

# Utility Regulation, Ratemaking & Economic Development

## Courses & Presentations 2020

*Presented By*

**CATALYST**  
CONSULTING LLC



**John Wolfram**  
Principal



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### OVERVIEW

#### *Introduction*

Catalyst Consulting LLC is pleased to announce its Utility Regulation, Ratemaking & Economic Development Course and Presentation offerings for this year.

These presentations address important traditional and emerging issues in the utility industry. Any of these offerings may be delivered as a stand-alone presentation at your industry conference. Several topics may be combined to produce a training session at your offices, customized to fit the particular objectives, timeframe, and interests of your organization.

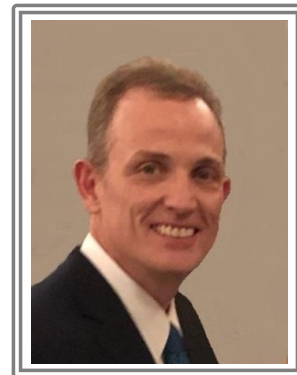
Continuing education credits may be available to participants upon successful completion of the training programs.

All topics will be presented with knowledgeable, clear, and dynamic instruction in a genuine and professional manner tailored to the particular audience.

Please contact me directly to discuss how the course offerings can be customized to meet your professional development or conference planning needs.

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***Instructor: John Wolfram***

John Wolfram is the founder and Principal of Catalyst Consulting LLC. He has broad experience in electric utility ratemaking, regulatory affairs, operations, planning, energy marketing, customer service, energy efficiency, and economic development.

He began his career in 1990 with PJM, where he implemented systems for the reliable operation of the multi-state transmission grid. He worked with Cincinnati Gas & Electric Company on similar matters before returning to PJM during the deregulation of the electric wholesale market.

In 1997, Mr. Wolfram joined Louisville Gas & Electric Company and Kentucky Utilities Company, first in the Energy Trading group and then in the Generation Planning department. As Manager of Regulatory Affairs, he directed strategic regulatory initiatives with FERC and with regulators in Kentucky and Virginia, including rate cases, certificates of public convenience and necessity and transmission siting proceedings, compliance & management audits, energy efficiency program filings, RTO membership, and hydroelectric relicensing. Mr. Wolfram then served as Director of Customer Service & Marketing, where he was responsible for all facets of customer interaction, including marketing, major accounts, call centers, customer inquiries, economic development, and energy efficiency program design & implementation.

In 2010, Mr. Wolfram joined The Prime Group, LLC, a rate and regulatory consulting firm, as a Senior Consultant assisting utilities on matters related to rate design, cost of service studies, revenue requirements, formula rates, open access transmission tariffs, RTO membership, and special rate structures.

In 2012, he founded Catalyst Consulting LLC, a rate and regulatory consulting firm specializing in utility rate cases, tariffs and complex regulatory matters.

Mr. Wolfram has a B. S. degree in Electrical Engineering from the University of Notre Dame and a M.S. degree in Electrical Engineering from Drexel University with concentrations in power system modeling and engineering management. He has testified as an expert witness many times before state and federal regulators. He regularly presents to utility staffs, to Boards of Directors, at customer meetings, and at national conferences.



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### OFFERINGS

#### 1) *Fundamentals of Utility Regulation*

Regulation of electric utilities has existed in the United States for many decades. Utility ratemaking is built upon a foundation of regulation that continues to evolve today.

##### Topics

- Basic Tenets of Utility Regulation
- Ratemaking Principles
- The Revenue Requirement
- The Fair Rate of Return
- Cost of Service Studies
- Rate Design
- The Ratemaking Process

#### 2) *Fundamentals of Cost of Service Studies*

The cost of service study is a basic tool for utility ratemaking. These studies are used in many ways by utilities and regulators alike, but are most commonly used as the basis for establishing utility rates. The purpose of this presentation is to explore the steps for preparing cost of service studies consistent with the standards generally accepted by regulators across the country.

##### Topics

- Overview of Cost of Service Studies
- Objectives & Test Period Concepts
- Functionalization of Costs
- Classification of Costs – Demand, Energy & Customer
- Allocation of Costs to the Rate Classes
- Class Rates of Return
- Class Unbundled Costs
- Per-Unit Costs



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### ***3) Fundamentals of Revenue Requirements***

The Revenue Requirement is the amount that a utility should recover from consumers in the rates charged by the utility. The cost of service study and rate design effort may be moot without the proper determination of the revenue requirement. Properly determining revenue requirements is critical for utility rates to successfully produce the target revenue.

#### Topics

- Components of the Revenue Requirement
- Operating Expenses
- Pro Forma Adjustments
- Depreciation, Taxes & Other Costs
- Revenues
- Rate Base
- Margins: Return on Rate Base, TIER, DSC, Other
- Other Considerations & Alternative Approaches

### ***4) Fundamentals of Rate Design***

Electric rate design has been called “part art and part science.” While accepted practices exist, realistic rate design takes into consideration the utility objectives and the cost causation data that is unique to the set of circumstances at hand, including not only the revenue requirement and the cost of service study, but also numerous other financial, technical, historical and political considerations.

#### Topics

- Rate Design Objectives
- Attributes of a Sound Rate Structure
- Unbundled Rate Components
- Rate Mechanisms & Riders
- Rate Design Variations
- Special Rate Structures
- Other Considerations



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### 5) *Fundamentals of Residential Demand Rates*

The growing penetration of rooftop solar and other residential distributed generation (“DG”) has sparked a renewed interest in Residential Demand rates (also known as Residential Three-Part rates). Utilities have offered Three-Part rates to large commercial and industrial customers for decades, but the application of this structure to residential customers poses several new and interesting challenges that many utilities across the country are beginning to embrace.

#### Topics

- The Role of Demand in Cost of Service
- Two Part Rate vs. Three Part Rate
- Alignment of Wholesale and Retail Rates
- Rate Design & Billing Impacts
- Other Considerations: Technology, Behavior, & Optionality
- Transition Planning & Implementation Issues

### 6) *Implementation of Rate Revisions*

The cost of service study and rate design analysis is completed, showing that changes to current rates are warranted. Now what? Rate revisions can wreak havoc if not properly implemented; the proper implementation involves several steps that, if well executed, can allow the utility to achieve both its financial and public relations goals.

#### Topics

- Rate Design: Initial Considerations
- Determination of Proposed Rates
- Revenue Proof: Present & Proposed Rates
- Customer Rate Impacts
- Securing Necessary Approvals
- Customer Service Issues
- Communications & Media
- Timing



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### **7) *Communicating Rate Revisions to Consumers***

The cost of service study and rate design analysis is completed, and the leadership is considering a general rate increase. What is the best way to communicate this to consumers? Rate increases can devastate customer satisfaction if not properly communicated; explanation, education and persuasion involve several steps that, if well executed, can convince consumers of the appropriateness of the changes and maintain the long-term customer support for the utility and its management.

#### Topics

- Understanding the Drivers of the Rate Increase
- Customer Rate Impacts: The Numbers Game
- The Rate Design Strategy
- It's All in the Timing
- The Communications Plan
- Who You Gonna Call? Preparing Customer Service Staff
- Methods & Media

### **8) *Ratemaking for Environmental Compliance Plans***

With the Climate Action Plan and the recent steady stream of EPA regulations for power plants, ratemaking for Environmental Compliance Projects ("ECPs") -- particularly the Environmental Cost Recovery ("ECR") mechanism -- is experiencing a bit of a revival. Utility regulators are examining several aspects of their jurisdiction over utility ECPs, including but not limited to ratemaking options. ECR mechanisms have existed for a few decades and offer an alternative to the traditional rate case for utilities to address rate treatment for environmental compliance costs.

#### Topics

- Regulatory Requirements for Environmental Compliance Plans
- Applicable Ratemaking Principles
- Foundation for Environmental Cost Recovery Mechanisms
- Project Criteria
- ECR vs. Base Rates
- How ECR Mechanisms Work





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### 9) *Ratemaking for Distributed Generation*

The growing penetration of rooftop and community solar has reignited interest in rates for distributed generation (“DG”) among customers, regulators, and utilities alike. The fundamentals of rates for DG have not changed, but the technology has advanced and the effect of DG rate design can be tremendous given the potential for residential adoption.

#### Topics

- Implementation Options for DG
- Cost Impacts of DG
- DG Rate Design Objectives
- Options for DG Rate Design
- Challenges with DG Cost Allocation
- The Future of DG Rate Design

### 10) *Ratemaking for Economic Development*

Incentive rates have been around for decades. The body of regulatory deliberations is extensive, and certain principles have emerged over the years for evaluating Economic Development Rates (“EDRs”) and Load Retention Rates (“LRRs”), which utilities use as an incentive for business attraction, retention, and expansion in their service territories.

#### Topics

- Regulatory Foundations for EDRs and LRRs
- Common Criteria for EDRs and LRRs – When They Apply
- Common Tariff Provisions – How the Rates Work
- Common Utility Requirements – What Utilities Must Do
- Other Considerations & Examples



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### 11) *Rate-making for Energy Efficiency & Conservation*

Public interest in energy efficiency and conservation continues to grow. Many utilities are experiencing margin erosion as consumption declines, because the current rate structures fail to align utility cost drivers with customer billing components. A sound rate design establishes rate components that send clear price signals while aligning the incentives of the consumers and the utility for promoting conservation and energy efficiency.

#### Topics

- Rate Component Review
- Consumer Behavior & Utility Costs
- Consumer Behavior & Utility Revenues
- Alignment of Consumer and Utility Incentives
- Seasonal & Time-Differentiated Rates
- DSM / Energy Efficiency Adjustment Clauses

### 12) *Rate-making with Smart Metering*

Metering technology is advancing, and as metering costs continue to drop, many utilities are moving forward with smart metering rollouts. Then what? Smart metering affords a utility many opportunities to improve revenue stability, reduce costs, increase overall efficiencies, and even enhance customer satisfaction. From a ratemaking standpoint, smart metering opens the door to time of use rates and other alternatives that could not be implemented previously.

#### Topics

- What is Smart Metering?
- Advantages of Smart Metering
- Critical Issues for Smart Metering Data
- Smart Metering Rate Designs



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### 13) *Ratemaking for Economic Downturns*

Recent economic downturns have created a number of challenges for utilities; increased adoption of energy efficiency, distributed generation, and conservation have reduced revenues and eroded margins for many utilities. The solution to these challenges includes a review of utility policies, billing and payment offerings, and current rate structures.

#### Topics

- Utility Financial Policy Review
- Customer Billing & Payment Offerings
- Utility Cost Review: Fixed & Variable
- Rate Components: Demand, Energy, Customer
- Revenue Stability: Strategy & Tactics

### 14) *Ratemaking with Formula Rates*

In order to avoid the risks associated with periodic variations in costs and rate recovery, wholesale generation providers and transmission owners often employ formula rates in lieu of stated rates. With formula rates, the approved rate is actually a formula, with certain parameters fixed and other parameters varying with the actual costs recorded on the utility's books and records. These rate structures have been approved by regulators (in particular the Federal Energy Regulatory Commission) for many years.

#### Topics

- Formula Rate History & Foundation
- Formula Rate Template Structure
- Fixed Amounts
- Variable Amounts & Data Sources
- Formula Rate Protocols
- Annual True-Up Methods
- Annual Projection Approach
- Other Considerations & Examples



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### 15) *Rate-making for the Future*

The utility landscape is dynamic. Some pundits claim that traditional utility rate-making is being rendered obsolete by advancing technologies, evolving energy markets, new environmental regulations, consumer adoption of distributed generation and energy efficiency, and other changes. What do these emerging forces mean for utilities and for utility rate-making for the future?

#### Topics

- Emerging Issues & Trends
- Effect on Utility Operations & Planning
- Effect on Utility Costs & Financing
- Rate Design Options for Emerging Trends
- Customer Offerings
- Challenges, Advantages & Disadvantages
- Utility of the Future

### 16) *Rate-making for Boards of Directors*

Utility leaders closely manage the details of utility operations, planning, and financials; they understand the fundamentals underlying a sound rate design. However, when rate changes are needed, it is important not only for management but also for the Board of Directors to thoroughly understand how rates allow for the proper achievement of target margins. This is especially true for new Directors. The Board is best positioned to support rate changes when they understand the reason for those changes and how rates send proper price signals to customers, consistent with the utility's mission.

#### Topics

- Cost of Service Study Overview – Objective and Approach
- Differences in Rate Classes
- Cost Components – Demand, Energy, Customer
- Rate Design Objectives
- Using the Cost of Service Study for Rate Design
- Understanding & Supporting Rate Revisions



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### **17) *Ratemaking for State Regulators***

Regulation of electric utilities has existed in the United States for many decades. Utility ratemaking is built upon a foundation of regulation that continues to evolve today. State regulators are uniquely positioned to balance the interests of utility customers and shareholders as part of the regulatory compact.

#### Topics

- Basic Tenets of Utility Regulation
- Ratemaking Principles
- The Revenue Requirement
- Cost of Service Studies
- Rate Design Objectives
- Attributes of a Sound Rate Structure
- Unbundled Rate Components
- Automatic Adjustment Clauses
- Other Considerations

### **18) *Ratemaking for City Councils***

Utility leaders closely manage the details of utility operations, planning, and financials; they understand the fundamentals underlying a sound rate design. However, when rate changes are needed, it is important not only for management but also for the Council to thoroughly understand how rates allow for the proper achievement of margin targets. This is especially true for new members. The Council is best positioned to support rate changes when they understand the reason for those changes and how rates send proper price signals to customers, consistent with the utility's mission.

#### Topics

- Cost of Service Study Overview – Objective and Approach
- Differences in Rate Classes
- Cost Components – Demand, Energy, Customer
- Rate Design Objectives
- Using the Cost of Service Study for Rate Design
- Understanding & Supporting Rate Revisions



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### **19) *Reviewing Rate Class Composition to Support Sound Rate Design***

The composition of rate classes can significantly impact utility margins. With rate design based on average consumption patterns for each rate class, a heterogeneous rate class can undermine the rate design, jeopardize target revenue collection, and arouse customer dissatisfaction following a rate case. This session will highlight the importance of reviewing rate class composition, provide a case study, and explain the principles behind rate class formulation. The session will also consider the application of rate class review to Residential DG rate design and describe methods for reviewing and refining rate classifications in order to support fair, just and reasonable rates.

#### Topics

- Justification for Rate Classes
- Homogeneous vs. Heterogeneous Rate Classes
- Case Study: Large Customer Rate Classes & Rate Migration
- Supporting Rate Design with Rate Class Data
- Using Rate Class Review for Residential DG
- Examples

### **20) *Fostering Economic Development with Existing Customers***

Salespeople sometimes forget about their existing customers in the quest to gain new ones. This can also happen in economic development. This presentation explores ways for the utility to cultivate retention and expansion opportunities within its existing customer base.

#### Topics

- Boosting Communications with Current Key Accounts
- Identifying Community and Utility Advantages
- Optimizing Existing Utility Services (Not Only Quality and Price)
- Creating Additional Value Through Partnership and Promotion (and Creativity)
- Examples



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### ***21) Enhancing Utility and Community Collaboration on Economic Development***

A famous author once said “It takes two flints to make a fire.” Need to ignite economic development in your service territory? This presentation explores ways for the utility to enhance collaborative efforts with community economic development organizations, so that utilities can be more proactive in the attraction, retention and expansion process.

#### Topics

- Alignment of Objectives and Budget
- Analysis of Sites, Industries, Key Metrics, and Expansion Plans
- Partnership on Areas of Expertise and Funding
- Promotional Events and Opportunities
- Preparing and Planning for Prospect Inquiries
- Examples

### ***22) Extreme EDR Makeover – Reinventing Economic Development Rates***

Incentive rates have been around for decades, but what large customers want from utilities as an incentive for business attraction, retention, and expansion is rapidly changing. Energy is becoming a higher corporate priority due to sweeping environmental, social, and business trends on climate change, expectations about corporate environmental stewardship, energy technology innovations, and declining renewable energy prices. These trends are driving new developments in utility Economic Development Rates (“EDRs”) faster than ever before.

#### Topics

- Regulatory Foundations for EDRs
- Emerging Corporate Interests
- Renewable Energy
- Market-Based Rates
- Other Considerations & Examples