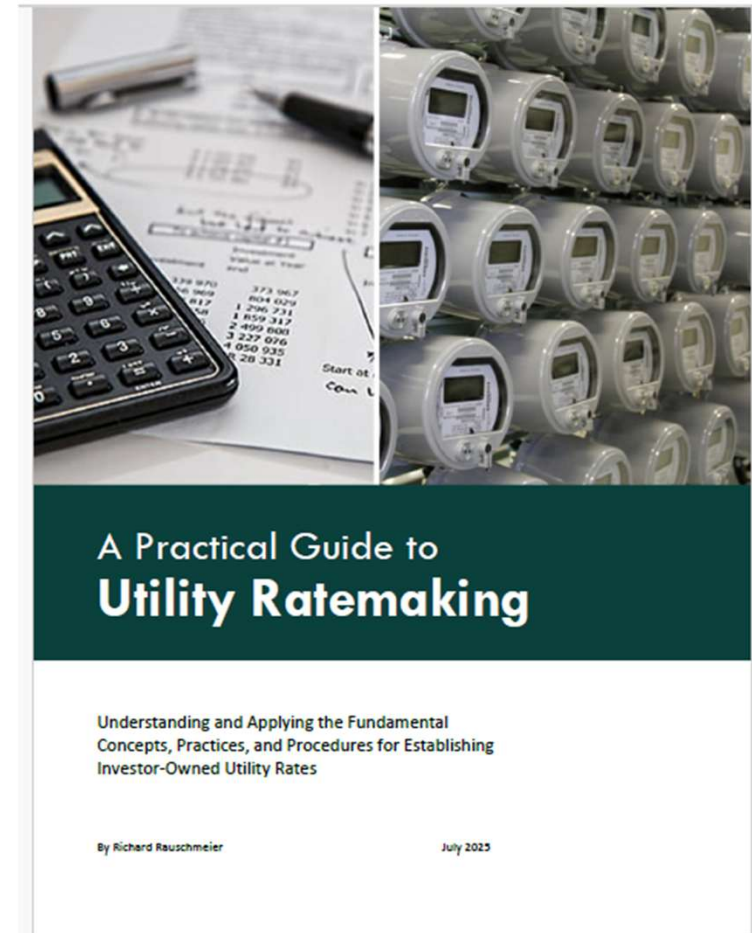


A Practical Guide to Utility Ratemaking

- 130-page Workbook
- +100 Problems & Solutions
- Real Case Studies
- Most Common Errors
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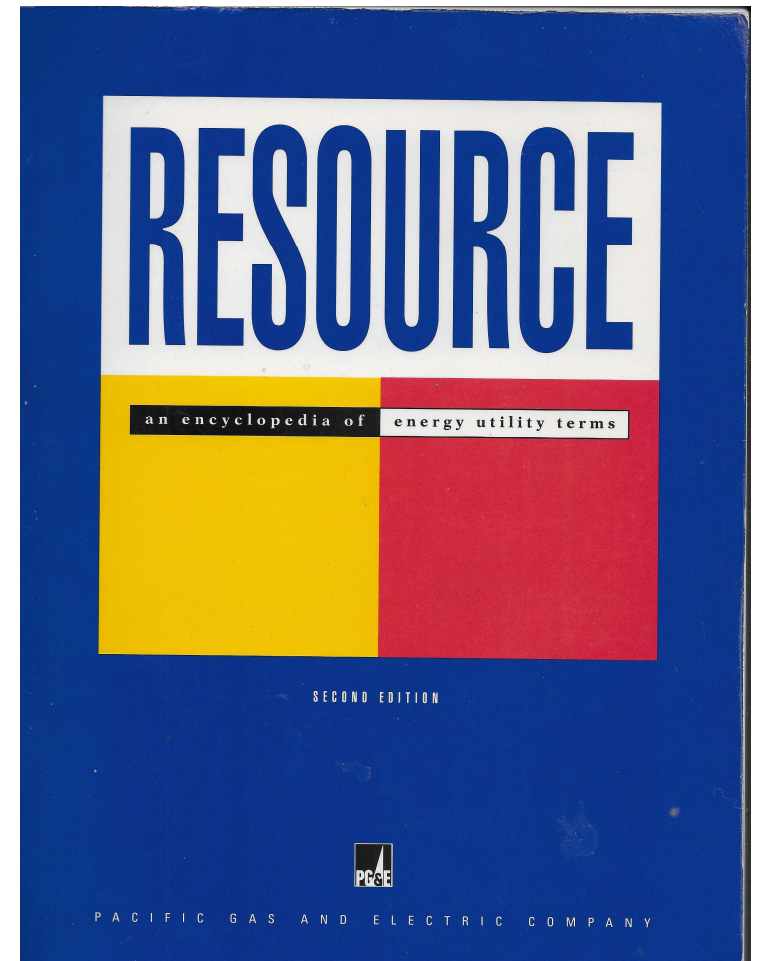
Richard.Rauschmeier@cpuc.ca.gov

- The Revenue Requirement is what a utility must collect to cover costs and have an opportunity for a reasonable rate of return
- When the Revenue Requirement increases, rates increase (and when the Revenue Requirement decreases rates decrease)
- The Rate of Return determines the Profit a utility will earn
- It is possible to compare a utility's actual Rate of Return with its Authorized Rate of Return (or compare actual Rate Base to authorized Rate Base)
- Lowering a utility's Rate of Return lowers the Revenue Requirement and the rates customers pay (all else being equal)
- Regulatory Accounting Follows Generally Accepted Accounting Principles
- A Test Year must include the period in which new rates will be in effect
- A Future Test Year is required for prospective ratemaking
- Examining more than one issue at a time avoids single-issue ratemaking
- Once approved in rates, removing a capital project from rates is retroactive ratemaking
- Memorandum and Balancing Accounts (i.e. trackers and riders) prevent retroactive ratemaking
- Including a capital project in rates provides the funds necessary for construction
- Removing a proposed project from rates results in a regulatory disallowance
- Utilities require regulatory approval to spend or build projects
- Requiring shareholder profits to be reinvested in utility infrastructure prevents windfall shareholder profits.

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PG&E Resource: An Encyclopedia of Energy Utility Terms

Revenue Requirement:
Total Amount of money a utility must collect from customers to pay all operating and capital costs, including a fair return on investment.



Revenue Requirement is a Budget

A utility can collect less than its Revenue Requirement and Exceed its Authorized Profit

A utility can collect more than its Revenue Requirement and Fail to make its Authorized Profit

This part of the budget we like to call money we wish we had.



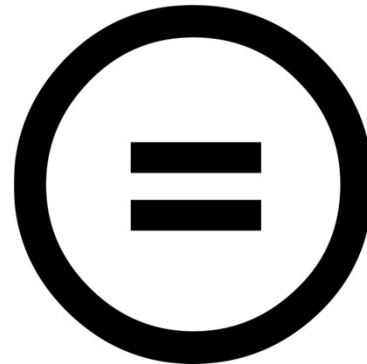
If Revenue Requirement Increases

- A. Rates must Increase
- B. Rates must Decrease
- C. Don't Know



To Determine a Rate Change, Need to Know Both...

**Revenue
Requirement**

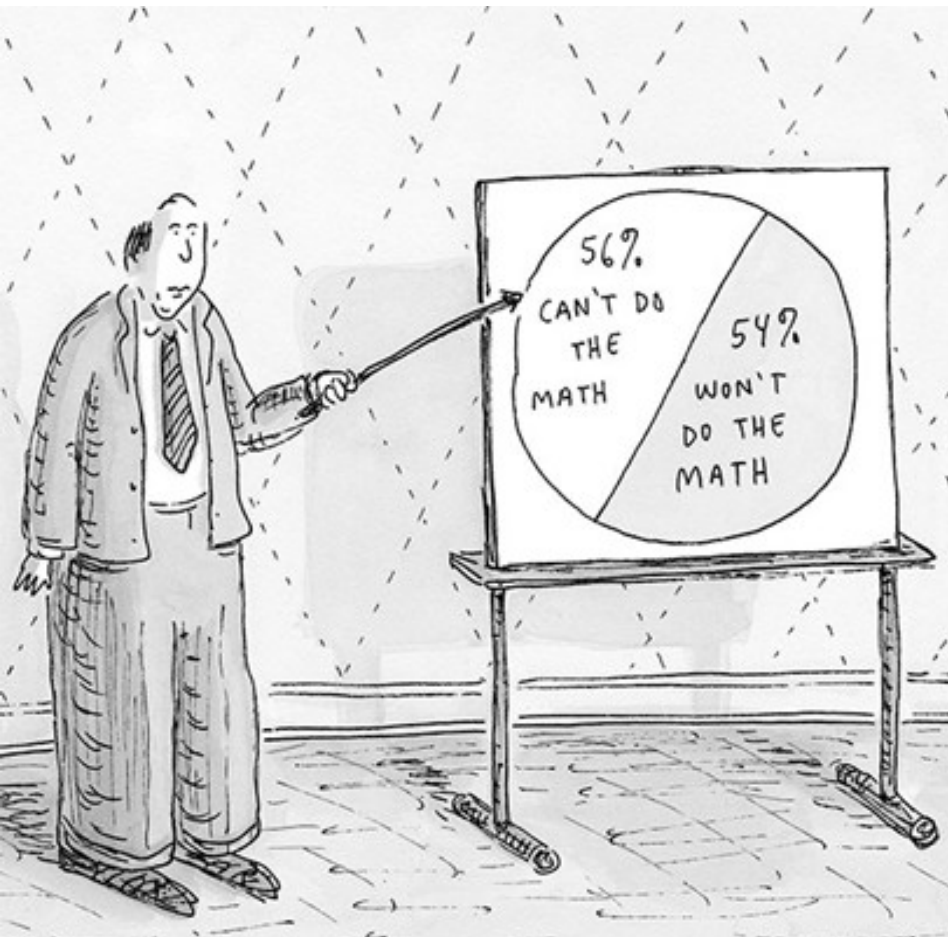


**Revenue at
Proposed Rates**

**Ability to Meet
Revenue Requirement**

**Revenue at
Present Rates**

$$\frac{\text{Revenue at Proposed Rates}}{\text{Revenue at Present Rates}} - 1 \times 100\% = \text{Change in Average System Rates}$$



- Δ Revenue After a Rate Change
- Most commonly communicated
- Not the same as Δ in Average Bill

What Do We Know (or Don't Know)

If and When...	Revenue Requirements Increasing	Revenue Requirements Decreasing
Revenue at Present Rates Increasing	Unknown Rate Change (may be + or -)	Average System Rates Must Decrease (-)
Revenue at Present Rates Decreasing	Average System Rates Must Increase (+)	Unknown Rate Change (may be + or -)

Case Study – A Water Utility's 10% Proposed Rate Change

- Proposed a “10% Rate Increase”
- Revenue Requirement Increasing 10%
- During Drought Consumption had Fallen
- Ability to Meet RevReq Decreasing 20%
- Proposed Rate Change = 30%

Case Study #2 – A Telecom's Misunderstood Rate Change

- Delayed Decision – Interim Rates Authorized
- Final Decision Issued
- Revenue Requirements LESS than Previous
- Company MUST refund all interim rates
- Appellate Court Remands

Regulatory Constructs

- $\text{Rate Base} \times \text{Rate of Return} = \text{Net Income}$
- Necessary for setting rates
- Impossible to compare to actual financials
- ROE is the bridge between Ratemaking & Financials

Example:

Authorized 10% Return on Equity, a 6% cost of debt, and a 50/50 capital structure for an authorized Rate of Return of 8.0%

Calculating the utility's "actual" Rate of Return next year. The result is 7.8% based on actual cost of debt at 5%, the actual capital structure being 60% debt and 40% equity, and an actual 12% return on equity.

"Actual" Rate of Return < Authorized Rate of Return...Increase Customer Rates?

Retroactive Ratemaking in California

- History of asserting memorandum and balancing accounts prevent retroactive ratemaking
- Only necessary to assert if one believes that retroactive ratemaking is unlawful
- Overly convenient to believe one is upholding the law rather than engaging in bad policy
- Recognize when retroactive ratemaking is necessary and explain why it is reasonable

Single-Issue Ratemaking

- Never justifiable or reasonable
- Legal standard of rates providing an opportunity for a reasonable return
- Single Issue Ratemaking = Unknown Opportunity
- Need Revenue, Expense and Capital Investment
- Safeguard when Retroactive Ratemaking occurs



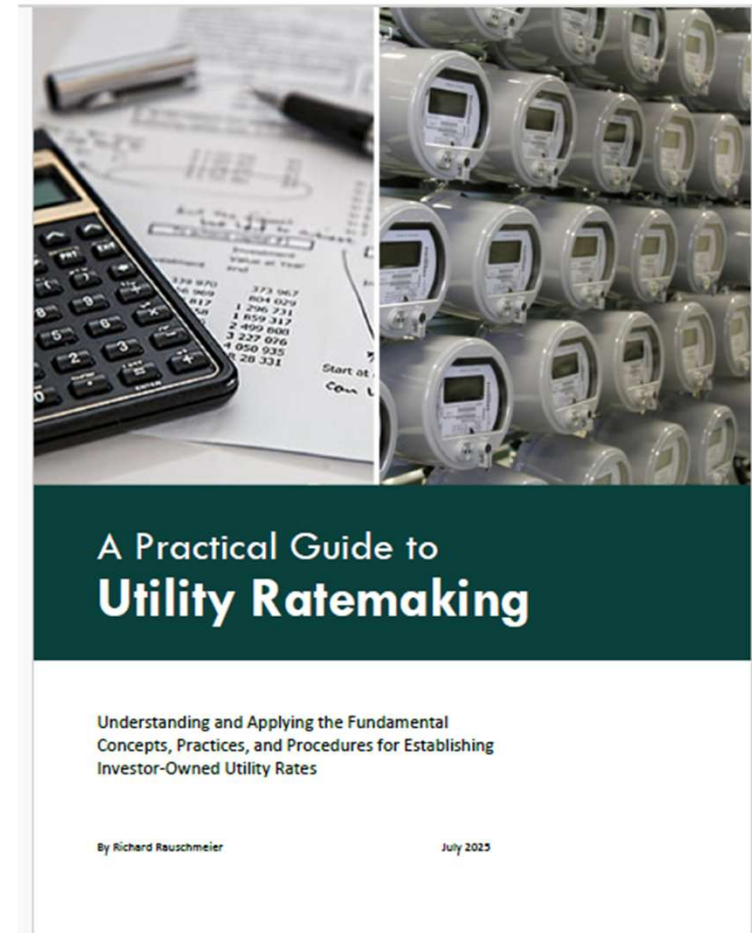
Proceeds from the Gain on Sale

- When / How Does it Occur?
- Who gets Proceeds (ratepayers or shareholders)?
- Policy Determination - often dependent on assets
- California Infrastructure Investment Act
- All proceeds from the sale of assets sold by a water utility must be reinvested for ratepayer benefit.
- Translated: Shareholders keep 100% of the Gain



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