



**POWER NOTES - APPALACHIAN POWER EDITION**

**SUMMER 2015 ISSUE - POWER NOTES**

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**SAVE ENERGY, MONEY AND THE ENVIRONMENT**

UMS provides energy audits. The purpose of the audits is to reduce your energy consumption, reduce your utility bills and to help our environment. The audits are performed by Brian Coughlan.

Coughlan is the president and founder of UMS. He has a BS and an MS in Electrical Engineering, an MBA, is a registered Professional Engineer and has appeared as an expert witness in multiple utility rate cases. He is also a Certified Energy Manager, Certified Energy Auditor, Certified Energy Procurement Professional and a Certified Demand Side Management Professional.

The audits include a walk-through of your facility(ies) in search of energy savings opportunities. Call Mr. Coughlan at (910) 793-6232 ext.102 for questions or details.

**HELP WANTED**

UMS needs one or more Account Managers in the Appalachian Power service territory. If you know of someone who provides excellent customer service and excels at outside B2B sales of a technical, professional service, please have them email a resume' to [Careers@UtilManagement.com](mailto:Careers@UtilManagement.com).

**ALL UMS CUSTOMERS INVITED TO THE WORLD ENERGY ENGINEERING CONGRESS AS UMS GUESTS**

**Location: Orange County Convention Center  
Orlando, Florida**



UMS is again a sponsor of the World Energy Engineering Congress (WEEC). You are invited to attend the expo at the WEEC as our guest. Your two passes will arrive in September.

**Dates: 9/30 thru 10/2/2015**

The WEEC is well-recognized as the most important energy event for end users and energy professionals in all areas of the energy field.



**Keynote Speaker: Condoleezza Rice**



## **IMPORTANT ENERGY TERMS**

### **DEMAND**

Electrical demand, measured in kiloWatts, is a big part of the electric bill for most business customers. Taking a few simple steps to reduce your demand can significantly reduce your electric bills. This page covers the basics of electrical demand and how you can reduce your demand and bills.

Demand is a measure of how much equipment a customer has running at the same time. Running a lot of equipment at the same time places a larger burden on the power company's system.

### **SIMPLE DEMAND EXAMPLE**

- Electric water heater: 4,500 Watts (4.5 kW)
- Electric oven: 6,000 Watts (6.0 kW)
- Hand held blow dryer: 1,500 Watts (1.5 kW)

Running this equipment at the same time would result in a peak demand of 12.0 kW. If the equipment was not run at the same time, you could have a peak demand of only 6.0 kW.

### **DEMAND INTERVAL**

Peak demand is the average demand established over a pre-determined interval. Most power companies use a 15 minute or a 30 minute demand interval. There will be one 15 or 30 minute interval during the month that will determine your peak demand and your demand charges for the month.

### **DEMAND CHARGES**

Demand charges vary widely depending on your power provider and the rate under which you receive service. Smaller customers (less than about \$500/month) often do not have a demand charge. Other customers will typically have a demand charge that varies from \$2/kW to \$20/kW.

### ***UMS ACCEPTS CREDIT CARD PAYMENTS***

To pay your UMS bill by credit card, please contact Mary Mooney at (910) 793-6232 x 109.

### **RATCHET DEMAND**

Many electric rates charge a percentage of the power demand established in a rolling 12 month period. Therefore, establishing a high peak demand in one 15 minute interval can increase your electric bills for a full 12 months! This is called a demand ratchet.

### **REDUCING YOUR DEMAND**

The easiest way to reduce your peak demand is by working to minimize the number of pieces of equipment that run at the same time. Minimizing the number of pieces of thermostatically controlled equipment that run at the same time can significantly reduce your peak demand. Thermostatically controlled equipment includes heat pumps/air conditioners, refrigerators/freezers, stoves/ovens, water heaters, Coke machines, water fountains, coffee pots, space heaters and more.

To help reduce your peak demands, do the following:

- Avoid starting all of your HVAC equipment at the same time. Start this equipment in part of your building, wait for those parts of the building to achieve the desired temperatures and then start the HVAC equipment in the rest of the building.
- Turn off some HVAC equipment and water heaters during a power outage. Turn them back on after the power returns and the temperatures in the rest of the building achieve the desired levels. Otherwise, the outage is likely to increase your bills for the next 12 months.

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