Regulatory Basics: Vision

• Introduction/Overview of the Rate Setting Process (April 2023)
• Future Presentations
  – Revenue Adjustments
  – Operation and Maintenance Expenses
  – Depreciation
  – Rate Base
  – Cash Working Capital
  – Capital Structure
  – Rate of Return
  – Rate Design / Class Cost of Service
  – Witness Preparation
Public Utility Regulation

- Regulate what? Typically, 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.
  - Municipalities – City Councils
  - Co-ops – Customers are the owners
- For IOU’s – PSC or PUC/Public Advocate or Consumer Counsel
What is it that regulators are trying to do?

- Acknowledge natural monopolies but protect consumers through preventing the abuse of monopoly power.
- Balancing act of considering utility investor interests and ratepayer interests.
- In the end, Commissions blend all these considerations together to make decisions that are in the “public interest.”
Regulation is largely effectuated through:

• Final orders issued by regulatory bodies in rate case proceedings.
• Acting as a “substitute” for the disciplines of a market economy.
Rate Case Procedural Process-Prior to Hearing (variations in process or terms by jurisdiction)

- Utility files application for new rates
- Public advocate and other interested parties file to intervene
- Intervenors submit discovery to utility which then responds
- Consumer Advocate and other intervenors file testimony
- Utility submits discovery to intervenors who then respond
- Utility files rebuttal testimony
- Discovery on rebuttal submitted to utility which then answers
Procedural Process-Hearing & Forward
(A Settlement Agreement could be reached along the way.)

- Hearing held on application
- 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

• Determining the size of the pie. How much revenue does a utility need to cover legitimate operating expenses and have an opportunity for a reasonable return on investment?

• In other words, what is the total revenue target for a utility that rates should be designed to generate.

• How much is just right?
The recipe or formula is:

Rev Req = O&M + Taxes + Depreciation + r(Rate Base)

*Where:*

- **O&M** – Operation and Maintenance Expense
- **Taxes** – Income and other (i.e. Property taxes)
- **Rate Base** – Value of in-service, *used and useful*, utility plant funded by investors in utility
- **Depreciation** – on in-service, used & useful investor funded utility plant
- **r** – Rate of Return = (Debt cost * % of debt) + (ROE * % of equity); times rate base = utility profit *opportunity*

% of debt and equity used to finance rate base is the *Capital Structure*
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Utility Plant in Service</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Less: Accumulated Depreciation</td>
<td>($400,000)</td>
</tr>
<tr>
<td>Net Utility Plant in Service</td>
<td>$600,000</td>
</tr>
<tr>
<td>Add</td>
<td></td>
</tr>
<tr>
<td>Cash Working Capital</td>
<td>$5,000</td>
</tr>
<tr>
<td>Prepayments</td>
<td>$15,000</td>
</tr>
<tr>
<td>Materials and Supplies</td>
<td>$35,000</td>
</tr>
<tr>
<td>Total Additions</td>
<td>$55,000</td>
</tr>
<tr>
<td>Deduct</td>
<td></td>
</tr>
<tr>
<td>Accumulated Deferred Income Taxes</td>
<td>$130,000</td>
</tr>
<tr>
<td>Customer Advances for Construction</td>
<td>$10,000</td>
</tr>
<tr>
<td>Contributions In Aid of Construction</td>
<td>$5,000</td>
</tr>
<tr>
<td>Miscellaneous Deductions</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Deductions</td>
<td>$155,000</td>
</tr>
<tr>
<td>Total Rate Base</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

Rate Base General Formula
Then: Who (which rate class) pays what?

ACOS/CCOS study
Class Cost of Service Allocation

- Residential
- Commercial
- Industrial

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.
And then: What rates will collect the proper revenue amount from each rate class?

You are trying to hit the revenue target for each rate class.
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
Final chapter: (unless there’s an appeal)
Commission Decision

• A commission will make decisions on parties’ various positions leading to final determinations on:
  Revenue Requirement
  Class Allocations, and
  Rate Design, resulting in...

• Tariffed rates
Thank you