



Edison Electric  
INSTITUTE



**WISCONSIN**  
UNIVERSITY OF WISCONSIN-MADISON  
Department of Engineering Physics  
Wisconsin Public Utility Institute

## 2024 EEI Electric Rates Course: Rates in a Changing Industry

July 28-31, 2024 | Pyle Center at University of Wisconsin | Madison WI

Hosted by the Wisconsin Public Utility Institute

*All times are Central*

### SUNDAY JULY 28

3:00 – 6:00 p.m.

*Two 10-minute breaks*

#### **Overview of Electric Ratemaking Basics**

**Larry Blank** – *Center for Public Utilities, New Mexico State University*

- Overview of the General Steps in Electric Ratemakings  
(Revenue Requirement; Class Cost of Service Study; and Rate Design for Customer Classes)
- Basic Rate Design
  - Customer, Energy, and Demand Charges
  - Energy Charge vs. Fixed Customer Charge
  - Energy Charge vs. Demand Charge
- Actual Tariff Contents and Sample Rate Schedules
  - Challenges to Cost-Based Rate Design

6:00 – 7:00

**Welcome Reception – Pyle Center**

## MONDAY JULY 29

8:30 – 8:45 a.m.

### **Welcome and Course Introduction**

**Brendan Timmons** – Edison Electric Institute

**Lori Sakk** – Wisconsin Public Utility Institute

8:45 – 10:15

### **Regulatory Accounting**

**John Caldwell** – Center for Public Utilities, New Mexico State University

- Review of Regulatory Accounting Fundamentals
  - Regulatory Accounting vs. “Regular” Accounting
  - Revenue Requirements
  - The Income Statement and Balance Sheet
  - The Rate Base and Its Components
  - Rate of Return and Capital Structure
- Ratemaking Adjustments and Normalization
- Operating Expenses vs. Capital Expenditures
- Tax Treatment
- Construction Work in Progress vs. Allowance for Funds Used During Construction
- Accounting for Plant Retirement

10:15 – 10:30

### **Break**

10:30 a.m.– 12:30 p.m.

### **Current Issues in Cost of Capital**

**Bente Villadsen** – The Brattle Group

- Cost of Capital and Revenue Requirement
- How Markets Affect Cost of Capital
- Traditional Cost of Equity Methods and Their Use Across Jurisdictions
- Sources of Risk, Old and New
- Earned Returns vs. Allowed Returns
- Rate Design and the Effect on the Cost of Capital
- Impact of the Energy Transition on Cost of Equity
- Recent Rate Case Issues
- How Markets Adjust if Allowed Return on Equity Is Below Market Requirements

12:30 – 1:30

### **Lunch**

1:30 – 3:00

### **Costing to Support Contemporary Rate Design**

**Bruce Chapman and Mike Clark**– Christensen Associates Energy Consulting

- Embedded/Financial Costs
  - Cost Allocation Methodology
  - Uses of Embedded Costs in Rate Design
- Marginal Costs
  - Generation Services
  - Delivery Services
  - Uses of Marginal Costs in Rate Design

3:00 – 3:15

### **Break**

3:15 – 4:45

### **Traditional and Contemporary Rate Design**

**Bruce Chapman and Mike Clark** – *Christensen Associates Energy Consulting*

- Traditional Rate Design
  - Rate Design Objectives, Constraints, and Tradeoffs
  - Traditional Designs
- Contemporary Rate Design
  - Design Challenges and Opportunities
  - Dynamic Pricing Designs and Issues
  - Pricing for Distributed Energy Resources
    - Substitutes for Net Energy Metering
  - Pricing for Electric Vehicle Charging
    - Customer-Site and Third-Party/Commercial
  - Emerging Alternative Designs

4:45– 5:30

### **Explanation and First Meeting of Group Projects**

**Bruce Chapman, Mike Clark** – *Christensen Associates*

5:30

**Adjourn**

## **TUESDAY JULY 30**

8:45 – 10:15 a.m.

### **Minimum Distribution System Concepts and Applications**

**Larry Vogt** – *Vogtage Engineering Corporation*

- What Constitutes a Minimum Distribution System (MDS)
- Different Approaches to Determining Minimum Distribution System Costs
- Illustrative Results of a Minimum Distribution System Study

10:15 – 10:30

**Break**

10:30 a.m. – 12:00 p.m.

### **Alternative Regulation**

**Nick Crowley** – *Christensen Associates Energy Consulting*

- Performance-Based Regulation
- Multi-Year Rate Plans
- Performance Incentive Mechanisms
- Forward Test Years
- Cost Trackers
- Formula Rate Plans

12:00 – 1:00

**Lunch**

1:00 – 2:30

### **Alternative Regulation, continued**

**Nick Crowley** – *Christensen Associates Energy Consulting*

- Implementation Considerations

- Current State of Alternative Regulation in North America
- International Examples of Alternative Mechanisms (e.g., TotEx)

2:30 – 2:45

**Break**

2:45 – 4:00

**Madison Gas & Electric's Customer Options for Carbon Reduction**

*Brian Penington – Madison Gas & Electric*

**Interstate Power & Light's Proposed Time-of-Use Rates/Wisconsin Power & Light Power Partnership**

*Jeff Ripp – Alliant Energy*

4:00 – 5:00

**Group Project**

Each team can enjoy refreshments in their break-out rooms while continuing to outline their response to the project.

5:00

**Adjourn**

## WEDNESDAY JULY 31

8:30 – 9:30 a.m.

**Final Prep for Group Projects**

9:30 – 9:45

**Break**

9:45 – 10:45

**Resource Adequacy and NERC Overview**

*Elliott Nethercutt – Edison Electric Institute*

10:45 – 11:45

**Customer Response to Dynamic and Time-of-Use Pricing**

*Dan Hansen and Michael Clark – Christensen Associates Energy Consulting*

11:45 a.m.– 1:30 p.m.

**Working Lunch, Group Project Discussion and Debrief**

1:30

**Adjourn**