

Phase II – Rate-Setting

Once the regulator issues a decision on the Phase I revenue requirement, the utility company must prepare and file Phase II of its General Rate Application.

The main purpose of a Phase II application is to determine the specific rates that each type of customer will be charged and to demonstrate that these rates will enable the utility company to collect its annual revenue requirement.

The utility company must complete two main tasks in the preparation of its Phase II application – cost of service studies and rate design.

Cost of Service Studies

Cost of service studies (also known as cost allocation studies) are complex analytical exercises in which the utility company's total revenue requirement is divided among the utility's customer classes. Typical customer classes include residential, general service, streetlighting, wholesale and industrial power consumers. The main principle used to allocate the utility's capital and operating costs to the customer classes is cost causation, although elements of fairness and judgment are also used. The three main steps involved in a cost of service study are explained below:

Functionalization – refers to the gathering and separation of the utility's capital investments (i.e. rate base) and operating costs into four functions – production, transmission, distribution and general. These categories correspond to the main activities the utility company engages in to provide service to its customers.

Classification – once the costs are functionalized, the next step is to classify the costs based on the type of service provided. The three main cost classifications are demand costs (costs related to the kilowatt demand involved in serving customers), energy costs (costs that vary with the amount of energy provided by the utility) and customer costs (costs that are directly related to the number of customers served).

Allocation – the final step is to allocate the classified costs to the customer classes. Different allocation factors, such as demand information, energy usage and number of customers are used to perform the allocation step.

A cost of service study provides two important results. The first is the determination of the unit costs (i.e. \$/kW, \$/kWh and \$/customer) incurred by the utility company to provide service to each of its different customer classes. The second result is to show any surplus or deficiency in the revenues currently being collected from each customer class compared to the cost to the utility to serve that customer class.

Rate Design

Rate design is the process by which the utility company determines the rates it proposes to charge to each of its customer classes. Rates are supposed to reflect the unit costs determined in the cost of service study, however, due to other factors (such as the need for rate stability, promotion of conservation, customer understanding etc), the proposed rates rarely equal the unit costs.

A few examples of typical rate structures for different types of electric service in a northern community is as follows:

Residential Customers:

Customer charge of \$18.00 / month

Energy charge of \$0.4834 / kilowatt-hour (kWh)

General Service Customers:

Demand charge of \$8.00/kilowatt/month

Energy charge of \$0.7226 / kilowatt-hour (kWh)

Demand and customer charges are fixed charges that occur per month. Demand charges are designed to recover the utility company's costs related to their investment in capital assets, such as generating plants and transmission and distribution systems. Customer charges are designed to recover costs associated with dealing with the customers, such as meter-reading and billing expenses. Energy charges are designed to recover costs that vary with the amount of energy provided, such as fuel costs.

Phase II Hearing and Decision

Once the utility company files its Phase II application with its regulator, a hearing is held to discuss contentious issues and obtain the views of the utility's customers. Key issues for discussion usually involve questions of fairness as each customer class seeks to minimize the rates to be charged to it. In this regard, the utility company is often indifferent to exactly how the final rates are set by the regulator as it knows that the approved rates must be set at a level sufficient to permit the utility an opportunity to recover its total revenue requirement.