

Overview of Rate Case and Process

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Process and Analysis of a Rate Case
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THE PENNSYLVANIA APPROACH

- The Standard Pennsylvania Formula:
- $RR = E + ROR(RB)$
- Or
- Revenue Requirement = Expenses + (Rate of Return x Rate Base)
- $(RR) = E + ROR (RB)$

- ***GENERAL CONSIDERATIONS***

- Net Operating Income divided by Plant in Service = Rate of Return
- Revenue Requirement is the Total Revenue Needed to Cover Cost of Service
- The Formula Can Apply to Private or Public Entities

- For example:

Historic Year (Most Recent)

Plant in Service \$100.00

Operating Income: \$8.00

Rate of Return: 8%

Rate Increase: \$0.00

Test Year (Future Year)

Plant in Service: \$100.00

Operating Income: \$8.00

Rate of Return 10%

Rate Increase: \$2.00

\$2.00 Rate Increase Allocated to Customers

\$2.00 Rate Increase Reflects Higher Return to Attract Investors

\$2.00 Increase Allocated by “Rate Design”

- ***COMPONENTS OF FORMULA:***
- The Pennsylvania Experience

- **REVENUE REQUIREMENT (RR)**

Reasonable Expenses of the Utility (E)

+ Reasonable Return on Investment
(ROR x RB)

= Revenue Requirement

Pennsylvania follows the standard rule with some differences.

- REVENUE REQUIREMENT ISSUES IN PENNSYLVANIA:
- Are there any “non-jurisdictional” or “non-utility” related sales or revenues that should be included in a utility’s revenue.
- Did the utility “sell” any “property” for a “profit” and should that be included a revenues in the utility’s revenue.\
- Are the sales “normalized” for weather. This is done by calculating a 30-year temperature/sales rate for gas utilities. Otherwise:
 - A “colder than normal” winter means more sales (increased revenue) that do not come up next year (and the utility’s revenues are overstated).
 - A “warmer than normal” winter means less sales (reduced revenue) that will come up next year (and the utility’s revenues are understated).
- Are there any “rate increases” put in place during the text year that are added to the utility’s revenue.
- Are there any “social pricing” or “budget support” obligations that must be paid by the utility as a public entity.

EXPENSES

Operation and Management Costs in Pennsylvania include

- Labor
- Production of Gas
- Storage of Gas
- Distribution of Gas
- Customer Service
- Sales costs
- Administrative and General functions

Depreciation: Always Controversial

- Return the capital given to the utility back to investor.
- Straight-line method takes cost of capital (plant) divided by the number of years (useful life) of the plant. The figure then included in equal increments over the time of the plant.
- Pennsylvania uses “Straight Line” Depreciation like this.

Depreciation Example

- *Gas Pipeline* costs \$500 million to build and will last 50 years. The depreciation of that pipeline is \$10 million dollars per year for each year of the 50 years after the pipeline is opened to deliver gas to customers.
- *Storage Facilities* cost \$100 million and will last 50 years. The depreciation of storage is \$2 million dollars per year for 50 years.
- Pennsylvania's "Straight Line" Depreciation would recognize \$10 Million Annual Depreciation for Gas Pipeline and \$2 Million Annual Depreciation for Storage Facilities.

Expenses (Cont'd)

- Uncollectible Expense: (Unpaid consumer Bills and Pennsylvania Commission can disallow)
- Taxes (all taxes paid to all government authorities); Commission rarely disallows.
- Interest (Typically a utility's fixed debt to investors); Commission rarely disallows.
- Rate Case Expense (paid by Utility, Customers, or Both); Commission can, and sometimes has, disallowed all or a percentage of the expense because utility is filing too many rate cases or the utility's claimed expenses for "professionals" is excessive.

RATE BASE

- What is the “value” of the utility’s plant. Original or Replacement Cost.
- Plant Held for Future Use. Should it be included and for how long?
- In Pennsylvania, this is typically up to 10 years. Anything beyond that is subject to Advance for Funds Used During Construction (AFUDC).
- Depreciation Reserve. The amount of a capital investment that has been depreciated.
- CWIP pays for capital during construction; AFUDC defers payment of the capital until the capital is put in service (“used and useful”).

RATE BASE (Cont'd)

- Excess capacity. Utility plant beyond that needed, with consideration of a necessary reserve, is taken out of rate base.
- Cash Working Capital. Lead/Lag or 1/8th rule.
- Pennsylvania may require independent study for rate cases in excess of \$1,000,000.
- Materials and Supplies
- Unamortized Expenses: Amortized expense not yet recovered. Utility pays or does it go into rate base.

Rate of Return

- The Profit Expectation applied to Rate Base To Attract Private Investor Capital

Typical Rate of Return Components

- Capital Structure
- Debt - Bonds with Fixed Interest Rates Paid to Investor

Advantages: Fixed and known obligation to investor

Disadvantages: Inflation may exceed interest rate

- Equity – Stock sold to a Stockholder as Investor

Advantages: Voting Rights in Company

Disadvantages: No guarantee of dividend

Preferred Stock – a combination of Debt and Equity

Rate of Return Calculation Options

- P/E
- DCF
- Comparables
- CAPM

The Golden Rule

“ . . . the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. The return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain credit and attract capital.”

Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591.

Pennsylvania Process

- Company Files Rate Case; Consumers Notified in Bill of Case
- Notice is Published In Pennsylvania Bulletin
- Formal Protests Filed
- Administrative Proceeding
- Judge Issues Recommended Decision (RD)
- Exceptions Filed
- Reply Exceptions Filed
- Staff Prepares Recommendation
- Commissioners Vote on Recommendation
- Company Files Compliance Tariff
- Compliance Tariff May be Redlined and Subject to Protests
- Commission Determines Validity of Protests to Tariff
- Pennsylvania has no “Social Pricing” Tariff
- If there were, “Social Pricing” Tariff objections treated like others.

Final Analysis

Rate Base/Rate of Return is a
Methodological Tool

General Principle: Fair Return in Exchange
for Fair Rates

Many decisions are Judgment Calls

Questions