



**Courses, presentations and webinars  
offered by Utility Financial Solutions**

## **Cost of Service & Rate Design Courses:**

### **Basic Cost of Service & Retail Rate Design 2 days**

#### **Course Overview**

This course covers traditional industry approaches to electric cost of service and retail rate design using fully distributed, allocated cost methods. Participants will review determination of revenue requirements with cash and utility basis accounting and work through exercises to classify generation, transmission, and distribution service expenses. Participants will also work with standard rate forms used to send proper price signals and recover costs in a fair and equitable manner.

#### **Course Highlights**

- Identification of relevant costs and data sources
- Collection and organization of costs
- Purpose of cost classification or functionalization
- Cost allocation overview
- Retail rate design options
- Rate forms and their applications
- Factors affecting the development and approval of rate proposals

#### **Who Should Attend**

This is an introductory course for utility staff and policymakers involved in the costing and pricing of electric utility services. It covers basic concepts and methodologies surrounding traditional cost-of-service allocation and retail rate design.



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## **Intermediate Cost of Service & Retail Rate Design**

### **1.5 days**

In this course participants will be requested to complete a cost of service study using information and cost of service model provided in the class. Course instruction will guide each participant through the detailed steps that involve the development and application of cost allocation factors to the information to arrive at the cost to serve each sample class. This is a practical hands on course and will provide participants an actual working knowledge of how a cost of service study is completed. Participants are encouraged to bring a laptop computer.

#### **Course Highlights**

- Learn information needs for a cost of service study and how to verify the integrity of the information provided
- Learn how the study is completed using both cash basis and utility basis methodologies
- Identify techniques to obtain, develop and apply load research data
- Discuss methods to allocate distribution and power supply costs to each customer class
- Learn how each cost allocation factor should be applied in the study
- Discuss bundled and unbundled costs
- Learn how to determine each classes facility (monthly customer) charge
- Identify the demand charge and energy charge for each customer class
- Learn how to assess the results of the cost of service study and its application to the rate design process

#### **Who Should Attend**

This is a mid level course for utility staff and policymakers desiring to learn how the cost of service process is completed and applied by utilities. It is designed for those who wish to learn how to apply the basic concepts and methodologies for traditional cost of service allocations and retail rate design.



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## **Advanced Utility Cost of Service & Retail Rate Design 1.5 Days**

### **Course Overview**

This hands-on course takes attendees through a traditional, fully allocated cost of service exercise to obtain practical experience and knowledge of the issues faced during a cost of service study. The course builds upon the concepts learned in APPA's Basic Utility Cost of Service & Retail Rate Design course and focuses on developing unbundled cost of service studies.

### **Course Highlights**

- Developing revenue requirements on the "Utility Basis" and "Cash Basis" of ratemaking
- Identifying minimum rate adjustments to meet requirements in bond ordinances and developing a plan to move toward recommended targets for net income and cash balances
- Developing rates for customers served at various voltage levels (secondary, primary, substation, and transmission)
- Using marginal costs in economic development rates and developing rate designs for customers
- Developing cost allocators that closely resemble how costs are incurred
- Developing a long-term rate track and methods to move customers closer to cost of service
- Using unbundled rates in the rate-design process
- Identifying cost differences in serving outside-city customers
- Working with boards and city councils in developing plans for rate adjustments

### **Who Should Attend**

This course is for utility staff involved in costing and pricing electric services who desire advanced knowledge of the cost of service and ratemaking process. Participants need a basic understanding of the cost allocation process through experience or attendance at APPA's *Basic Utility Cost of Service & Retail Rate Design* course, as the advanced course begins each section with only a brief overview of the basics of cost of service and ratemaking and quickly builds on the concepts and applications.

- Understanding Cost of Service and Rate Design for Board Members – 4 hours
- Retail Costing & Pricing of Electricity (For Public Service Commissioners) – 2 hours
- Wholesale Costing and Pricing of Electricity (For Public Service Commissioners) - 2 hours



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## **The Potential Impact of Smart Grid on Customer's Rate Structures**

### **4 hours**

Varying power supply costs, pressure to increase city contributions, declining sales and pressure to provide rate structures that promote economic development, energy efficiency, and the impact of smart grid technologies are all affecting how we manage and implement customer rate structures. This program will address new and old rate forms and how utilities should prepare for the future including offering time of use rates, importance of marginal costs, why unbundled rates are necessary, alternative rate mechanism to financially protect revenues when sales are reduced or declining, and different forms of power cost adjustments.

## **Understanding New Approaches to Retail Rate Designs**

### **4 hours**

Smart grid technologies, volatility in power supply markets, promotion of energy efficiency programs, and economic downturns have resulted in utilities offering or considering new rate forms for customers. This session discusses industry trends, how rates structures are changing and types of rates being considered by utilities. Topics covered include the following:

1. Rate structures and Industry trends
2. New approaches to rate designs resulting from smart grids
3. Rate structures you may want to consider at your utility
  - a. Positives & negatives of new residential rate structures and potential financial impacts
  - b. Why utilities are using demand charges to recover distribution costs
4. Why utilities are lowering demand charges for power supply cost recovery

## **Industry Rate Trends and Future Rate Structures**

### **4 Hours**

The addition of smart grid technologies, energy efficiency programs and pressure to send price signals to promote energy conservation is changing how utilities are pricing electric services. This session discusses industry rate trends and rate structures your utility may consider to take advantage of the additional information from smart grid and to promote energy conservation. This session will discuss:

1. Types of residential rate structures that promote energy efficiency and how to minimize the financial consequences to the utility
2. How to help ensure cost recovery from customers
3. Issues to consider when developing time differentiated rate structures
4. New rate structures to help promote economic development
5. Innovative rate forms to reflect wholesale power supply charges



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## **Utility Ratemaking for Boards & Councils 4 Hours**

Electric costs around the country are rising due to changes in power supply costs, aging infrastructures, significant capital improvements, and pressure to increase city contributions. To help ensure customer rates are structured correctly it is important for management and Boards to understand the utility's cost structure and use the information to send price signals to customers. This session will take participants through a traditional cost of service study and discuss how the information can be used to design customer rates. The following topics will be covered:

1. Cost of service studies and information provided to Management and Board of Directors.
2. How marginal costs analysis can supplement traditional studies to develop electric rates
3. Using the cost of service study to design rates and minimize customer impacts
4. Why rates vary by type of customer
5. What type of cost the rate components (Facilities Charge, energy, demand) are designed to recover
6. Using the cost of service study to develop new rate structures
7. How to justify and present rate adjustments to governing body

## **Overview of Utility Financial Operations for Boards & Councils 4 Hours**

Utilities are under pressure to minimize rate impacts on customers well maintaining the financial health of the organization. This session discusses key financial targets to help ensure the long term financial stability of the utility and ways to identify potential areas of cost reductions or improvements. Participants will be provided information on how to assess the current financial condition of their utility, how to use the financial targets to develop long term rate tracks and ways to minimize potential rate changes on customers. The session will discuss the following:

- 1) Key operational ratios to identify areas of improvement or cost reductions.
- 2) Financial ratios the utility should review on a regular basis
- 3) Policies used by other utilities to maintain the long term financial health and stability of the utility
- 4) The amount of cash the utility should keep in reserve
- 5) Factors Important to maintaining the financial health of the utility



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## **Financial Planning Courses:**

### **Financial Planning for Municipal Utilities 1.5 days**

#### **Course Overview**

A key component to providing reliable service to your customers is the financial health of the utility. Financial planning is critical to the current and future success of municipal utilities. In this highly interactive course, participants will learn methods used to improve bond ratings, amount of cash reserves the utility should maintain, the key financial targets to monitor, methods to get rate changes approved by the governing body, practical ways to develop a rate plan for the utility. The course completes with a mock financial planning exercise where participants get experience in the process of presenting rate changes to a governing body.

#### **Course Highlights**

- Learn the key areas to consider to improve or maintain utilities bond ratings
- Identify the three key financial targets a utility needs to monitor to help ensure current and future financial stability
- Discover how utilities achieve the proper balance between the utilities financial health and minimizing rate impacts on customers
- Discuss information provided to governing bodies and how to get utilities rate adjustments approved and implemented
- Learn the three key financial targets a utility needs to monitor to help ensure current and future financial stability
- Learn how to determine the amount of revenue to recover in rates
- Identify the amount of bond proceeds needed to fund a utilities capital improvement program and maintain the financial stability of the utility
- Discuss common cross subsidies that occur between city departments and the impact on electric utilities
- Methods to determine the amount of cash a utility should hold in reserve
- Identify appropriate methods to identify operating income targets for not-for-profit utilities
- See how to develop long-term financial plans and rate tracks to achieve utilities financial targets
- Learn methods to achieve the proper balance between maintaining the financial health of the utility and minimizing rate impacts on customers
- Practice developing and presenting rate changes to governing bodies

#### **Who Should Attend**

This intensive and interactive course is designed for utility personnel involved in financial planning, including general managers, finance and accounting personnel, and rate analysts.



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## **Financial Planning for Municipal Utilities 8 Hours**

### **Course Overview**

This high-level financial planning course is designed to teach techniques that evaluate the financial health of the utility; the course instructor will cover financial planning techniques, amount of minimum cash reserves the utility should maintain, debt coverage ratios, bond rating process and alternative electric line extension policies. Upon completion of the course, participants will know how to evaluate the financial health of their utility.

### **Course Highlights**

- Learn about alternative methods used to determine the necessary amount of revenue to recover from customers
- Develop financial targets that are critical to ensuring the long-term financial health of the organization
- Discover differences between financial targets established for cities' general operations and financial targets established for utilities
- Discuss and Identify types of contributions most utilities make to their city's general fund operations
- Discover the purpose of special rate types (economic development, interruptible rates, marginal cost pricing, production cost adder (PCA)) in a rate program
- Find out how to evaluate the long-term financial plan of the utility
- Discover special policies to consider for cash reserves and line extension policies

## **Coping with Financial Challenges during periods of declining sales 4 Hours**

The economic downturn combined with energy conservation programs has reduced electric sales and created a number of financial and rate design challenges for utilities. This session discusses policies that assist in dealing with these challenges: Specific areas discussed include the following:

1. Financial policies that help guide utilities during difficult times
2. Rate policies that promote financial stability
3. How long-term rate tracks and financial projections can guide a utility through difficult times
4. Rate structures that promote financial stability and those that need to be closely monitored
5. What other utilities are doing to get through these difficult times
6. Industry trends that promote financial stability



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2. Financial ratios the utility should review on a regular basis
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4. The amount of cash the utility should keep in reserve
5. Factors Important to maintaining the financial health of the utility





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## **Presentations:**

### **Rate Structures to Create Revenue Stability during Tough Economic Times**

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4. Rate structures that promote financial stability and those that need to be closely monitored
5. What other utilities are doing to get through these difficult times
6. Industry trends that promote financial stability

### **Line Extension Policies (Contributions in Aid of Construction)**

A utilities line extension policy determines the amount the utility would pay to extend services to new customers. A properly designed policy helps ensure growth is good for all ratepayers and the utility contributes appropriate amounts to extend services. Often line extension policies are determined through review of line extension policies of nearby utilities and not on the actual costs of extending new services. Policies may result in growth that increases rates for existing ratepayers or may unfairly burden new customers thereby limiting the utilities ability to grow. This session discusses alternative line extension polices and methods to identify the maximum contribution a utility should incur for a new service.

1. Review of alternative line extension methodologies
2. Assessing the risks to the utility of extending service to different types of customers
3. How line extensions for subdivisions and developers and differ from a extensions to a residential home
4. How to determine the value a customer will provide the utility
5. How an upgrade of service can be considered under line extension contributions



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## **Developing Cash Reserve Policies**

A cash reserve policy is critical to maintaining the utilities financial stability and bond ratings. This session discusses alternative methods to develop cash reserve polices used by other utilities and discusses:

1. Factors that influence the necessary amount of cash a utility should maintain
2. Risk is a key factor in determining the amount of cash the utility should maintain. Learn the risk factors and how to reduce some of the risk factors that will help to keep rates lower and lessen the need for cash reserves
3. How cash policies can provide guidance on when a utility should issue debt and what capital projects should be financed through cash reserves
4. Participants will be provided sample cash reserve policies

## **Maintaining or Improving Utility Bond Ratings**

Bond ratings have become important to utilities and help reduce interest rates paid on debt. The focus of the session is factors bond rating agencies consider when providing a utility with a bond rating and discusses:

1. Why rating are important to utilities
2. What are the key factors rating agencies consider
3. How much debt is appropriate for your utility
4. How much cash should the utility have in reserve
5. Why debt is important to maintaining the financial stability of the utility
6. How historical financial statements are used by rating agencies
7. What financial policies bond rating agencies consider important

## **Determining Utility Revenue Requirements**

**(How much you should recover from customers in the rates charged by the Utility)**

Determining revenue requirements is the most important financial target a utility can establish but often the least understood. Revenue requirements determine the amount and timing of rate adjustments which are often influenced by social and political factors. The utility's ability to achieve the needed revenue requirements is dependent on a number of factors including:

1. The rational and foundation revenue requirements are determined
2. How rate adjustments are communicated to the governing body
3. Training and education provided to the governing body
4. Identifying the consequences of forgoing needed rate adjustments



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5. What three financial factors are considered in determining rate adjustments
6. How are revenue requirements determined and what methods are appropriate
7. Why looking at cash flows and cash reserves can lead to negative consequences for the utility

### **Electric Vehicle Charging Stations**

Electric car charging stations installed in residential homes may result in a number of technical, metering and rate issues the utility should consider. Including how the customer may be metered such as sub metering or requiring a separate service line. Is time of use the only method used to charge the customer, what would occur if a customer installs a quick car charging and what are the impacts on the Utilities distribution system. This session will focus on these issues and the following:

1. What metering installations are being used by Utilities
2. The types of rate structures the utility may consider including:
  - a. Rate is a separate meter is installed
  - b. Placing customer on a blocked rate structure
  - c. Having a separate rate structure for customer with car charging stations
  - d. Should we implement a time of use rate structure for residential car charging stations
3. How does the cost to purchase and operate an electric vehicle compare with an internal combustion engine
4. How utilities are addressing the cost issues if a new service line is installed



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## **Webinars:**

### **Coping with Financial Challenges during Periods of Declining Sales**

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6. Industry trends that promote financial stability

### **Overview of Utility Financial Operations for Board & Council Members**

Utilities are under pressure to minimize rate impacts on customers well maintaining the financial health of the organization. This webinar will discuss key financial targets to help ensure the long term financial stability of the utility and ways to identify potential areas of cost reductions or improvements.

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### **Rate Making for Utility Boards & City Councils**

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