

## Understanding Your Electric Rates

In today's competitive world, companies are aggressively seeking to reduce their costs. Successful cost management programs increase profitability, improve cash flow, and are vital for the company to remain competitive. Part of any cost reduction plan should include strategies to manage utility expenses.

Managing the price you pay for your electric needs begins with choosing a pricing plan. Failing to take advantage of the best pricing options will needlessly raise your operational costs.

### Poke n Hope

As a young man, I had occasionally visited the local pool hall.... purely for educational purpose. I learned many interesting things there, including some great terminology. One term I never forgot is, "Poke n Hope".

"Poke n Hope" is when an unskilled player just whacks the cue ball and then hopes that something good will happen. That strategy didn't win many games.

### Winning

A great cost effective way to manage your utility expenses is to make sure that you are getting it at the best price.

Conservation measures will reduce your consumption. Choosing options that are favorable for your demands will optimize your price.

I was in a meeting once when supervisors were collecting praises for their cost-saving ideas. One idea was to save the company \$10,000 per year by moving a water fountain 10 steps closer to the work area. It was an excellent idea. The trip to the water fountain should take less time now. However, did savings occur?

I always wondered.... what would happen if the employee walked slower now?

Unlike some costs saving ideas that are vague or hard to verify, *reductions in your electric bills are verifiable by looking at the utility invoice.*

### Billing Charges

Your electric bills consist of three types of charges. There are other charges but these are consistently, the most expensive items.

- charge for KWH consumed
- charge for your highest rate of consumption (demand KW )
- my personal favorite, "billing adjustments" which may account for more than 50% of the billing.

A billing "ratchet" can also influence your bill. You may have noticed the result of a "ratchet" if a bill indicated that your "actual" demand is less than the "billed" demand. Ratchets are built into your rate schedule and allow you to be charged for more power than was used. A ratchet may be based on, your highest demand during the past 12 months, set by your selection of rate schedule, or as a penalty for low power factor.

In most cases, the schedule will have the clause, "billed demand will be the highest of," then will list two or three different factors.

### Common Rate Types

A *Time of Use (TOU)* rate is a pricing plan when per unit price is based on, when it was used.

The *General Service (GS)* rate is a plan that is usually available to any type of business.

An *All Electric (AE)* rate is usually for consumers that don't have natural gas in the facility.

## Electric Bills 101

To get a idea of how your bills are calculated, it is helpful to understand how a rate schedule works.

### Basics

(1) Electric charges are based on, how much is consumed and, the rate of consumption.

(2) The prices you pay for service are governed by your selection of pricing options.

The invoice;

An electric bill identifies *consumptions* as kilowatt-hours or KWh.

The highest rate of consumption during the billing period is, your *demand*. Your demand is identified as KW.

Rate structures;

Electric consumption and demand *quantities* are usually priced, according to one of the following methods.

- “Flat rate”- when the per unit price does not change
- “Block rate”- can be either *inclining* or *declining*. With a declining block, the more used the lower per unit price. For example, the utility may charge \$.10 per KWh for the first 25,000 then \$.09 for the next 25,000 and .08 for what is left. Another common version of a block rate is when the number of KWH inside each block, is determined by demand, instead of the fixed number of KWH, as in the above example.

## A Brief Introduction To Rate Schedules

### Time Of Use Rate (TOU)

This is a rate where the price of your electricity depends on the time it was used. On your bill, you will notice that consumptions and demand charges are divided into *peak*, *shoulder*, and *off peak* hours.

“Peak” hours are the most expensive and may run consecutive, for one period per day, or split up into multiple time periods. The hours of the day that peak hours occur vary with each utility. Typically, peak hours occur during warmer months with no peak hours for nights, holidays, weekends, and winter months.

“Shoulder” or “Intermediate peak” are the hours between peak and off peak hours. These are the next most expensive hours. Shoulder hours usually occur during the warmer months, the rest of the year these same hours are usually off peak.

“Off peak” are the least expensive hours. Off peak hours, occur during the hours of the provider’s lowest load. These hours are usually during nights, holidays, weekends, and winter months.

Nearly all companies that offer TOU rates also have demand charges. Demand charges are also broken into peak, shoulder, and off peak hours.

### **General Service Rate (GS)**

There are many types of these schedules. GS charges are usually based on either “flat” or “block” rates. Your electric provider may also offer versions for small, medium, and large consumers. Demand charges can also be in the form of, inclining or declining block, flat, and some KW may be included with the monthly base charge.

### **All Electric Rate (AE)**

This type of rate usually requires that all industrial processes, water heating and space conditioning is powered electrically. Some providers allow businesses to use renewable fuels and still qualify.

These schedules come in many forms, including TOU and GS. In theory, it is for the company that has invested in electrically powered equipment and then, rewarded with lower electric rates. Don't bet the farm.

### **Miscellaneous Rates**

There are many other types of rates. A provider may offer rates for, specific consumer types such as

- loads over 1,000 KW
- grocery or retail stores
- lighting for athletic fields

Most of these schedules will include block rates for demand and KWh charges, and may even offer TOU versions.

### **Adjustments**

Billing adjustments are fickle animals and can change monthly, annually, or several times each year. Just a few types of adjustments are, fuel, utility license tax, ad valorem tax, environmental fees, and storm damage fees. The charges for these adjustments can differ between rate schedules, within the same utility company. Adjustments can be applied either as a, flat monthly charge, per KWH charge, or as a percentage of an invoice subtotal. Your electric provider can have multiple billing adjustments, each with, different rates, methods of calculation, and changing prices at different times of year.

### **In Closing**

My purpose is to shed some light on the rate options that may be available to you. This paper *is not* meant to persuade you to change to any rate program mentioned. Any decision to change your arrangement, or pay your next bill, should be an informed decision. The high costs of energy along with the complexity and variety of pricing options, make it necessary to get experienced professionals to help you make the best decisions for your electric purchases. “Poke n Hope” is expensive.

Author: Stan McCracking,  
Senior Auditor/Analyst  
Sands Utility Professionals