BASE RATE EXPLAINED—THE KEY TO RELIABLE ELECTRIC SERVICE
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PG 3

BASE CHARGE EXPLAINED—
The Key to Reliable Electric Service
At Beartooth Electric, our mission is to provide our members with reliable, reasonably priced electricity and related services delivered in a safe and efficient manner.

BEC rates are set based upon load and designated into classes including Residential, Small Commercial, Large Commercial, Irrigation and Industrial.

The Residential and Small Commercial classes have two components on their monthly power bill—1) the Energy Charge (kWh), that varies with how much electricity is used and 2) the Base Charge, the fixed monthly charge. The remaining classes also have a third component—the Demand Charge (KW). The Demand Charge varies monthly according to the maximum 15-minute peak energy usage placed on Beartooth’s electric system during the billing period.

Here’s a detailed look at each component:
1) The Energy Charge (kWh)—The energy charge is simply the amount of electricity (kWh) used times the rate. This charge covers the costs of purchasing and delivering energy from our power supplier and pays the remaining fixed costs that are not covered by the Base Charge. For example, if you had ten, 100 watt light bulbs turned on for one hour you have consumed 1 kWh. At the residential rate it would cost you 8.8768 cents. This should make you think about purchasing LED bulbs next time you need to replace a burned out incandescent bulb.

2) The Base Charge—Undoubtedly, the most misunderstood part of every member’s electric bill is the Base Charge, the monthly fee—no matter how much electricity is used. From a rate perspective, it’s one of the most frequent things we are questioned about, so let’s shed some light on this part of your monthly bill.

Beartooth Electric serves a diverse membership. Some of our members use a lot of electricity all year long, and some may use electricity only one or two months per year. Whether you use a lot or a little, the cost of getting electric power to your location remains the same.

Many utilities, such as your home phone, cell phone, cable or satellite TV service utilize some form of monthly charge to cover the cost of providing service to your home. So, when you need electricity to heat or cool your home, pump your well, refrigerate your favorite beverage or irrigate your fields, all you have to do is flip a switch, throw a breaker or plug into an outlet. What happens before that flip of the switch is a significant commitment of time, capital, equipment, infrastructure and people your cooperative has in place to ensure that power is there when you need it. The Base Charge—It’s the key to your reliable electric service.

3) The Demand Charge (KW)—The Demand Charge is based on the highest capacity required during the given billing period, typically a 15-minute interval during that billing cycle.

To use an analogy, think about consumption (kWh) as the number that registers on your car’s odometer—to tell you how far you’ve driven—and demand (KW) as what is captured on your speedometer at the moment when you hit your max speed. Consumption (kWh) is your overall electricity use, and demand (KW) is your peak intensity, or maximum “speed.”

Within any business there are numerous electrical loads. As an electric utility we are responsible to insure during periods of peak loading in summer or winter that our electrical system; e.g. wires and transformers, etc. are sized properly to deliver continuous service. It may only be for a couple hours per year, but our system needs to be built to handle that peak electrical load. Commercial and Irrigation accounts include a Demand Charge on their billing to allow the cooperative to recover costs associated with the larger electrical loads placed upon the system. Consequently, to reduce the load on the cooperative’s system and the amount of billed Demand to the member, it is wise to look at all loads and determine if some don’t need to be on while other loads are running. This is very similar to asking your kids to turn off the lights when they are not in the room.

Energy Efficiency
Tip of the Month
Here’s a cool tip for your fridge! Cover liquids and wrap foods stored in your refrigerator. Uncovered foods release moisture, causing the compressor to work harder.

Source: energy.gov
What does my Base Charge cover?

Have you ever wondered what your monthly Base Charge supports? It takes a solid infrastructure and great people to keep safe, reliable and affordable power flowing to your home. Here’s just a few examples of what’s included in your Base Charge:

Substations, Poles, Wires, Trucks, Safety, Facilities, Employees, Accounting, Billing & Administration and so much more...

Continued from page 3.

Members ask many questions about rates. Here are the most frequent questions and our response:

1. What makes up the Base Charge?
   As described above, the Base Charge supports a significant commitment of time, capital, equipment, infrastructure and people your cooperative has in place to ensure that power is there when you need it.
   
   In addition, there are a whole host of expenses we incur that have nothing to do with how much electricity each member uses which include, just to name a few, the cost of insurance, interest, and taxes. One other very simple example—at the end of each month, we read your meter, calculate your bill and have it printed and mailed to each member. This is a relatively small cost, but illustrates that with some expenses, regardless of how much electricity you use, it costs approximately the same to perform this function for all members in each rate class. Because of this, we include those expenses in the Base Charge.

2. Members sometimes ask why Beartooth Electric’s Base Charge is higher than some neighboring electric utilities.
   It’s because of our low consumer density; Beartooth Electric serves an average of 2.5 members per mile of line. Compare this to a city where the average density is easily more than 100 customers per mile of line. It is always more economical to serve areas of higher density.

3. I don’t like the Base Charge so I’m just going to disconnect my service (to my hunting cabin, or seasonal home, etc.) and just reconnect it when I need it.
   You do have that choice but I’d like to give you some information that may help you decide if this is the best option for you.
   To restore your service within a year of the disconnection, a member must pay a reconnect fee of $150 (administration, truck, lineman). In addition, the Cooperative will bill the monthly $33.50 Base Charge for the months the service was disconnected. Disconnection does not stop the availability of the system nor the job to maintain it.

4. Rates are too high!
   Actually, did you know rates have decreased 25% since 2015? Rates went down:
   - 5% in August 2015
   - 10% March 2016
   - 5% in August 2016
   And, 5% decrease for Residential, Large Commercial and Industrial users; 6.5% decrease for Small Commercial Class; and 2.5% decrease for Irrigation Class in July 2017.

   Beartooth Electric currently ranks in the middle of the pack when comparing rates and base charge to other utilities (rural electric cooperatives and investor-owned utilities (IOUs) that border our service area. In fact, our residential kWh energy charge of .088768 is 27% lower than NorthWestern Energy at .112820. However, their Base Charge is $4.10 (many more customers per mile). Spoiler alert: We recently conducted a rate comparison that we’ll share in next month’s Rural Montana.

   On a side note, if your monthly bill has increased, look at your usage and any changes in your energy consumption patterns. Using your FREE SmartHub application may provide the answers with its energy management tools. Access your SmartHub from the BEC website or download SmartHub for Android and iOS smartphones from your app store.

   Hopefully, you can see that a lot goes into designing rates that are both fair and equitable among our members and between different rate classes. Nobody really likes the Base Charge, but it is necessary to ensure we have rate equity amongst our members. Please call us if you have any questions—we’re here to serve.

Greetings members!

It looks like summer has finally come our way, at least the chance of snow has dropped below 50 percent.

We had a lot of interest at the Shares du Soleil informational workshops last month in Red Lodge and Absarokee. Solar has certainly garnered a lot of interest amongst our members and I am more than happy to keep answering questions. BEC’s solar project is in direct response to member’s interest in renewable options. To be clear, it’s just an option for members to consider. It doesn’t replace Net Metering at your place of business or residence if that is an option for you to consider. It’s also probably not at the top of your personal investment choices, but it’s a hedge against future energy expenditures.

But for some, a little bit is the right socially responsible thing to do. These projects have been incredibly successful at other Montana electric cooperatives. Some cooperatives are on their 3rd phase of development based upon member demand. BEC member interest will dictate the size of our offering. The opportunity to purchase Shares Du Soleil Certificates, the output from a panel(s), began July 1.

You also received an update on our meter upgrade project last month and a letter from me highlighting some of the projects underway at the cooperative. Please, if you have any follow-up questions, give me a call. We are off and running!
The project will be put out to bid.

Solar Project Q&A

What am I actually buying?
• You are purchasing the output from one or more solar panels measured in KWHs.

• Monthly production will be credited to your next month’s bill in KWHs. Production varies month-to-month depending on sunshine.

• Members will be issued a certificate documenting their purchase of the output from a solar panel(s) over the life of the project. The life of the project is estimated at 25 years.

What is the project schedule?
• The sale of certificates will commence on July 1, 2018.

• Members will initially be limited to two (2) certificates. If there are still certificates available, interested members may indicate an interest to purchase remaining certificates.

• The sale of certificates for this project will conclude on November 1, 2018.

• The project will be put out to bid in January 2019. A final contractor will be selected and construction will begin in March 2019. The project may be completed by April 1, 2019 (weather permitting) and members will begin receiving bill credits in the following months.

Are other members underwriting the costs of this project?
• No, this project has been designed as a stand-alone project financed by those that benefit from the energy output of the solar panels.

• The Cooperative will limit its involvement in the project to maintaining the panels, cleaning and snow removal based upon actual need.

Are these certificates transferable?
• Yes. The credits will follow you to any other location served by Beartooth Electric or if you move, the certificates can be sold, donated or transferred to family or friends. Remember, you own the output.

Are there tax credits available from this project?
• The answer to that question is between you and your accountant. Make sure they understand you do not actually own a piece of equipment, rather the energy produced from the solar array.

Who owns and maintains the solar array?
• The solar array will be owned and maintained by Beartooth Electric Cooperative.

Where will it be located?
• It is currently scheduled to be built on the south property line of Beartooth Electric’s parking lot. It will be designed to act as a functional carport structure.

How many solar panels will be included in the solar array?
• The project is very scalable based upon member interest. An estimated 108 panels can be installed in this particular project location. If interest is less than that, fewer panels will be designed into the project.

When will the certificates be available for purchase?
• Certificates to purchase the output of one or more solar panels will be available on a first come, first served basis beginning July 1. A payment of 50% ($375) will be required at that time.

• Each certificate is currently estimated at $750. Actual costs will be determined once bids from contractors are finalized around February 2019. Second payment of the balance owed ($375) per certificate will be payable January 4, 2019.

What are the economics behind the purchase of the output from one project solar panel?
• Each panel is rated at 300 watts initially. There will be a slight degradation of the panel efficiency over the life of the project, currently estimated at 25 years.

• The cost to purchase the output from each panel is currently estimated at $750. Each panel is estimated to produce 330 KWHs per year. Actual output will vary month to month based upon solar intensity.

• At current retail energy rates, a member may expect a bill credit of approximately $29 per year.

• Bill credits may fluctuate as retail rates and rate structures change over time.

• Each panel has a Simple Payback of approximately 25.9 years at current retail rates.

The necessary upgrades to Belfry substation have been completed and our crews will be moving on to the next four substation upgrades slated for this year. We still anticipate meter change outs to begin in the Belfry area the first of August. Back office computer billing hardware and software started arriving last month as well.

Included in our mailing last month was a reader survey card on the content of our Rural Montana communications. I hope you all spent a few minutes to respond to the survey, it only makes us better. Results of the survey contest will be announced in next month’s Rural Montana.
Big Projects are Coming Up.
Let us hear from you.

The BEC Board’s risk management committee reports to members as the committee, board and management evaluate information and make decisions. The committee is a tool for applying due diligence—avoiding risk by doing the homework and analysis necessary to make informed decisions. We share our evaluations through Rural Montana as well as other methods, including a new Board Reports tab on the BEC website http://www.beartoothelectric.com.

We will share timely reports and information on the new website location. The objective is to provide full information and to hear from you. We encourage Rural Montana readers as well as online visitors to check out the reports on the website and tell us what you think. Phone us (board trustee numbers are on the website), email or track us down at community events.

Upcoming projects include meter upgrades, a potential member-financed solar generation project, and full examination of whether changes to BEC rate structures could benefit members. Decisions about financing the required meter upgrades at BEC are made and the replacement project is underway. We are exploring how a small solar generating facility financed by interested members might offer members an opportunity to support renewables and learn about solar operations in our area. We are gathering information about rate structure developments throughout the country and will start BEC evaluations later in 2018.

You are hearing from Beartooth Electric. We need to hear from you too. Visit the BEC website. Contact your trustees. Attend board and committee meetings. Join a committee. Consider serving on the BEC board.