

# ELECTRIC UTILITY RESTRUCTURING AND THE LOW-INCOME CONSUMER

Facts on File: No. 3

Fisher, Sheehan & Colton, Public Finance and General Economics

October 1997

## The Components of Electric Service

When people talk about competition in the electric industry today, it is necessary for them to understand the different parts of their electric service. The local electric company today provides more than kilowatt hours (kWh) of electricity. The electric service can be divided into four different components:

- o Generation
- o Transmission
- o Distribution
- o Customer service

The "competition" which is being talked about for electric utilities will occur in the generation part of the industry.

### Generation

The generation part of the local utility bill involves the actual production of electricity at a power plant. The costs of producing electricity through power plants can be thought of in much the same way as the costs of buying a new car.

First, there is the purchase price of the car itself.

While some cars cost \$10,000 to buy, others cost \$50,000. Second, even aside from the purchase price, there are the operating costs of the car. The costs of gasoline, oil changes, tires, maintenance, insurance, and the like vary on a car-by-car basis.

Similarly, the generation part of a bill includes two primary components. On the one hand, there is the capital component. This involves the actual cost of building the power plant, including financing costs. On the other hand, there are the

production costs. The major components included here are power plant fuel expenses (coal, fuel oil, natural gas) as well as maintenance expense.

### Transmission

When electricity is generated at a power plant, it is generated at very high voltage levels. A volt is a measurement of the power of electricity going through a wire. The electric transmission system takes that high voltage electricity and carries it, often over long distances, so that it can be used by individual consumers.

The transmission lines run to electric substations where the voltage is reduced. The electricity then goes to further and further substations where, in each instance, the voltage is reduced further.

### Distribution

Ultimately, the electricity is delivered to individual consumers over the "distribution system" consisting of wires and poles running to each individual building. The goal is to carry the power at high voltage to get it as close as possible to the actual user of the power before it is "stepped down."

Power begins its journey on the transmission system at anywhere from 27,000 to 765,000 volts. It is delivered to individual consumer homes at either 115 or 230 volts.

In short, the generation, transmission and distribution facilities make up the network that produce and deliver electricity to consumers.

### Customer Service

It would be easy to conclude that the "service"

provided by an electric utility is solely the "service" of providing this power through the wires to the consumer. A more accurate approach, however, is to consider an electric utility as a distributor of a "manufactured" product and adopt the manufacturing concepts of "product" and "service." In the manufacturing world, a company's "offering" to its market is composed of both a physical "product" and a "bundle" of related or supporting "services."

A simple example would be the appliance manufacturer who offers free delivery, free installation and a 90-day warranty with the purchase of any appliance. The delivery, installation and warranty comprise the "service" components of this offering.

Applying these concepts to an electric utility leads one to define the actual electricity provided to consumers as the "product" component of the company's market offering. All other components of electric power or supporting the provision of electric power would be the "service" component.

For the average consumer, the customer service component would thus consist of things such as meter reading, sending monthly bills, receiving and booking payments, and the like.

### **Services to Payment Troubled Customers**

In addition to these services to the "average" consumer, some customers use expanded services as well. Services to payment troubled customers may include things such as negotiating deferred payment arrangements when bills cannot be paid on time, or obtaining information about public and private sources of bill payment assistance. Other consumers may have occasion to make inquiries about meters that appear to be running too slow or too fast, to dispute a bill as inaccurate, or to challenge bills that are based on "estimates." Each of these costs will be in addition to the generation, transmission and distribution charges.

### **What Goes into a Utility Bill?**

The generation part of a residential consumer's utility bill represents about one-third of the monthly cost of electricity. If a consumer's monthly bill is \$70, therefore, the generation part of the bill would be roughly \$21.

In this case, if a person could obtain a 15% discount on his or her generation bill, the discount would be roughly \$3 a month. When the transmission, distribution and customer service components of the bill are added, the 15% discount means the customer would be paying a monthly bill of \$67 rather than \$70.

### **Summary**

The electric industry is made up of several different components. The component that will become competitive involves the generation of electricity. This component represents roughly one-third of a consumer's total electric bill. As a result, when consumers hear that they will experience electric bill savings of 10% or more, they must realize that the reference is to 10% of the 33% which makes up the generation part of the bill.

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