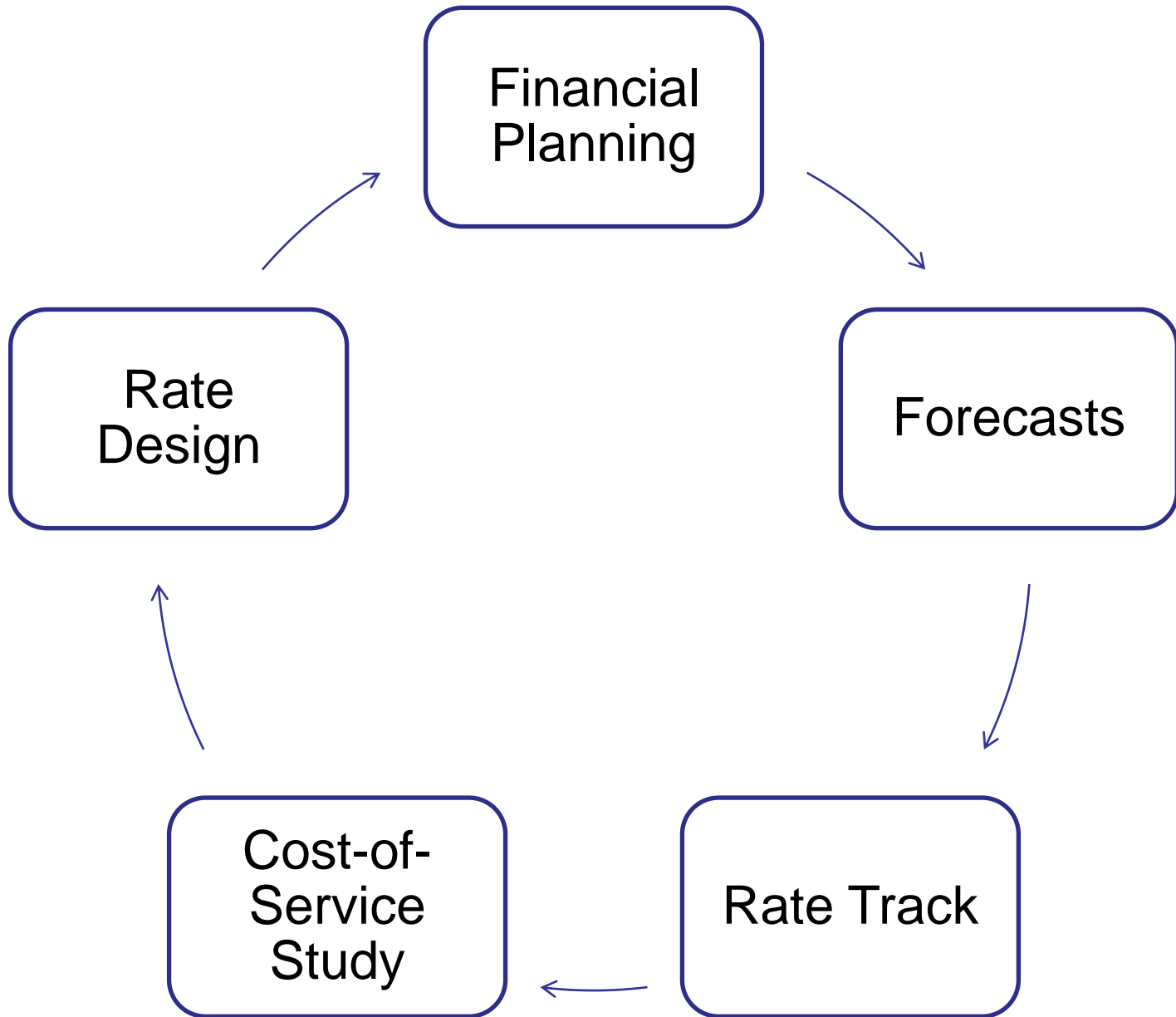


It's Not Just Rate Design



Financial Planning
Cost-of-Service Study
Rate Study - Rate Design

Jim Windsor



Financial Planning



- Develop Long-Term Financial Plan
 - Minimum Cash Reserves
 - Annual Cash Flow & Coverage Ratio
 - Financial Forecast
 - Develop Rate Track
 - Determine Target Rate Adjustment
 - Define Minimum Rate Adjustment

Determine Cash Reserve Requirement – Cash Basis



- Operating Expenses
- Payment-In-Lieu-Of-Tax
- Interest Expense
- Misc. Non-Operating Expenses
- Principle Payment – Bonds
- CIP Funding from Cash Reserves
- Vehicles & Equipment
 - Total Expenses
 - Percent of Total (16%)

Determine Cash Reserve Requirement

– Utility Basis



- Operation & Maintenance 15%
- Principle & Interest 100%
- Insurance Deductible 100%
- Depreciated Value of Utility 1%
- Current Construction Requests (CIP) 15%
- Total of Five Year Plan (CIP) 15%

- Total Reserve Requirement

Simple Cash Flow



- Operating Revenues
- (Operating Expenses)
- (Payment-In-Lieu-Of-Tax)
- Non-Operating Revenues (Expenses)
 - Includes Interest Expense
- (Contributions and Transfers)
- (CIP Appropriation from Enterprise Revenue)
- Outside CIP Reimbursement
- (Vehicle and Equipment Replacement)
- (Principle Payment on Bonds)
 - Annual Change in Cash

Coverage Ratio



- Sum of
 - Operating Revenues
 - (Operating Expenses)
 - (Payment-In-Lieu-Of-Tax)
 - Investment Revenues
 - Misc Non-Operating Revenues
- Divided by the Sum of
 - Interest Expense
 - Principle Payment on Bonds

Financial Forecast Considerations



- Growth – Plus or Minus
 - Associated Revenues & Expenses
- Major Known Events
 - New Contracts (Coal or Purchase Power)
- Major CIP Considerations
- New Bond Proposal

Develop Rate Track



- **Develop Target Rate Adjustment**
 - Multi-Year

- **Determine Minimum Rate Adjustment**
 - First Year

Cost of Service Study



- Allocation of “costs of service” to classes of customers.
 - Functionalize your cost by activity
 - Production; Transmission; Distribution; Customer Accounting; Administrative & General
 - Classify your costs by allocation basis
 - Customer Related; Demand Related; Energy Related
 - Allocate to customer classes
 - Influences the rate-making process

What is the rate making process?



- A process to evaluate existing rate structures, past practices, individual customer impact and cost of service study results to design user rates in a manner consistent with the rate objectives of the City.

Rate Objectives



- Simplicity
- No drastic rate impacts to individual rate classes (no rate shock)
- Administrative feasibility
- Send price signals to promote conservation
- Send price signals to promote usage
- Movement toward cost of service
- Stewardship of large industrial loads
- Social concerns

Rate Structures



- Declining Block Rate
- Flat Rate
- Inverted Block Rate
- Time-of-Use Rate
- Real Time Pricing

Rate Design



- Consider Existing rate history
- Consider Rate Objectives
 - Consider Revenue At Risk
- Consider Cost-of-Service
- Consider Rate Track
- “What If” Analysis

The Future



- Smart-Grid, Net Metering, & Distributed Generation
- How do you fairly provide a reliable, economic, centralized power system, run by a financially healthy utility serving a shrinking kilowatt-hour per customer base?
Paul Mauldin – Intelligent Energy Portal

Further Study



- While I hope this presentation provides you with a good general overview, I recommend attending the American Public Power Association (APPA) 5 day course on Cost-of-Service & Retail Rate Design. Cost for APPA members is \$1,865 and is held as part of the “Utility Institute” at different times of the year.

