



The Differences in Water Rates of Municipal and Investor-Owned Utilities in California

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Background

- White paper was prepared for the California Water Association and its members
- Intended to be a reference document
- For use in discussions with non-water utility interested parties
- A “Back to the Basics” analysis of IOU and GOU water rates



Generally, Two Types of Utilities

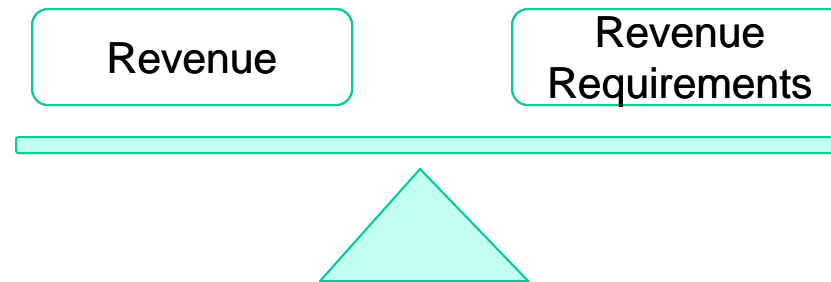
- Investor-Owned (IOU)
 - Regulated by the California PUC
 - Except in case of mutual water companies
- Government-Owned (GOU)
 - AKA: Municipally-Owned utilities or agencies
 - Usually overseen by governmental elected bodies



Common Features to All Water Utilities

- Calculation of revenue requirements
- Design of water rates intended to generate revenues to match revenue requirements

Revenues and Revenue Requirements



Relationship of Revenue Requirements to Water Rates and Water Bills

	Revenue Requirements		
U T I L I T Y	Fixed Costs	Variable Costs	↓
	÷ Customer Equivalents	÷ Usage	
WATER RATE	Fixed Portion (Service Charge)	Variable Portion (Commodity Charge)	
C U S T O M E R	x Meter Equivalency	x Water Used	
	=		
	Service Charge + Commodity Charge		
	=		
	Water Bill		
	x Customers and Usage		
	=		
	Annual Revenues		



The Question

“Why are your water rates different than mine?”

The Answer

“Because my revenue requirements are different than yours”

Remaining Unanswered . . .

“Why?”

Will not satisfy the person asking the question



Additional Discussion Required

- Rates are based on revenue requirements
- Different methodologies commonly used to determine revenue requirements
- Different costs of operations (factors can influence size and composition of revenue requirements)
- Alternate methods of designing water rates
- Differing processes and procedures used in setting rates



Determination of Revenue Requirements

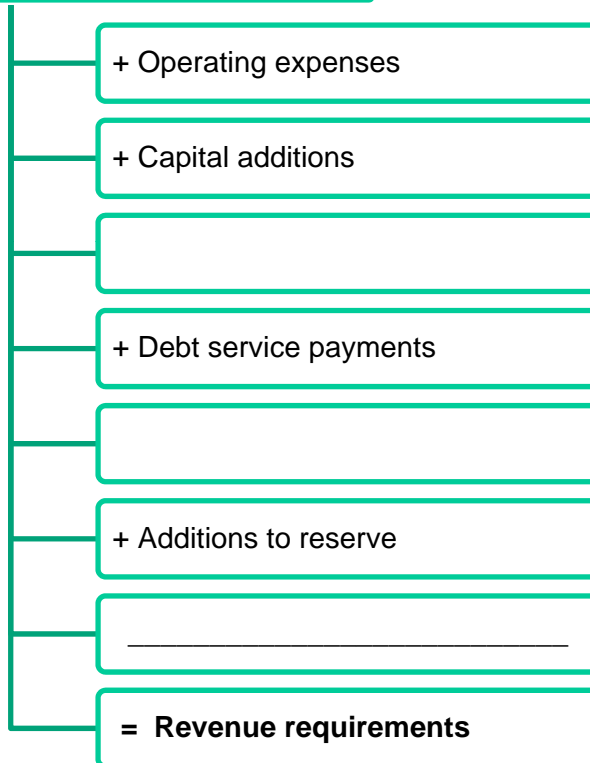
AWWA M1 – “Water Rates” identifies two generally accepted and practiced approaches . . .

- Utility Approach
 - Typically used by IOUs
- Cash-Needs Approach
 - Typically used by GOUs
 - Occasionally used by IOUs for repayment of governmental loans

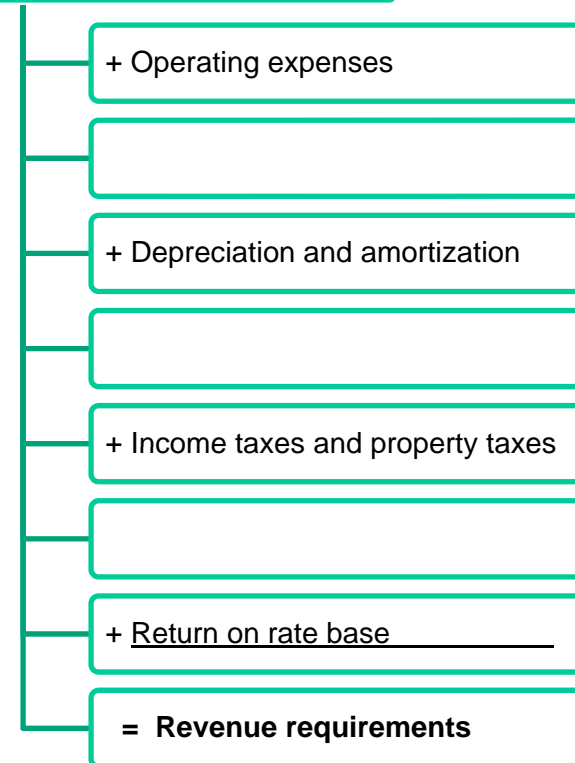


Cash Needs and Utility Approach

Cash Needs Approach



Utility Approach



**Excluding depreciation and amortization*

Each approach has four components, with only one common component.



Cash Needs Approach

- Results in rates that are intended to recover the cash required for that year
 - Matches the cash received from the customer to the cash needs of the utility and not necessarily to the service received by the customer (cash basis)
 - True costs or expenses (on an accrual basis) may be under or over-recovered for that year
 - Can send improper price signal



Utility Approach

- Matches the cost of service provided to the appropriate time frame when the customer is receiving service (accrual basis)
- Costs or expenses (on a cash basis) may be under or over-recorded for that year
- Results in rates that are based on cost of service
- Includes the return on the accumulated amounts that have been invested in the system



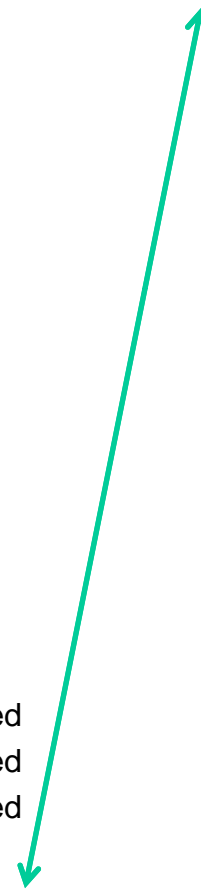
Cash Needs and Utility Approach Comparison

- Recovering differing things
- Difference is similar to cash v accrual basis of accounting
- Much like the difference between governmental accounting (GASB) and non-governmental accounting (FASB) – different accounting standards apply
- Cash needs method can leave GOU in shortfall, surplus or over-collected cost of service position (“balloons and clowns”)



Many Factors Impact Revenue Requirements

Rates will be.		<u>Lower</u>	<u>Higher</u>
	<u>If</u>		
Source of Water Supply	Groundwater	Greater %	Smaller %
	Imported	Smaller %	Greater %
	Water Rights	Adjudicated	Purchased or Leased
Quality of Water Source	Treatment	None	Extensive
Physical System	Age	Older	Newer
	Condition	Well Maintained	Dilapidated
	Density	Dense	Spread Out
	Design	Efficient	Less Efficient
	Terrain and Elevation	Flat and Low	Hilly and High
Customers	Count	More	Fewer
	Service	Low	High
	Demand	Constant	Peak
Financial	Tax-Free Financing	Available & Obtained	Not Available
	Connection Fees	Available & Obtained	Not Available
	Grants	Available & Obtained	Not Available
	Taxes	Receive	Pay



Alternate Methods of Designing Rates

- Revenue requirements = “how big is the pie”
- Water rates = “how the pie is sliced”
- Uniform volume rate with service charge
- Tiered rates - increasing block rate
- Subsidized lifeline or low income rates - social policy
- Cost allocation techniques
 - Commodity – demand method
 - Base extra capacity method



The Rate Setting Process

- IOUs
 - Follows long established procedure prescribed by CPUC
 - Subject to extensive 3rd party review
 - Authority for changes granted by CPUC
- GOUs
 - Change made under authority of governing body
 - Not always subject to 3rd party review
 - California Proposition 218 requires:
 - (1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service
 - (2) Revenues derived from the fee or charge shall not be used for any purposes other than that for which the fee or charge was imposed



Can Water Rates of IOUs be Directly Compared to Water Rates of GOUs?

- 2007 Deloitte Report
 - Study done to assess the reasonableness of Illinois-American Water Company's rates in the context of surrounding GOU rates
 - Conclusion: IAWC's rates were not unreasonable and, due to the numerous differences in cost structures between GOUs and IOUs, it was not feasible to quantify differences
- 2003 New York Public Service Commission
 - New York Public Service Commission in re Seacliff Water Company that IOU rates and GOU rates could not be fairly compared



Outside Influences Can Add to the Difficulty of Comparison

- Political pressures
 - City of Tustin, California (2009)
- Judicial decisions
 - California-American Water Company water rights in the Carmel River (2010)



Simple Rate Comparisons Are Misleading

- Different approaches to revenue requirements
- Different accounting standards
 - FASB for IOUs and GASB for GOUs
 - Data not maintained (e.g., CIAC)
- Less uniform rate design criteria for GOUs
- Impact of politics
- You can't just go onto the utilities' web sites, find the rates, and expect comparability



What to Expect if Comparison is Attempted

- Every utility will have unique revenue requirements and water rates
- Due to different approaches used in determining revenue requirements of IOUs and GOUs, the rates will differ and could differ significantly



Where Are We Now?

- Due to many factors - topography, water source, physical system - each utility will have unique operating costs
- IOUs and GOUs use differing approaches to determine overall revenue requirements
- IOUs and GOUs often use different rate design criteria
- IOUs and GOUs follow different processes to establish user rates

If we compare the rates of an IOU to the rates of a GOU, wouldn't we expect them to be different?





Project Status

- Phase I
 - The White Paper

- Phase II
 - Will “get under the hood” of neighboring differently owned utilities (1 IOU and 1 GOU) and do actual comparisons to identify the items that cause the differences

 - Interesting finding – Initial comparison of City of Whittier, California to Suburban Water Systems. Preliminary result: City of Whittier does not determine its own revenue requirements and rather “water fee increases have typically been limited to match the fees adopted by Suburban Water Systems”. *(City of Whittier City Council Meeting held on August 10, 2010 per agenda item 8a dated August 10, 2010)*



Conclusion

- Due to differing factors, methodologies, and processes involved in rate setting that are so varied between IOUs and GOUs, simple comparisons may yield misleading results
- Careful evaluation of the causes for variances in rates is required before any meaningful conclusion can be reached
- Straight rate comparisons are not valid





Discussion, Questions, and Comments

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