



REVENUE REQUIREMENT DETERMINATION

KENTUCKY PUBLIC SERVICE COMMISSION



WHAT IS A REVENUE REQUIREMENT?

- **The reasonable level of revenue required for a utility to properly operate and maintain its system and meet its financial obligations.**
- **A revenue requirement provides a basis for determining the amount of revenue to be collected from rates.**

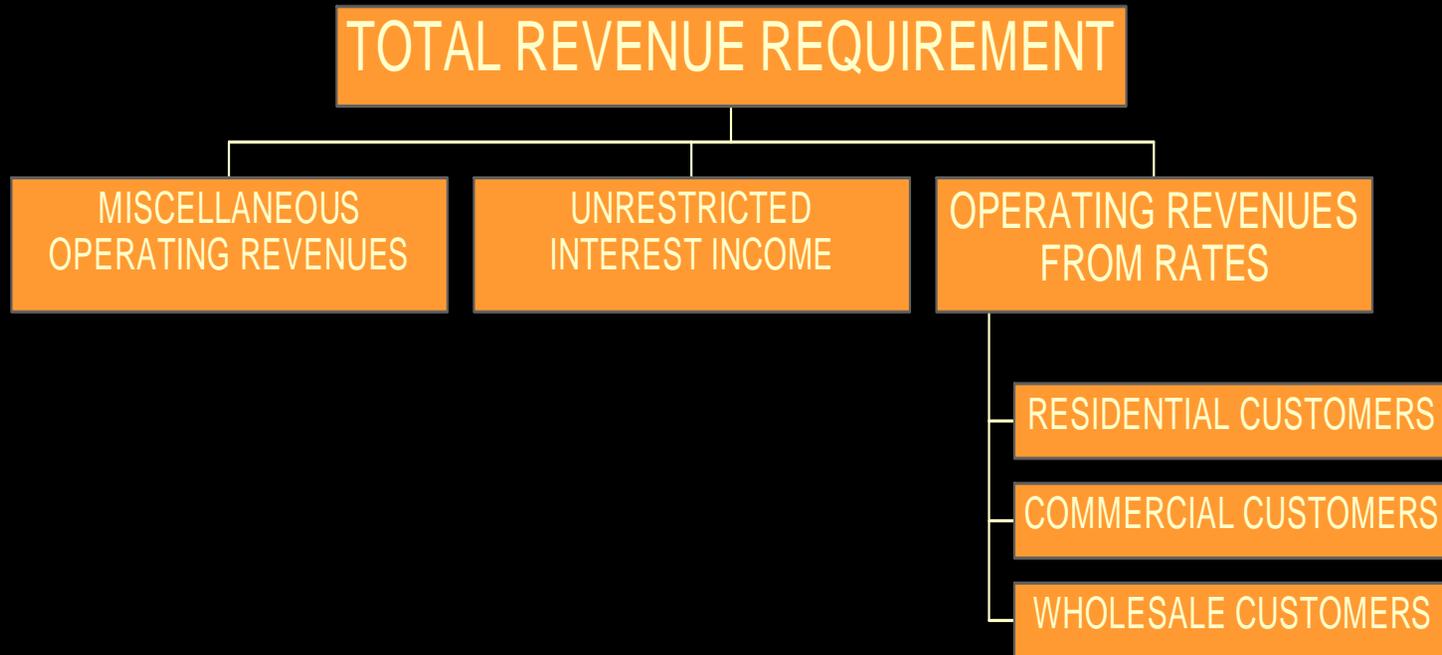


Revenue to be Collected from Rates

TOTAL REVENUE REQUIREMENT

- **Miscellaneous Operating Revenues**
 - **Unrestricted Interest Income**
- = Operating Revenue from Rates**

ALLOCATION OF REVENUE REQUIREMENT



3 Main Methods of Determining Revenue Requirements



- Debt Service
- Operating Ratio
- Rate of Return

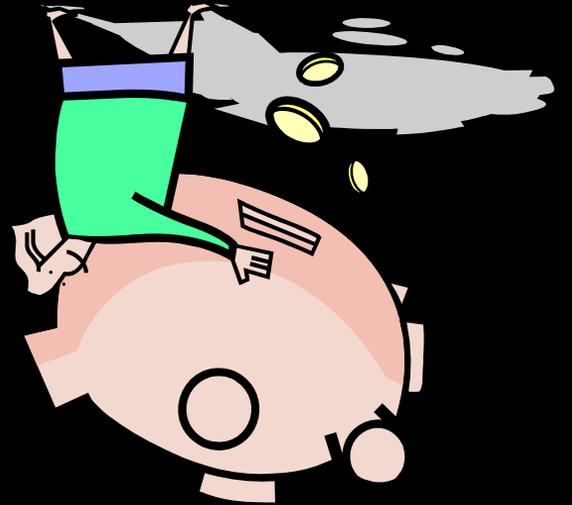


DEBT SERVICE

$$\begin{aligned} & \text{Adjusted Operating Expenses} \\ + & \text{Average Annual Debt Service} \\ & \text{Requirement} \\ + & \text{Debt Service Coverage} \\ = & \text{Total Revenue Requirement} \end{aligned}$$

AVERAGE ANNUAL DEBT SERVICE REQUIREMENT

- **Principal + Interest payable on long-term debt**
- **Generally use a 3-year average**





DEBT SERVICE COVERAGE

Debt service coverage (DSC) is calculated based on the DSC required to issue bonds. This requirement should be stated in the bond indenture.

- RD debt: 120% or 1.2x
- KIA debt: 110% or 1.1x
- Private debt: Varies



OPERATING RATIO

$$\begin{aligned} & \text{Adjusted Operating Expenses} \\ \text{_____} & \div \text{.88 Operating Ratio} \\ & = \text{Total Revenue Requirement} \end{aligned}$$

RATE OF RETURN

Adjusted Operating
Expenses
+ Return on Rate Base
= Total Revenue
Requirement

Where RATE BASE =
Original Cost of Plant
- Accum. Depreciation
= Net Plant in Service
+ Working Capital
- Contributions in Aid
of Construction



COMMISSION FILING REQUIREMENTS

- **Independent Auditor's Reports**
- **Detailed General Ledger**
- **Adjusted Trial Balance & Audit Adjustments,**
- **Detailed Payroll Records & Employee Job Descriptions,**



COMMISSION FILING REQUIREMENTS

- **Allocation Procedures for ALL Shared Costs, Including Payroll.**
- **Detailed Depreciation Schedules, and**
- **For each Outstanding Bond Issuance**
 - **Bond Ordinance or Resolution**
 - **Amortization Schedules**
 - **Purpose of Debt**



TEST YEAR

- A consecutive 12-month period.
- A utility will generally use the 12 months reflected in its most recent annual report or audit.



REVIEW OF TEST YEAR



- **Reconciliation of books to test year.**
- **Review accountant's adjusting journal entries.**
- **Review for proper accrual accounting.**
- **Review of test year expenses.**



ADJUSTMENTS TO TEST YEAR

- **Test year numbers are adjusted to reflect 12 months that are representative of the utility's on-going, normal operations.**
- **Adjustments must be BOTH known and measurable.**
- **Adjustments must be adequately documented.**

2 TYPES OF ADJUSTMENTS

- **Pro forma**
- **Normalizing**





PRO FORMA ADJUSTMENTS

- Known or anticipated increases or decreases in revenues and expenses.
- Supporting documentation must be provided by the utility.



NORMALIZING ADJUSTMENTS

- Adjustments made to reflect a full 12 months of operations for revenue and expense items that changed during the test period.
- Supporting documentation must be provided by the utility.



OPERATION & MAINTENANCE EXPENSES

- Generally include expenses such as salaries & wages, employee benefits, purchased power, purchased water, rent, chemicals, materials & supplies, repairs & maintenance, and general overhead.
- Could also include the allocated portion of common or shared costs such as support services rendered by the city (e.g., use of computer facilities, office rental, office staff, and bill collection).



DEPRECIATION EXPENSE

- **Depreciation expense is included in the determination of revenue requirements for non-profit utilities.**
- **Depreciation should be properly maintained and assets of the water utility should be kept separately from other departments.**
- **Depreciation schedules should be available for review.**



ALLOCATION OF COMMON COSTS

- Allocations are necessary to ensure that the water department is not subsidizing other departments of the city or vice-versa.
- Some type of system should be in place for allocating the appropriate level of each expense to the water utility.
- If a system is not currently in place a basis for logical estimates must be determined.



OTHER ADJUSTMENTS TO O&M EXPENSES

- **Non-recurring expenses such as tank painting or rate case expense.**
- **Capitalization of improperly classified expenses such as meters or pumps.**



OTHER CONSIDERATIONS

- **Other requirements specified in any applicable bond ordinance such as the funding of specified reserves or the exclusion of depreciation expense.**
- **Other requirements specified in any applicable purchased water agreement or other contracts or agreements. An example might be any special provision made for the financing or payment of capital improvements.**

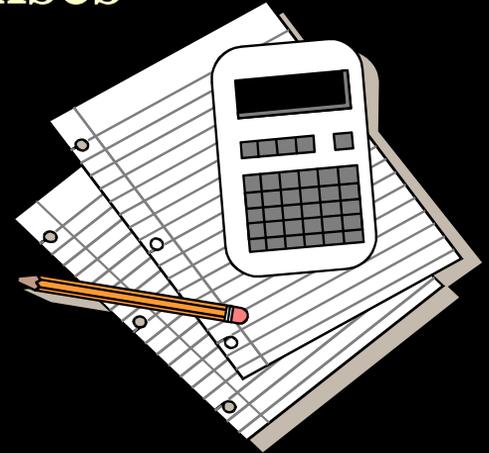


UTILIZATION OF A UNIFORM SYSTEM OF ACCOUNTS

- **Allows for the proper reporting of each expense item.**
- **Helps utility to account for capital expenditures separately from O&M expenses.**
- **Provides historical data in a comparable format that helps in making projections.**

UTILIZATION OF A UNIFORM SYSTEM OF ACCOUNTS, cont.

- **Facilitates cost-of-service calculations.**
- **Allows for a comparison of expenses among water utilities.**



MAINTAINING RECORDS

- Use the appropriate system of accounts
- Records:
 - logical
 - well organized
 - documented
 - separate





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