ALTERNATIVE METHODS OF RATE REVIEW

GOALS

- Improve the efficiency and performance of the utility
- Improve incentives and remove disincentives for utility cost reduction
- Simplify and streamline the regulatory process
- Maintain a reasonable opportunity for the utility to not only earn a fair rate of return, but extra profits as determined under the performance-based ratemaking plan
- Maintain and improve quality of service

(From: Performance Based Ratemaking: Theory and Practice, Dr. Michael Schmidt, Public Utilities Reports, Inc., 2000)

OPERATING RATIO

- Operating Expenses / Gross Revenues
- Operating Expenses include depreciation and taxes
- Shows proportion of annual gross revenues which is required to meet the cost of doing business before compensation of capital

OPERATING RATIO

- Complement of the operating ratio (the difference between total expenses and gross revenues) is the return margin.
  - Amount remaining for the payment of a return on investments
  - If operating ratio is 90%, then 10% is available as a return (also referred to as *the margin*)
- More capital intensive industries tend to have lower operating ratios, since a larger margin is required to assure that investors receive money on the investment required to fund plant.
- May be a reasonable alternative when information on investment is unavailable or unreliable

TIMES INTEREST EARNED RATIO

- $\frac{\text{Margin + Interest Expense on Long Term Debt}}{\text{Interest Expense on Long Term Debt}}$

- Some companies, particularly cooperatives, have strict mortgage requirements tied to TIER and Debt Service Coverage

- Regulators have used TIER at a reasonable level over and above the minimum to establish the reasonableness of customer rates

CASH FLOW NEEDS

- May be used as a supplemental or stand-alone test to determine necessary level of rates
- Have generally seen this test used in crisis (rather than normal) situations
  - Example: Company had waited too long to request rate increase, and thus, was having difficulty meeting payroll cash flow needs
  - Example: May be used to keep a company out of bankruptcy by looking at amount needed to keep company from defaulting on loans
  - Example: May be used as an *interim* (stop-gap) measure while regulators can have more time to study the longer term revenue needs of the utility

BENCHMARKING

- Compare the results of an individual company to a set of standards or results from other selected companies or overall industry standards
  - Can use for overall (total) costs
  - Can use for a specific, identifiable category
- Key is in selection of companies to which to compare
  - Similarly situated or best-of-class

PERFORMANCE BASED RATEMAKING

- Provide monetary rewards or penalties based on specific, pre-determined performance indicators, such as:
  - Customer satisfaction
  - Employee safety
  - Outage time
  - Reliability
  - Other?
- Important to review periodically, and will likely want to increase standard over time
- May be combined with other methods – especially to make sure that service standards remain high

EARNINGS OR COST SHARING

- A method of sharing the risk of changes in costs and / or earnings
- A dead band is established as a neutral zone, where price changes do not occur – shareholders take the risk of changes within this established zone
- Above or below the deadband, changes are shared between customers and shareholders
  - Often based on a sliding scale,where the larger the change, the greater the share assigned to customers
  - Sharing may be asymmetric between increases and decreases

PRICE CAPS

- Important to be comfortable with starting rate
- Rates are reviewed formally only at preset intervals (if at all)
- Meanwhile, a pre-set, pre-approved formula is used to reflect expected growth in the utility's input prices, less an allowance for an appropriate rate of productivity gain

  Current Price + Inflation (or escalation) Factor – Productivity Factor = New Allowed Maximum Price

  May also be adjusted for external developments that are not expected or outside of utility's control (e.g., tax rate change)

- Below the established cap, the utility has full or partial price freedom

PRICE CAPS

- Per 1997 National Association of Regulatory Utility Commissioners (NARUC) Report:
  - Establishing Appropriate Productivity Index may require complicated analysis of industry costs and operating results
  - If designed to achieve one objective, a mechanism could create disincentives in other areas, or may result in unintended consequences
  - Need to review formula over time, and monitor its effectiveness
  - Some objectives are difficult or impossible to meet with a specific pricing mechanism

PRICE CAPS – U.K.

- British Price – Cap Model:[1]

  PC = Price level ± Inflation ± K

  Where K is a composite of :

  Expected Efficiency in the Future

  Expenditure on Quality Enhancements

  Efficiency Gains Delivered

  Enhanced Service Levels Expenditures

  Supply / Demand Balance Expenditure

[1] Description courtesy of Jan Beecher, Institute of Public Utilities, beecher@msu.edu.

PRICE FLOORS

- Wyoming (my home state) has passed a law indicating that the revenues from each service must be at or above the *total service long-run incremental cost* of providing that service
  - Eliminates implicit subsidies by making each service at least recover its direct cost
  - Prices may exceed the price floor, with regulatory approval and oversight
  - Part of a transitional plan for moving industry from monopoly to competition

CONTACT INFORMATION

Denise Parrish

Dparri@state.wy.us

Phone (307) 777-5743

FAX (307) 777-5748