NEW YORK STATE Public Service Commission

Tariff Development II: Developing a Rate Design

Thomas Dvorsky
Director, Office of Electric, Gas and Water
New York State Department of Public Service
June 10, 2010 5:00 p.m.

Introduction

- What Does Rate Design Mean?
  - NYS Utilities' rates use the "Cost of Service" approach
  - Rates are based upon the actual costs incurred by the utilities to provide service to each specific customer class
- How Does it Fit in the Ratemaking Process?
  - Rate Cases
  - Tariff Filings
  - Generic Proceedings

Principal Goals of Rate Design

- Meet Revenue Requirement
- Equity Among Classes
- Customer Impacts
- Customer Acceptance
- Revenue Stability
- Feasibility of Administration
- Understandability
- Social Concerns - Lifeline/Low Income Rates

Major Components of NY Electric Tariffs

- Firm Service Classifications
  - Residential
  - Commercial
  - Industrial
- Delivery Charge, T&D (Set by the Commission)
  - Reflects the costs of moving electricity from the generator to the customer's meter
- Electric Supply Charge
  - Reflects the costs of electricity produced or purchased from the market (commodity and capacity)
  - Utilities use hedging instruments to moderate price volatility

Other Variations of NY Electric Tariffs

- Other Rate Types
  - Seasonal
  - Standby - Supplemental, back-up
  - Delivery
  - Buyback
  - Economic Development Zone Rates
  - Area Development Rates
  - Business Incentive Rates
  - Time-of-Use (TOU) – Voluntary/Mandatory
  - Real Time (Hourly) Pricing
  - Flex Rates

Major Components of NY Natural Gas Tariffs

- Delivery Charge (Set by the Commission)
  - Reflects the costs of moving the gas from the citygate (interconnection with interstate pipeline company) to customer's meter
- Gas Supply Charge
  - Adjusted monthly and reconciled annually
  - Reflects the costs of gas supplies purchased on interstate pipelines or from local production (commodity and capacity)
  - Commodity price is set by the marketplace; utilities use hedging instruments to moderate price volatility
  - Capacity price is set by FERC

Other Components of NY Natural Gas Tariffs

- Other Rate Components
  - **Weather Normalization Clause** – lowers bills during colder than normal weather periods and raises bills during warmer than normal weather; tends to smooth customer bills and revenue to LDC
  - **Storage Service** – allows for gas injections during the summer when prices are presumably low, and withdrawals in winter during peak demand and high prices
  - **Standby Service** – back-up commodity supply service provided to transportation customers as needed

Why is a Cost of Service Study Needed?

- To assign utility costs to customer classes of service
- To determine how to recover costs from customers in a class
  - For example: time-of-use vs. flat rate residential customers, or
  - Differentiate costs caused among different voltage levels in a large general service class
- To determine the number and types of service classifications
- To establish system, class and subclass rates of return (ROR)
  - Significant class ROR deviations from system average ROR suggests over or under contributions (inequity among classes)
- To form the basis for rates or contract prices for special services
  - Delivery or standby
  - Interruptible or curtailable

Various Types of Cost Studies

- Embedded Cost of Service Study (ECOS)
  - Historic – focused on how existing costs were incurred, use of historic test year data
  - ProForma – estimates forward looking costs – projections – from recent historic test period costs
    - Allows for known and anticipated changes from historic base
    - Significant capital expenditures, major changes in workforce, supply cost changes, etc.
- Marginal Cost of Service Study (MCOS)
  - Measure the change in cost levels in response to a change in customer usage or demand
  - Short Run versus Long Run
    - Short run – based on small per unit changes (usually variable cost sensitive)
    - Long run – considers broader time spectrum – 3-5 or 10 year planning horizons and capital expenditures

Embedded Cost Study Fundamentals

- **Functionalize** costs into:
  - Production
  - Transmission
  - Distribution
  - Customer Service and Facilities
  - Administrative and General
- **Classify** costs as being related to:
  - Customer, Demand or Energy
- **Allocate**
  - Final step in cost of service study – classified costs are assigned to customer classes and sub classes
  - Uses Load Research to form the basis using statistically significant and current load samples for each anticipated service class