

RATE SETTING IN SOUTH CAROLINA

OVERVIEW AND KEY PRINCIPLES



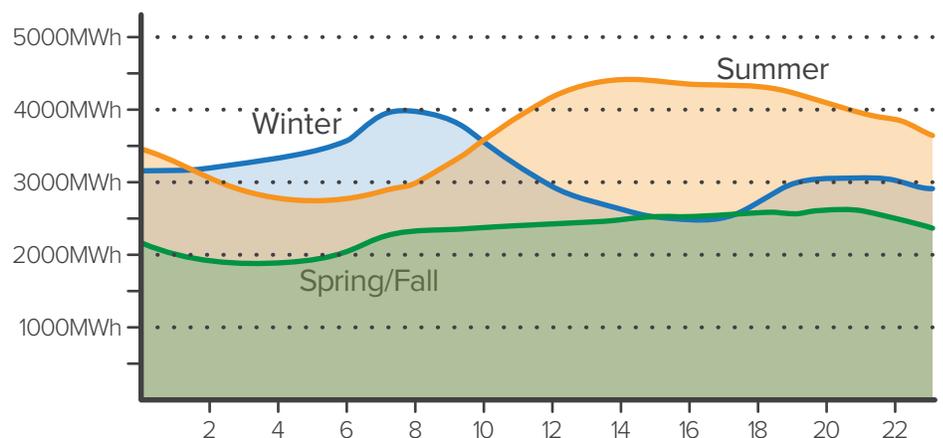
Traditionally, electric utility customers have expected to receive reliable and safe service at a reasonable price. In today's world, however, information travels quickly, and customers are expecting more from their utility. From a service standpoint, they want faster response times for disruptions and constant updates about fixes or delays. They also want more insight into their electricity usage and bill, which would allow them to have more control over their charges. To understand an electric bill, it is important to first learn how rates are calculated.

Electric Energy versus Demand

Utilities rely on generating facilities to produce instant and stable electric service for their customers. The type of facility used depends on the amount of demand, and each facility has certain characteristics and costs to produce energy. A main objective for utilities is to be able to meet peak demand, or to have electricity available when demand is highest. Customer electricity demand changes throughout the year, being higher in the winter and summer months, and throughout an individual day. For example, consider a late summer afternoon in which the washing machine and dryer are running, someone is taking a shower, dinner is on the stove, and air conditioning is being used to keep cool. Peak demand increases every year, and operating peak generating facilities is expensive. When utilities make spending decisions to upgrade systems and better meet customer needs, they are legally entitled to recover these investments through electric rates. Therefore, they can file rate cases to propose changes to what they are charging customers to make up for the costs they are incurring.

Charges to the customer must account for both the demand and the energy used. The charges include a base rate and riders, such as adjustments to cover the change in fuel cost. The electric rate here refers to the price a customer pays for one unit of electricity – with per kilowatt-hour (kWh) for energy or per kilowatt (kW) for demand.

South Carolina Time of Day Electricity Demand



Source: U.S. Energy Information Administration, U.S. Electric System Operating Data, October 2016



Setting Electric Rates in South Carolina

In South Carolina, electric rates are determined by regulators at the South Carolina Public Service Commission (PSC). The PSC is a government agency that oversees the rates of all public utilities in the state, ensuring they are fair and reasonable for customers and utilities. It also must approve new generating plants prior to construction.

The Office of Regulatory Staff (ORS) is an independent agency that represents the using and consuming public in any proceedings of the PSC, including rate cases. The ORS has a number of different roles but primarily acts as an economic regulator and advocate on behalf of utility customers, and it must balance the concerns of these customers, the financial integrity of public utilities, and the economic development of South Carolina. It is not involved in PSC decision-making.

South Carolina, unlike North Carolina, does not have a statute of least cost for setting electric rates. However, General Statute § 58-27-810 states that the PSC must ensure that rates made by electric utilities are just and reasonable. At the same time, the utility wants to ensure the rate is sufficient to recover its capital investment and expenses. The rate not only helps with operating costs and providing service, but also allows a fair return for investors and shareholders.

South Carolina Rate Setting Key Points

Rates should be
just and reasonable

Rates should allow the utility
the opportunity to earn a return
on its investment

Public Service Commission Base Ratemaking Principles

The PSC and utilities agree to a regulatory compact, which gives the utilities a monopoly in a specific service area but requires that they serve every customer in that area at rates that are regulated to reflect the cost of providing service. Therefore, before any rate changes go into effect, the PSC must review and approve them, keeping certain criteria in mind.

First, the PSC evaluates how much it will cost the utility to provide the service, or the cost of service. Cost of service is determined by looking at a 12-month historical test year, which provides the prior spending of the utility and helps determine rates that will recover the expected future costs.

Utility rates are based on an annual revenue requirement, which is the amount of money a utility must collect through rates to recover the depreciated costs of its capital investment, plus an approved return on such investments, and its annual operational and maintenance expenses. A capital investment refers to an expense that will provide a long-term benefit to the utility, such as the building of a new power plant, transformer, or transmission lines. An operating expense, on the other hand, is an expense required for the daily functioning of the utility.



Cost Allocation and Rate Scheduling

Utilities group customers based on certain characteristics, such as the amount of power needed, voltage requirements, and overall energy demand. These groups are called customer classes or market segments. The three primary market segments are residential, which includes houses and apartments, commercial, consisting of businesses, and industrial, which contains manufacturers and other large users. Once a utility's revenue requirement is determined and it knows the amount of money that must be earned, the utility allocates the cost across its various customers.

The next step is to design the rate schedule. Rate schedules are attributed to the different market segments to reflect the cost of service to those segments. For example, the cost of service for industrial customers tends to be lower than for commercial and residential customers, which require more distribution. Therefore, the rate to industrial customers will likewise be lower.



Rate designing includes both fixed and variable costs. Fixed costs reflect expenses such as salaries and operations, while variable costs reflect power purchases, maintenance, and more. Fixed cost of service, however, does not directly map on to a fixed charge on an electric bill. Because fixed charges remain constant from month to month, they help contribute to revenue requirements. However, these charges tend to be lower than the actual fixed costs, and variable charges are also used to recover fixed costs. This rate design is used to reduce the fixed aspect of a bill, which may otherwise hinder low-income customers, and increase incentives to conserve energy, giving customers more control.

Customers can often choose different rate structures and pricing options for their electric bills. For example, they may pay a stable rate per kWh or kW, regardless of when it is used. Alternatively, time-variant pricing reflects the cost for providing service at different points of the year or day. As noted above, electricity can be more expensive for peak periods, so certain rate structures charge more per kWh and kW during these times to encourage customers to use electricity during off-peak hours.

Other Aspects of an Electric Bill

In addition to the utility rate, riders or charges are added to customers' electric bills as well. These riders are updated yearly and must also be approved by the PSC. They are included to help account for additional demands that utilities face. For example, the Fuel Adjustment Clause allows utilities to adjust their rates based on the cost of energy purchases and fuel burned for transportation. Another rider includes the Demand Side Management/Energy Efficiency annual adjustment, which is incorporated to help recover costs for complying with energy efficiency standards and adopting new energy programs.



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