

## Western Michigan Utility Rates 2023-24

### Electric<sup>i</sup>

|                                 |                   |
|---------------------------------|-------------------|
| Pass Through <sup>ii</sup> :    | \$0.141197301/Kwh |
| Cost Avoidance <sup>iii</sup> : | \$0.05162 /Kwh    |

### Steam<sup>iv</sup>

|                 |               |
|-----------------|---------------|
| Pass Through:   | \$15.59 /Klb  |
| Cost Avoidance: | \$5.6987 /Klb |

### Chilled Water<sup>v</sup>

|                 |              |
|-----------------|--------------|
| Pass Through:   | \$0.3791/Ton |
| Cost Avoidance: | \$0.1588/Ton |

### Water/Sewer<sup>vi</sup>

|                       |  |
|-----------------------|--|
| Pass Through (Water): | \$0.734/M <sup>3</sup> or \$0.648/M <sup>3</sup> |
| Pass Through (Sewer): | \$0.908/M <sup>3</sup>                           |

### Natural Gas<sup>vii</sup>

|               |               |
|---------------|---------------|
| Pass Through: | \$4.6486 /Mcf |
|---------------|---------------|

<sup>i</sup> Based in 2022-23 actuals (22-23 Monthly Utility Rates.xls). Includes electric generated from cogeneration as well as electricity imported and export from/to Consumers Energy. Includes energy and demand charges. The accounting for the turbines is typical to a topping cycle plant whereas the natural gas is used to generate electricity and the exhaust heat is used to produce "free" steam. A small number of campus building are not on the campus grid and would fall under the appropriate Consumers Energy rate depending on voltage level. <https://www.consumersenergy.com/-/media/CE/Documents/rates/electric-rate-book.pdf>

<sup>ii</sup> Billable rates include the cost of fuel as well as the overhead cost of generation and distribution overhead. This rate is primarily used for billing internal utility customers.

<sup>iii</sup> Includes only the fuel costs. This rate is primarily used to evaluating energy conservation measures.

<sup>iv</sup> Based on 2022-23 actuals (22-23 Monthly Utility Rates.xls). Includes steam produced from heat recovery boiler duct burners and auxiliary boilers to meet steam loads when campus demand exceeds 50,000 lb/hr from the turbines.

<sup>v</sup> Based on 2014-15 actuals increased 25% to 2022-23 approximate cost. Includes main campus and Energy Resource Center chiller plants. Includes a mix of electric and steam absorption chillers.

<sup>vi</sup> Monthly flat rate charges in additional to water/sewer rates vary by service type and size also apply. Cost avoidance rate is the same as the billable rate since all systems owned by City of Kalamazoo and cost avoidance will be equal to the billable rate.

<https://www.kalamazoo.org/Residents/Water-Sewer-Service/View-Water-Sewer-Rates>

<sup>vii</sup> Based on the average cost per MCF last fiscal year (including transportation and gas cost recover). Natural gas is a direct pass-through from Consumers Energy based on the following rate document. Cost avoidance rate is the same as the billable rate since all systems owned Consumers Energy and cost avoidance will be equal to the billable rate. <https://www.consumersenergy.com/-/media/CE/Documents/rates/gas-rate-book.pdf>