
Tariff Development II

Developing and Implementing Cost of Service Studies

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Embedded Cost of Service Study Implementation

Separating Costs between Regulated and Non-regulated Operations

- The Uniform System of Accounts required to be followed by each utility contains prescriptive definitions about what types of costs can be included in the accounts of the regulated books. These cost allocations are subject to audit.
- Holding Company cost allocations to utility subsidiaries are subject to FERC Service Company Cost Allocation Rules and are subject to audit.
- Provision is made for non-regulated costs to be included in other accounts within the USOA but these are identified as non-utility or non-operating costs.
- These non-regulated costs are excluded from all embedded cost of service studies.

Embedded Cost of Service Studies

Implementation

Determining Allowable Costs

- Generally speaking, the rate case review process is where the determination of allowable costs is made.
- Cost of Service studies are filed as part of a rate case and are conformed to the allowed costs set in the rate order.
- Allowable costs include the direct and indirect (overheads) costs of providing a particular service to a particular class of customer.
- For example, the USOA requires that plant investment be tracked using historical costs and that it be allocated between Production, Transmission, Distribution and General Plant types.
- Depreciation must also be kept according to plant type.
- Direct Labor, Materials and Supplies, Property Taxes are also tracked by plant type.
- Other, more general costs such as indirect labor, supervision, general administrative costs, income taxes and earnings are allocated to the cost of service based upon a number of allocation factors such as number of customers, demand, energy consumption, or revenues.

Embedded Cost of Service Studies Implementation

Determining Prudent Business Expenses

- Expenses which are entered into the regulated accounts pursuant to the USOA instructions and/or approved allocation factors are presumed to be prudent and necessary business costs recoverable from ratepayers.
- Audits, either done in connection with a rate case review or ad hoc, on-going audits by on-site NYS PSC staff will periodically discover costs which should not be borne by customers.
- In such cases, corrective accounting entries are made to exclude these costs and those adjusted results are incorporated into the next cost of service study performed for that utility.

Embedded Cost of Service Studies

Implementation

- Load Research
 - *Statistically significant, relatively current, load samples for each anticipated service class and subclass required in order to assess:*
 - Contributions to system coincident demands
 - Non-coincident demands
 - Coincidence Factors
 - Diversity Factors
 - *Scheduling Frequency of load research*
 - *Establish typical class load profiles*
 - Gas, electric, water
 - Seasonal, annual, time of day, hourly

Embedded Cost of Service Studies

Implementation

- Load Research (continued)
 - *Forms fundamental basis for allocating utility costs responsibly among the customer classes according to the way utilities incur costs*
 - Prefer - Load Research to reflect actual usage of the specific utility customers served
 - Option – Generic Load Research Obtainable
 - May not reflect conditions or circumstances unique to the utility

Embedded Cost of Service Studies

Implementation

- Typical classes of Service
 - *Residential - secondary*
 - *Small Commercial – secondary (no demand meter)*
 - *Large General Service (demand metered)*
 - *Large General Service with demand metering and time differentiated or hourly supply pricing*
- Large General Service Class further subdivided by service voltage:
 - *Secondary, primary, sub-Transmission and Transmission level services*
- Time of Use (TOU) Options

Embedded Cost of Service Studies

Implementation

- Allocating Costs to the Customer Classes
 - *System wide compared to each individual class rate of return computed based on allocated cost of service and customer revenues produced.*
 - *Tolerance band*
 - *Final class allocations reflect fine-tuning*
 - All or as many class returns within tolerance specified as possible
 - Class impacts within acceptable percentage of system average impacts

Embedded Cost of Service Studies Implementation

- Recovery of Costs from individual customers within Classes; Rate Design
 - *Continue to employ cost causation principles wherever possible*
 - *Rate Structures may limit the options available*
 - *Rates ultimately designed must produce the class revenue target as determined in previous step by the cost of service study*
 - Class billing determinants required
 - Historic and projected
 - Sales forecasts (conversion to equivalent billing determinants)

Embedded Cost of Service Studies

Implementation

- **Marginal Cost Pricing**
 - *Principle used to achieve most efficient pricing, even within the simplest rate structures.*
 - *Marginal cost pricing could establish an upper bound on the rate established for a particular component of service*
 - Pricing efficiency assures that customers able to respond to the rates (prices) make the most efficient use of the service without imposing undue burdens on customers with less opportunity to respond to the prices
 - Hourly Energy Supply Pricing