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## POWER NOTES - DUKE ENERGY EDITION

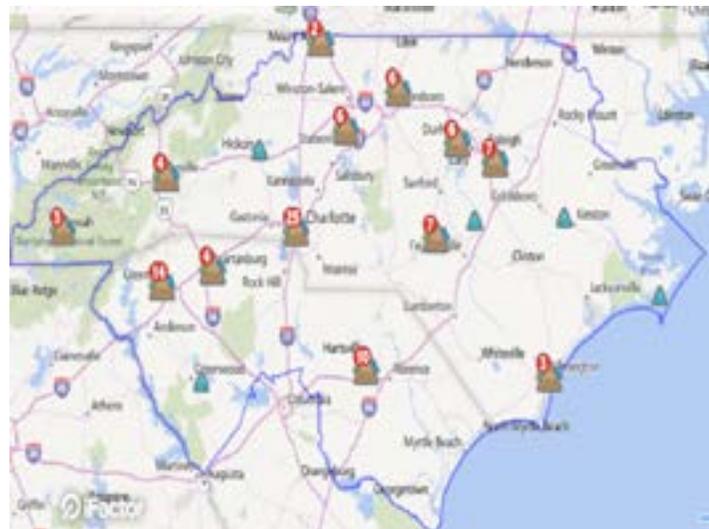
### SPRING 2015 ISSUE - POWER NOTES

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### WHEN WILL YOUR LIGHTS BE BACK ON?

Summer thunderstorm season is here. Unfortunately, that also means we are subject to storm related power outages. During an outage, you may want to know when your power will be back on. This helps you decide whether or not to send employees home. Duke has a map on their website that shows all current outages and the estimated service restoration time for each outage. By clicking on an outage, the map allows you to zoom in on your specific outage and provides an estimate of when your power will be restored.

The link is:  
<http://outagemap.duke-energy.com/ncsc/default>.



### FREE LIGHT BULBS!

#### Residential

Yes, they are really free! Even the shipping is free. Duke Energy has a program where they will mail 15 compact fluorescent light bulbs to their residential customers upon request. This will do the following for you:

- Save you the cost of buying the light bulbs
- Save you energy and money on your electric bills
- Save you the time and labor of replacing bulbs since compact fluorescent bulbs last many times longer than older incandescent bulbs

Go to the following link to order your bulbs:  
<http://www.duke-energy.com/deals/default.asp>

#### Commercial/Industrial

The bulbs aren't free for commercial or industrial customers, but they are available at a greatly discounted price. Take advantage of Duke's very low cost, high efficiency light bulbs for commercial and industrial customers. For orders over \$20, the shipping is free. Receive all of the savings that are received by residential customers and get the bulbs at a very low price.

Go here for more details:  
<http://www.duke-energy.com/business-savings-store/>



## 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. Afterward, 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!**

### **Utility Management Services, Inc.**

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