

## Ratemaking

### Q Why do electric rates vary from state to state or even from utility to utility?

**A** Even though all utilities deliver units of electric energy called a kilowatt-hour (kWh), the costs to produce and deliver this electric energy can vary from utility to utility. Each utility is impacted by many different factors that, in turn, impact electric prices. Many of these factors are outside the control of the utility and include:

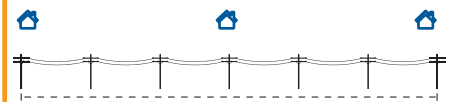
- ▶ **POWER SUPPLIER AND/OR GENERATION MIX** – What types and ages of generation does the utility, or its supplier, own and what fuel mixes are used to produce energy?
- ▶ **SYSTEM LOAD FACTOR** – A measure of system efficiency or utilization, i.e., the percent of actual kWh sales to total kWh sales if peak demand lasted for the entire billing period.
- ▶ **CUSTOMER DENSITY** – How many customers does the utility serve per mile of line?
- ▶ **CUSTOMER MIX** – Is the customer base primarily residential (low load factor) or does it include large commercial and industrial customers with high load factors?
- ▶ **REVENUE PER MILE OF LINE** – Both the customer mix and the density drive the revenue generated per mile of line. Less revenue per mile means higher rates.
- ▶ **CUSTOMER GROWTH** – Is the customer base growing, steady or declining?
- ▶ **PROPERTY TAXES** – The utility has little control over the mill levy or property tax burden.
- ▶ **WEATHER** – Extreme hot or cold temperatures will result in higher volumes of electric energy sales.

### Going the Extra Mile

Electric co-ops maintain more miles of power lines per consumer than other electric utilities. Even though we power fewer consumers on our lines compared to other utilities, we'll always go the extra mile for the consumer-members we proudly serve.

#### KANSAS ELECTRIC COOPERATIVES

serve 3 consumer-members  
per mile of line.



#### OTHER ELECTRIC UTILITIES

serve 32 consumers  
per mile of line.



### Q How are electric rates determined?

**A** The ratemaking process includes three steps to arrive at a rate:



1. Determine the revenue requirement by examining the overall expenses of providing electric service,



2. Perform a cost-of-service (COS) study that allocates those costs among the various customer classes, and



3. Design the electric rates to appropriately recover the costs of providing service.

While the steps are similar, the results are different for each electric cooperative.

### Q How much should the cooperative charge?

**A** This is determined by calculating the revenue requirement of the cooperative. The cooperative must be able to recover all operating expenses, such as purchased power, operations and maintenance, administrative and general, and depreciation plus enough margin to cover interest expense, fund future system growth and refund members' prior contributions of equity.

### Q What is a cost-of-service study?

**A** The COS examines the cooperative's investments in plant and expenses and categorizes them in three different ways to provide information for the rate design phase.

- ▶ **FUNCTIONALIZE** – First, costs are separated into groups: generation, transmission, distribution, or customer service.
- ▶ **CLASSIFICATION** – Second, costs are classified as either customer-related, demand-related, or energy-related depending on which factor is the major driver of the cost category.
- ▶ **ALLOCATION** – Finally, costs are allocated among the cooperative's various classes of customer, e.g., residential, commercial, industrial, and lighting.

Based on the revenue recovered from and the expenses allocated to each customer class, the class operating margin can then be calculated. The class rate of return is determined by calculating the operating margin as a percent of the plant invested to serve each customer class. This analysis is used to guide the board in allocating any revenue increase among the classes to minimize inequities and reflect risks of serving different rate classes.

**Q How are rates designed?**

**A** The results of the revenue requirement analysis and the COS are used to design rates to recover the costs incurred by the cooperative to serve each customer class. Commercial and industrial classes typically have a three-part rate: a customer charge, a demand charge, and an energy charge. Residential classes typically have a two-part rate: a customer charge and an energy charge. The energy charge usually covers all energy- and demand-related costs plus any customer-related costs not recovered in the customer charge. Some utilities are beginning to add a demand charge to residential rates to fairly recover grid costs. Since rate design is the third step, this changes the method of cost recovery but does not add to overall revenue.

**Q Who approves a rate increase?**

**A** For investor-owned utilities, a regulator balances the interests of the utility shareholders and the ratepayers. For self-regulated cooperatives, the member-elected board of trustees serves in this role. This balance is much easier to achieve for a cooperative since the ratepayer and the owner are one and the same. Since there are no outside investors, the board, all of whom are electric cooperative consumers, has no reason to approve rates higher than necessary to cover expenses and capitalization requirements. In fact, any excess revenue (margin) is usually returned to the members via a capital credit allocation on a patronage pro rata basis.

**Rate Setting for Electric Co-ops** \*Members have one year to petition the Kansas Corporation Commission for review of rate change

