



NATIONAL ASSOCIATION
OF STATE UTILITY
CONSUMER ADVOCATES

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Accounting & Finance Committee

Regulatory Basics: Introduction

Spring 2023

Regulatory Basics: Vision

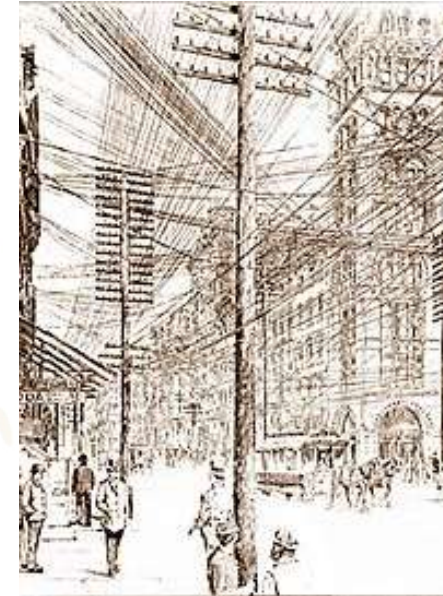
- Introduction/Overview of the Rate Setting Process (April 2023)
- Future Presentations
 - Revenue Adjustments
 - Operation and Maintenance Expenses
 - Depreciation
 - Rate Base
 - Cash Working Capital
 - Capital Structure
 - Rate of Return
 - Rate Design / Class Cost of Service
 - Witness Preparation

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.”



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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

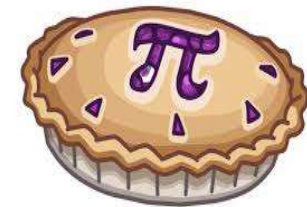
Rules of Evidence and many Rules of Civil Procedure apply.



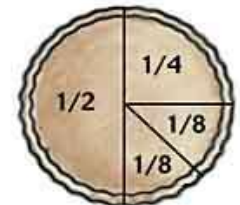
Utility Rate Setting Process

- Overview

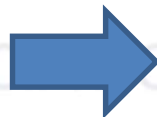
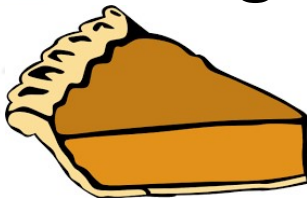
Revenue Requirement (size of the pie)



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:

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

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

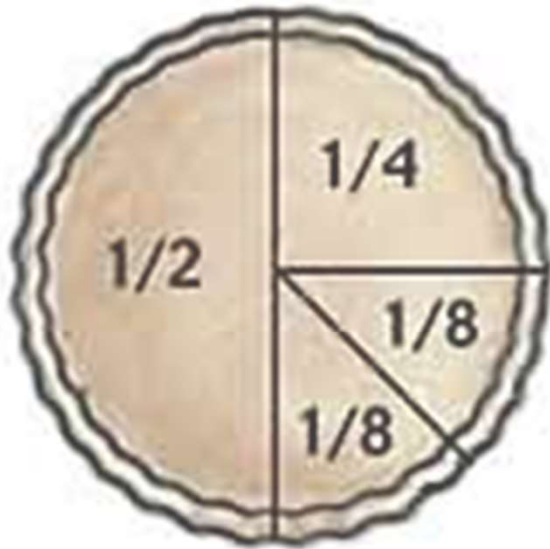
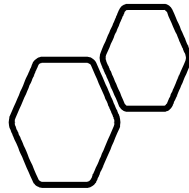
Depreciation – on in-service, used & useful investor funded utility plant

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*

Rate Base General Formula

Gross Utility Plant in Service	\$1,000,000
Less: Accumulated Depreciation	(\$400,000)
Net Utility Plant in Service	\$600,000
<i>Add</i>	
Cash Working Capital	\$5,000
Prepayments	\$15,000
Materials and Supplies	\$35,000
Total Additions	\$55,000
<i>Deduct</i>	
Accumulated Deferred Income Taxes	\$130,000
Customer Advances for Construction	\$10,000
Contributions In Aid of Construction	\$5,000
Miscellaneous Deductions	\$10,000
Total Deductions	\$155,000
Total Rate Base	\$500,000



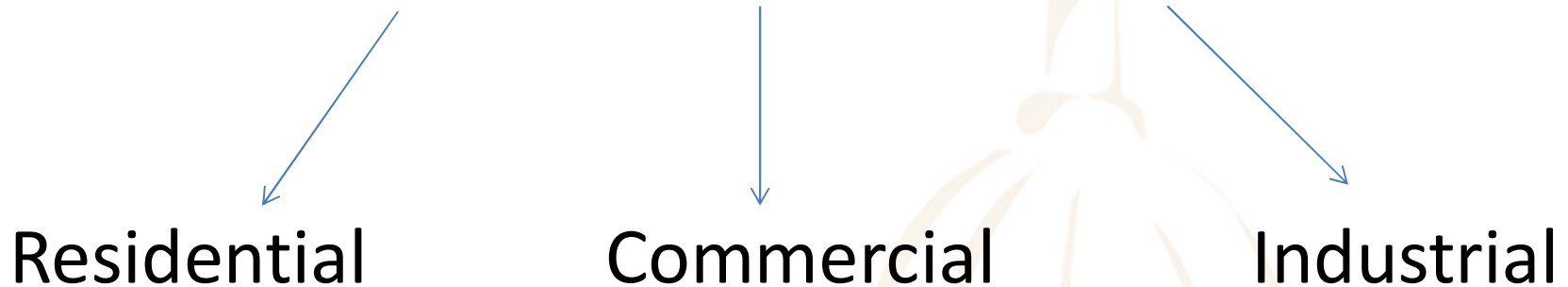
Then: Who
(which rate class)
pays what?

ACOS/CCOS study

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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.

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)

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Drum roll please...
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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**



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Thank you