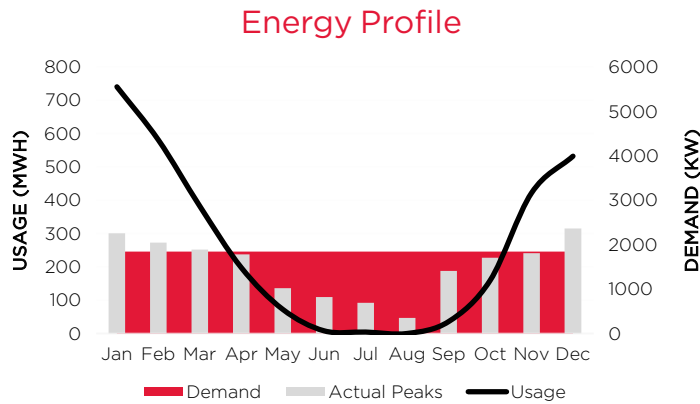
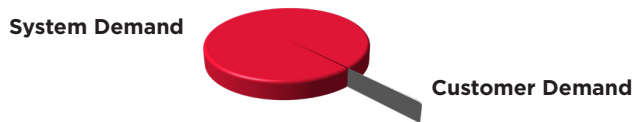


Heating and Cooling Demand Explanation



What is a demand charge?

The annual demand charge is based on District Energy's annual non-energy related costs which include energy production, energy delivery, operations and maintenance, repairs, capital expenditures, general, administrative, debt service, and working capital costs. This sum is divided across the total customer demand and charged to each customer based on their portion of system demand.



How is heating demand calculated?

A customer's heating demand (kW) is based on a building's weather normalized annual energy utilization. We rely on Minnesota's rolling 30-year average to normalize for weather. To calculate demand, a building's overall energy consumption (MWh) is tracked from June 1 - May 31. The customer's weather normalized energy consumption is divided by the customer's contracted utilization hours. The customer's heating demand is then multiplied by the hot water demand rate to calculate the monthly demand charge. The following is the formula we use to determine your monthly demand charge:

$$\text{Demand (kW)} \times \text{Demand Rate (\$ per kW per month)} = \text{Monthly Demand Charge}$$

The demand charge is determined each year prior to the heating season and billed to customers in 12 equal monthly installments throughout the fiscal year. A monthly charge provides customers with the ability to avoid seasonal spikes and forecast costs for a longer time period.

How is the energy charge calculated for heating?

To determine the energy charge, a customer's energy consumption (MWh) is measured each month and multiplied by the energy rate. The energy rate is based on District Energy's projected annual energy cost and usage, and is expressed in dollars per megawatt-hour. The energy charge is a pass-through of the system energy costs based on District Energy's cost to secure fuels for heating production and does not include a markup. The energy charge varies by usage. A fuel adjustment may be included with the energy charge for changes in the annual system fuel costs and also is expressed in dollars per megawatt-hour. The following is the formula we use to determine your monthly energy charge:

$$\text{Energy Consumption (MWh)} \times \text{Energy Rate (\$ per MWh)} \times \text{Fuel Adjustment (-/+ \$ per MWh)} = \text{Energy Charge}$$

Initial heating demand

For new customers, the initial demand is estimated based on building type, square footage, and either energy use prior to connecting to the district system or the energy model for the building's design based on anticipated use.

Heating demand adjustment

After a building has been on the system for at least 16 months, the customer's energy consumption is evaluated to determine any necessary adjustments to the contracted demand. The demand is annually adjusted each fiscal year beginning October 1st up or down by taking the customer's most recent June 1st through May 31st weather-normalized energy consumption. The normalized energy consumption is then divided by the customer's contracted utilization hours (1700 hours for most customers).

Reducing heating demand

To learn more about the steps you can take at your building to reduce your heating demand, please contact the District Energy team at 651-297-8955.