

Phase I – Revenue Requirement

As a regulated entity, a public utility company must apply to its regulator seeking approval if it wishes to change the rates that it charges to its customers. This type of application, known as a General Rate Application, usually proceeds in two phases.

The first phase, known as the “Revenue Requirement”, examines the utility company’s revenues and expenses. The revenue requirement is defined as “the amount of money that a public utility must receive from its customers to cover its operating costs, interest paid on debt, taxes (if applicable) and earn a reasonable return (profit).

The typical topics addressed during a hearing of a Phase I application include the rate base, rate of return, depreciation, operations and maintenance expenses and revenues. Each is briefly explained below.

Rate Base

Rate base refers to the facilities, equipment and other assets used by the utility company in providing service to its customers. Rate base is determined by taking the historical cost of all assets used by the utility and subtracting the accumulated depreciation. This figure, usually expressed in millions of dollars, represents the amount of money currently invested in the utility company’s assets. The mid-year rate base (or net plant in service) is one of two figures necessary to evaluate the adequacy of the utility company’s annual earnings.

Rate of Return

In order for a utility company to provide proper service and maintain its financial integrity, it must earn a sufficient amount of money each year (i.e. a dollar return) to service its debts and realize a profit. The rate of return, expressed as a percentage, is calculated by dividing the dollar return by the mid-year rate base. During a Phase I application, the regulator must determine an appropriate rate of return for the utility company. This is done by considering the utility company’s business risks and the current rates of return being allowed to other, similar public utility companies.

Depreciation

Depreciation (also known as amortization) refers to the orderly write-down of a utility company's capital assets to reflect the gradual decrease in value that occurs as assets age and eventually wear out. Given the huge amount of capital invested in a public utility's assets, the calculation of the annual depreciation charge is an important non-cash component of the revenue requirement.

The amount of depreciation to charge each year depends on the original cost of the assets, their estimated service life and any salvage value that may exist when the assets are retired from service. To ensure that a utility company isn't depreciating too slowly or too quickly, a depreciation study is usually conducted about every five years.

Operations and Maintenance Expenses

Operations and maintenance expenses refer to the expenses that a public utility company must incur to provide service to its customers. Most public utilities incur most of their O&M expenses in the areas of salaries and benefits, fuel, purchased energy and maintenance of their capital assets such as generating plants, transmission lines and distribution systems.

Revenues

The annual revenues collected by the utility company are calculated by multiplying the utility's annual sales by its current rates. This calculation is usually based on the utility's sales forecast and the assumption of normal business and climatic conditions. If the utility loses a large customer or experiences a warm winter, its sales and revenues can be lower than expected. These events have the potential to reduce the utility company's annual earnings and actual rate of return.

Revenue Requirement

Once the rate base, rate of return, depreciation and O&M expenses have been determined, it is possible to calculate a utility company's annual revenue requirement using the following formula:

$$\text{Revenue Requirement} = (\text{rate base} \times \text{rate of return}) + \text{depreciation} + \text{O\&M expenses}$$

By comparing the calculated revenue requirement to the utility's current revenues, it is possible to determine whether the utility company needs to adjust its rates

The annual revenue requirement is also referred to as the utility company's "cost of service" in that it includes all capital and operating expenditures that the utility company must make to provide service to its customers.

Once the regulator issues a decision fixing the utility company's revenue requirement, the next step is to figure out how to fairly collect this amount of money from the utility company's customers (or ratepayers). Please see the factsheet entitled "Phase II – Rate-Setting" for an explanation of how utility rates are set.