costs. Despite this year, the annual heating average rate has been stable over the last several years, including rate cuts in 2019, 2020 and 2022. Given that customer survey results reflect that most customers are satisfied with the service, staff recommends approval of the rate increase request.

Department	Description	2017	2018	2019	2020	2021
Police	Building Maint.	116,550.00	75,326.00	55,156.59	84,757.22	56,385.90
Fire	Station Maint.	32,408.00	33,981.00	31,821.37	36,079.47	33,810.57
Real Estate	Real Estate CHA	79,390.00	108,619.00	130,017.48	128,647.03	126,059.10
Library	Maint. Service	43,921.00	50,599.00	58,729.31	46,917.12	49,346.93
Total		272,269.00	268,525.00	275,724.75	296,400.84	265,602.50
% Change		9.87%	-1.38%	2.68%	7.50%	-10.39%

City District Heating Expenditures by Department: