

The who, why, what and how of utility regulation and the ratemaking process.

- By: Paul Schulz, Utility Rate Analyst, Montana Consumer Counsel

Public Utility Regulation

Who? Investor-owned utilities (IOU's)

Why? It is the one form of utility ownership where consumers do not already have some embedded form of representation.

- * MT Municipalities – City Councils
- * Co-ops – Customers are the owners

For IOU's – MT PSC/MCC

Fundamentally what is regulation supposed to do?

- Acknowledge natural monopolies but protect consumers through preventing the abuse of monopoly power – high prices, poor service
- How? Charles F. Phillips, “In short, regulation is a substitute for competition and should attempt to put the utility sector under the same restraints competition places on the industrial sector.”

Charles F. Phillips, *The Regulation of Public Utilities: Theory and Practice*, (Arlington, VA: Public Utilities Reports, Inc., 1984), p. 154

Rate Case Procedural Process-Prior to Hearing

- Utility files application for new rates
- MCC files to intervene (and other interested parties)
- Intervenors submit data requests to utility
- Utility provides data responses
- MCC/other intervenors file testimony
- Utility submits data requests to intervenors
- Intervenors provide data responses
- Possible additional issues identified by PSC
- Utility files rebuttal testimony (intervenors may also provide testimony in response to other intervenors)
- Data requests on rebuttal and cross-intervenor testimony
- Data responses provided

Procedural Process-Hearing & Forward

- Hearing held on application (possibly on a settlement agreement)
- Opening briefs filed
- Answer briefs filed
- Commission order issued
- Possible motions for reconsideration
- Order on reconsideration
- Possible Judicial review

Rules of Evidence and many Rules of Civil Procedure apply.



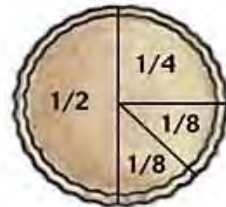
Utility Rate Setting Process

- Overview

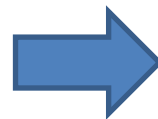
Revenue Requirement (size of the pie)



Class Cost Allocation (how to cut up the pie)



Rate Design (how to collect the pieces of pie)



Tariffed Rates

Revenue Requirement

$$\text{Rev Req} = \text{O\&M} + \text{Taxes} + \text{Depreciation} + r(\text{Rate Base})$$

O&M – Operation and Maintenance Expenses

Taxes – Income and other (i.e. Property taxes)

Rate Base – Undepreciated value of in-service, used and useful utility plant funded by investors in utility

Depreciation – on in-service, used & useful utility plant

r – Rate of Return = (Debt cost * % of debt in cap. structure) + (ROE * % of equity in cap. structure)

Capital Structure is the % of debt and equity used to finance rate base

r(Rate Base) = Profit Opportunity for utility



Rate Base General Formula

Gross Plant in Service

Less: Accumulated Depreciation

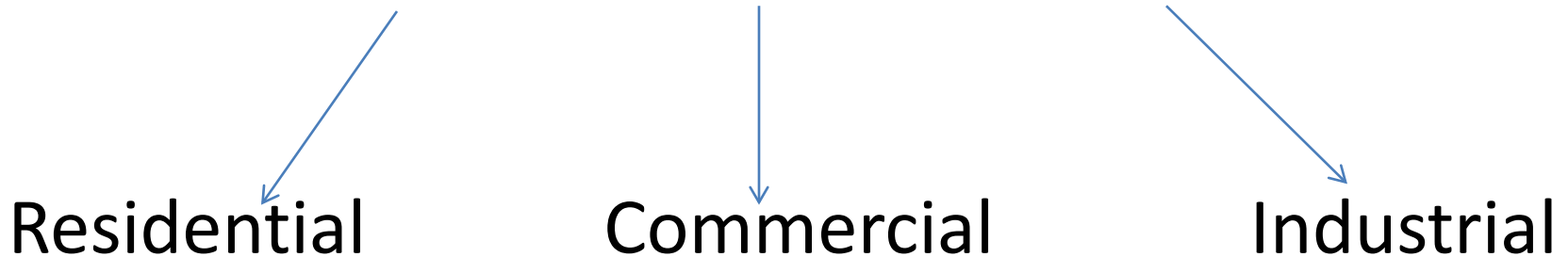
Equals: Net Plant in Service

Plus: Other Investor Supplied
Capital items (like Working Cash)

Less: Various forms of customer
contributed capital

Equals: Rate Base

Class Cost of Service Allocation



How much is to be paid by each class of customer or rate class, based largely on the costs incurred to serve each customer class. Parties to a docket may conduct ACOSS (Allocated Cost of Service Studies).

Rate Design- rate elements

Fixed charge – customer or service charge

Demand charge – for level of maximum usage (flow rate) that occurs during a billing cycle-typically for industrial customers

Commodity charge – for the amount of electricity, water, or natural gas that is consumed during a billing cycle

Billing determinants designed to recover each class' respective portion of the revenue requirement assuming certain usage levels and usage characteristics

PSC Decision

- The Commission will make decisions on parties' various positions leading to final determinations on:
 - Revenue Requirement
 - Class Allocations
 - Rate Design...resulting in
- **Tariffed rates**