What’s the difference between capacity and energy?

What is Capacity?
The U.S. Energy Information Administration (EIA) refers to capacity as the maximum output of electricity that a generator can produce under ideal conditions. Capacity levels are normally determined as a result of performance tests and allow utilities to project the maximum electricity load that a generator can support. Capacity is generally measured in megawatts (MW) or kilowatts (kW).

J.B.Sims Generating Station has a net capacity of approximately 70 MW.

What is Energy?
Energy is the amount of electricity that is produced and consumed over time. Energy is measured in megawatt-hours (MWh). Each of us consumes or uses energy. When you turn on a light, plug in a computer or cool a home, you consume energy.

J.B.Sims Generating Station produced approximately 273,300 MWh of energy in 2017.

Capacity Markets
GHBLP’s local generation and remote renewable energy entitlements provide adequate installed capacity to meet the necessary reserve requirements of the regional Independent System Operator (ISO) and to sell a small amount of excess capacity to others in the regional market.

Future Power Supply Planning
In its 5-year Strategic Plan, the BLP has committed to transition to a “more sustainable, economical, and diversified power supply portfolio,” to ensure we meet the energy and capacity needs of our community.
## ACTUAL Residential Energy Use & Rate Comparison

<table>
<thead>
<tr>
<th></th>
<th>January to December 2017</th>
<th>January to December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of residential customers</td>
<td>12,199</td>
<td>12,002</td>
</tr>
<tr>
<td>Total Residential kWh's of energy used</td>
<td>79,523,753 kWh</td>
<td>80,601,370 kWh</td>
</tr>
<tr>
<td>Average kWh's of energy used per customer per month</td>
<td>543 kWh</td>
<td>560 kWh</td>
</tr>
<tr>
<td>Total amount billed</td>
<td>$11,134,970</td>
<td>$11,819,927</td>
</tr>
<tr>
<td>Actual cents per kWh</td>
<td>14.0 cents</td>
<td>14.7 cents</td>
</tr>
<tr>
<td>Number of Cooling Degree Days - Decreased in 2017</td>
<td>8.8 % above normal</td>
<td>37.0 % above normal</td>
</tr>
<tr>
<td>Number of Heating Degree Days - Decreased in 2017</td>
<td>10.2 % below normal</td>
<td>11.8 % below normal</td>
</tr>
</tbody>
</table>

### Comparing 2017 to 2016 -

The AVERAGE amount billed to each residential customer decreased 7.4% year over year. This decrease was due to rate reductions implemented July 1, 2016 and decreased energy use in 2017. The AVERAGE energy usage of each residential customer decreased 3.0% year over year. This decrease was primarily due to cooler summer weather in 2017.

### What is a Degree Day?

**degree day** Cold winter weather or sweltering summer heat can increase the cost of your utility bills. You are able to determine the weather impact by using a unit of measure called a Degree Day. A higher number of degree days will require more energy for cooling or heating your home or business.

### 2 types of degree days -

Cooling and heating. Each compares the current day’s average temperature to a baseline standard of 65°F to determine the energy demands of cooling or heating your home or business. Days with an average temperature of 65°F have no cooling or heating degree days.

**Hot days** are measured in cooling degree days. On a day with a mean temperature of 80°F, 15 cooling degree days would be recorded (80-65=15).

**Cold days** are measured in heating degree days. For a day with a mean temperature of 40°F, 25 heating degree days would be recorded (65-40=25).

Adding the cooling or heating degree days together for a whole month (or year), provides a way to compare a previous month’s (or previous year’s) cooling or heating demands to that of the current month (or current year).

If you have questions about your bill don’t hesitate to call our Customer Account Representatives at 616.846.6250 or email us at customerservice@ghblp.org