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POWER NOTES - GEORGIA POWER EDITION

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VOGTLE PLANT UPDATE

GA Power continues to move forward with the construction of two new nuclear generating units at the Vogtle Plant. These will be units 3 and 4.

The completion dates for these plants have been repeatedly postponed. In January, GA Power said that the plants are now scheduled to go on line in 2019 and 2020. This is three years later than the initial projection. In addition, cost overruns are around \$1 billion.

GA Power blames the contractors for the delays and cost overruns. The contractors blame GA Power. Lawsuits have been filed and are in progress.

In 2009, the GA General Assembly passed a law allowing GA Power to collect money from customers for the plants before they begin producing electricity.

In 2014, GA Power customers paid an average of \$8/month to cover the cost of the plants. Most of those customers were residential customers. Commercial and industrial customers paid much larger amounts. Ultimately, the delays and cost overruns will significantly increase the total cost of the plants and the expense will be passed on to customers.

Nuclear power continues to be a clean and safe source of electricity, compared to other alternatives. However, the regulatory, legal and political systems that exist today make it extremely hard to build cost-effective nuclear power plants in the U.S.

Until the Fukushima nuclear disaster occurred in Japan, the world had gone years without a significant nuclear incident. During this time, people gained confidence in the ability of power companies to build and operate nuclear power plants. There were 30 new nuclear generating units being planned for in the U.S. After the Fukushima incident, many power companies abandoned their original plans and the number of new nuclear power plants significantly decreased to 13.

SAVE MONEY AT HOME WITH NEW GA POWER RATE

GA Power has a new residential rate that offers significant savings potential for many residential customers. The new rate is called Time Of Use–Residential Demand (TOU-RD). The standard rate for almost all residential customers is called Residential Service.

TOU-RD includes a KW demand charge, which does not exist on the Residential Service rate. This makes TOU-RD similar to the rates being used by most commercial customers. With a KW demand charge, GA Power will charge the customers on this rate for the highest 30 minute average peak demand established during the month.

The KWH energy charge on TOU-RD is much lower than the energy charge on the Residential Service rate.

To maximize savings under TOU-RD, customers would want to minimize their peak demand. This can be done by avoiding running your heaviest pieces of electrical equipment at the same time. By using the time delay button on your dishwasher, you can shift that usage and your electric hot water heater to the middle of the night when most other appliances are idle. Similarly, by washing and drying clothes on the weekends or at night, customers can reduce their peak demand and save money.

We believe that customers using more than \$150/month on average are most likely to save money on TOU-RD.



Electric Bill Fundamentals

The electric bill for most commercial customers includes:

- Basic Customer Charge (BCC)
- Demand Charge
- Energy Charge

Understanding these can help you minimize your electric bills.

Basic Customer Charge (BCC)

The BCC is a fixed charge for the basic facilities and services for the average customer in that rate class. This includes the transformer, wires between the transformer and the customer, right of way clearing and maintenance for those wires, the meter, meter reading and printing/mailling bills.

Depending on the size of the customers on a particular rate, the BCC can range from less than \$10/month to more than \$1,000/month. For most customers, the BCC is insignificant.

Customers must pay the BCC on all active electric accounts whether or not they use electricity through the account. If you have accounts that are expected to not use electricity for an extended period, you should consider having the service disconnected on those accounts to avoid paying the BCC. Be advised that an electrical inspection and reconnection charge may be required to reestablish service at the facilities.

Demand Charge

The demand charge is based on the peak 15 minute or 30 minute (depending on your provider) average consumption of electricity. It is measured in kiloWatts (kW). Ten 100 Watt light bulbs running at the same time have a demand of 1,000 Watts, or 1 kW.

The demand charge reimburses the utility for the capital investments they make in their system plus a profit margin. Capital investments include the cost of power plants, transmission systems, distribution systems, right of way clearing and maintenance, vehicles, buildings and other fixed assets.

The demand charge can be up to 50% or more of a commercial customer's total bill. The demand charge can range from \$0/KW (for smaller customers) to \$18/KW or more.

Instead of running all equipment at the same time, stagger startup times to reduce peak demand which can ultimately lower the demand charge.

For example, if you have multiple air conditioning units, it is best to start some of them and allow the space to achieve the desired temperature. Afterwards, startup the remaining units. This will avoid having all air conditioning units running at full load for an entire 15 or 30 minute demand interval.

Energy Charge

The energy charge is based on the demand in KW multiplied by the running time for the equipment in hours. Energy is measured in kiloWatt hours (kWh). For example, a 1,000 Watt (1 kW) space heater running uninterrupted for 5 hours will consume 5 kWh.

The energy charge reimburses the utility for the fuel, operating and maintenance costs associated with service customers. This includes coal, labor, and many other routine expenses associated with running a business. The energy charge can range from less than \$.01/kWh to more than \$.15/kWh. Customers paying less than \$500/month often pay no demand charge but a very high energy charge.

The amount of energy consumed and the associated energy charge is a function of the amount of equipment a customer has and the number of hours the equipment is operated. Customers can reduce their energy costs by reducing the number of hours their equipment runs. For example, shutting off as many lights as possible before leaving for the day can reduce your energy consumption.

REMINDER: Replace your air filters!

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