Pennsylvania
Public Utility Commission

Rate Case Presentation

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TEST YEAR

Development of Baseline Date for the Test Year

- The calculation of rates is founded in the device of a test year.
- The term test year as used in the filing requirements refers to the test year chosen by the utility to support its filing.
- The ultimate objective of the rate-setting process is to predict the operating results of the Utility during the period for which the rates being set will operate.

Historic Test Year

- The factual basis of an historic test year approach is the books of account maintained by the Utility, pursuant to the Uniform System of Accounts (USOA) as prescribed by the regulators.

- The USOA includes all operating results entered into specifically defined and separate accounts.

Historic Test Year (Cont.)

- Conversion of the “per books” results to a valid historic test year ratemaking basis involved two basic steps:
  - In-period adjustments
  - Out-of-period adjustments

- These adjustments are generally referred to as *pro-forma* adjustments.

Pro-Forma Adjustments

- *Pro-forma* adjustments change test year data to reflect the full year effect of major know and certain changes in expense levels, rates and other ratemaking elements which will occur during or at the end of the test year.

Future Test Year

- Most Utilities filing for rate increases in excess of $1,000,000 use a future test year for ratemaking purposes.
- A future test year employs the Utility's normal budget process to project operating results for a future period.

Future Test Year (cont.)

- The future test year obviates the need for *pro-forma* adjustments since the budget process generally assumes “normal”, non-extraordinary operations.

- The major advantage of the future test year is that rates will more closely reflect current Utility operating factors and general economic conditions.

REVENUE REQUIREMENT

Revenue Requirement (RR)

- The fundamental principle of ratemaking is that rates should be set such that a utility has a reasonable opportunity to recover the costs incurred in providing utility service to the public.

The equation that summarizes this principle is:

- RR = E + ROR (RB)
- Where
- RR = Revenue Requirement
- E = Expenses
- ROR = Rate of Return
- RB = Rate Base

To put this equation into words:

- The Revenue Requirement (RR) of a utility equals the Expenses (E) incurred, including wages and employee benefits, state and federal taxes and depreciation, plus a Return on Investment.

- The Return on Investment is calculated by multiplying the overall cost of capital to the company (Rate of Return or ROR) against the net assets dedicated to the public use (Rate Base or RB).

To Summarize:

- The Revenue Requirement is the total revenue that a utility needs to collect through rates charged to the public in order to recover its Cost of Service.

- Determining the Revenue Requirement of a utility is the central issue in Base Rate Cases.

RATE BASE

Rate Base

- Utilities are entitled, as a matter of U.S. Constitutional Law, to earn a fair return on the value of its property.

- Utility property is included in rates only if prudently constructed and necessary (“used and useful”) to the provision of service.

Principles of Public Utility Rates Bonbright, p. 237

- In its present form, the original cost or net investment standard may be defined as one which measures the rate base by summation of the actual legitimate costs of plant and equipment devoted to the public service.

Rate Base Related Issues

- There are several items that are traditionally included in the determination of the total Measures of Value for utilities.

- Original Cost is just one item. Other items included in the determination are as follows:

Measures of Value Issues

- Cash Working Capital
- Plant Held for Future Use
- Depreciation Reserve
- Construction Work in Progress (CWIP)
- Allowance for Funds Used During Construction (AFUDC)
- Excess Capacity

To Summarize:

- The total value of the investment devoted to public service is made up of numerous components. Each of which must be individually analyzed in order to determine the proper amount on which the utility is entitled to earn a return.

EXPENSES

Operations and Maintenance Expense

- This is usually the largest category (outside of fuel costs) of base rate expenses. It includes the cost of labor and expenses associated with the following activities depending on utility type:

- The production, storage and distribution of natural gas,
- Customer Service,
- Sales expense, and
- Administrative and general office functions.

Expense Issues

- Depreciation Expense (e.g., service life, depreciation method)
- Uncollectible Expense
- Rate Case Expense
- Consolidated Tax Savings
- Employee Expenses
- Normalized Expenses
- Amortized Expenses
- Post-Test Year Expenses

To Summarize

- Operating expenses are one area of a base rate case that involves multiple potential issues. It also deals with various ways to look at each type of expense in terms of the ratemaking process. It is usually necessary to review several years' worth of data to come up with the proper level of an expense for ratemaking purposes.

RATE DESIGN

Establishing Rates (Bonbright, p. 373)

- The establishment of a rate for a regulated industry often involves two steps of different character.
- The first is the adjustment of a general revenue level to the demands of a fair return.
- The second is the adjustment of a rate schedule conforming to that level, so as to eliminate discrimination and unfairness from its details.

Rate Design

- What this generally means is that the first step in designing rates is to determine the overall Revenue Requirement of the utility. Once that is accomplished, the next step is to complete a fully-allocated Cost of Service Study.

Cost of Service Study

- The Cost of Service Study is usually one of the more highly contested areas in base rate cases. The bottom line is that the results of the Cost of Service Study will provide the revenues needed to be collected by each customer class in order for the utility to have the opportunity to earn a fair return on its investments.

Factors Used in Designing Rates

- There are numerous factors to consider when designing rates. The following is a list of some of those factors considered in major base rate cases:

Rate Design Factors

- Class Revenue Requirement
- Customer Count
- Usage per Customer
- Usage by Rate Block/Bill Frequency Analysis
- Demand Charges
- Energy Charges
- Customer Related Costs

Rate Design Factors (Cont.)

- Non-Customer Related Costs
- IntraClass/InterClass Subsidies
- Customer Charges
- Minimum Charges
- Minimum Allowances
- Rate Shock
- Interruptible Rates

Rate Design Factors (Cont.)

- Declining Block Rates
- Flat Rates
- Commodity Charges
- Current Rate Design/Rate Stability