# **Advanced Workshop in Regulation and Competition**

# 28th Annual Western Conference

Hyatt Regency, Monterey, California, on June 24-26, 2015

The Conference features some of the latest developments in the network industries, especially energy, including:

- > Deregulation
- ➤ Market Structure
- ➤ Policy and Regulatory Issues
- > Environmental Policy and GHG
- > Telecommunications and Water
- Pricing and Demand Response
- > Capacity and Reliability

### Who should attend:

- ➤ Industry Economists, Consultants and Attorneys
- Marketing and Regulatory Managers
- Regulatory Commission Staff

**Dinner Speaker**: **Edward O'Neill**, Senior Advisor to the Governor on CPUC Modernization and Reform





# CENTER FOR RESEARCH IN REGULATED INDUSTRIES

The *Center for Research in Regulated Industries*, located at Rutgers University, aims to further study of regulation in economics, finance, and institutions. Its publications, seminars, workshop, and courses make available the latest advances to academics, managers, and regulatory commission staff. The Center has over thirty five years of experience providing research, instruction, conferences, courses, seminars, and workshops in economics of network industries. The Center's *Journal of Regulatory Economics* is an international scholarly bi-monthly publication intended to provide a forum for the highest quality research in regulatory economics. Other research from the Center's programs has been published in the book series *Topics in Regulatory Economics and Policy*.

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WEDNESDAY, JUNE 24, 2015

2:00 - 4:00 Registration MGB Terrace 4:00 - 6:00Welcome to Conference: Michael A. Crew **PacificRoom** 

Karl McDermott: The Impact of Innovations on Employment: The Post War Railroad Industry

Timothy Brennan: Net Neutrality: Economics, Law, and Politics

William Kovacic: Due Process and Quality Control in Regulatory Agency Decision-making

6:00 - 7:00 Cocktail Hour MGB Terrace Dinner & Keynote Speech: Edward O'Neill: CPUC Reform - Would We Know If We Saw It? 7:00 - 9:00Beach Room 9:00 - 10:00MGB Terrace Reception

# **THURSDAY. JUNE 25. 2015**

8:00 - 10:00 **Concurrent Sessions** 

> **RATES & TARIFFS** Grove Chair: Dennis Keane

Discussants: Nicole Belle Isle and Andre Ramirez

Ahmad Faruqui, Ryan Hledik & Wade Davis: Do Inclining

Block Rates Promote Energy Efficiency?

David Brown & David Sappington: On the Optimal Design

of Distributed Generation Policies

Richard McCann: A More Expansive Investigation into the

Value of Solar

Gregory Rybka Financial Impacts of Customer-Sited PV on

Utility Rates and Profitability

10:00 - 10:20Coffee Break

10:20 - 11:50 **Concurrent Sessions** 

> **RELIABILITY MODELING** Grove

Chair: Joseph Abhulimen Discussants: Neil Lessem

Frank Felder et al: Optimizing Reliability and Resiliency of

**Electric Distribution Systems** 

Kevin Woodruff: Can Traditional Electric System Reliability

Criteria Survive Exposure to the Sun and the Wind? **Robert Entriken et al:** Concepts and Practice Using

Stochastic Programs for Determining Reserve Requirements

11:50 - 1:20 Lunch Break

1:20 - 2:50 **Concurrent Sessions** 

**CAPACITY & RELIABILITY** 

Chair: Rami Kahlon Discussants: Carl Silsbee

Scott Harvey & Susan Pope: Demand Response, Market

Manipulation and Order 745

Albert Lamadrid, Tim Mount & Wooyoung Jeon: Can Pay-for-Performance Pricing Replace Capacity Markets and

Establish a Viable Energy-Only Market?

Carl Linvill: Swiss Army Knife or Meat Cleaver: Assessing Reliability Arguments for Expanding Gas Generation and

Infrastructure

2:50 - 3:00 Break

3:00 - 4:00 **Concurrent Sessions** 

> **WATER ISSUES** Grove

Chair: Rami Kahlon

Discussants: Carl Danner and Nguyen Quan

J. Chermak, R. Patrick, K. Krause & D. Brookshire: Water Commodity Pricing and Conservation Incentives

Bob Kelly: Prediction Of Small Water Utilities Heading

Into Receivership

THE DEMAND SIDE

Chair: Gary Stern

Discussants: Matthew Croucher and Alan Finder

**Stephen George**: Final Results from SMUD's SmartPricing

**Options Pilot** 

Luke Nickerman & David Sawaya: The State of PG&E

**Building Stock** 

Robert Entriken et al: A Benefit-Cost Framework for Optimal

**Load Shifting** 

Wade Davis, Ahmad Faruqui & Ryan Hledik: The

**Economics of Organic Conservation** 

MGB Terrace

**Pacific** 

**Pacific** 

**Pacific** 

**Pacific** 

**DEVELOPING REGULATION** 

Chair: Shivani Ballesteros Discussants: Khai Duong and Eric Woychik

Timothy Brennan & Michael Crew: Price Cap Regulation

and Declining Demand

Jiong Gong, Baomin Dong & Michael Crew: Guaranteed

Return Regulation

Joseph Wharton & Michael Vilbert: The Impact of

Decoupling Ratemaking on the Cost of Capital

PROGRAM MEASUREMENT

Chair: Alan Finder

Discussants: Jocelyn Wong and Charlene Zhou

Lamine Akaba & Christine Hartmann: An Experiment on Machine Learning and Estimating the Impacts of Demand

Response

Grove

Ahmad Faruqui & Josephine Duh: Re-examining the Controversial Rebound Effect in Energy Efficiency

**Neil Lessem**: Sharing the Love – Measuring Program Impacts

without a Dedicated Control Group

**COMPETITIVE VALUE** 

Chair: Anne-Marie Cuneo

Discussants: Carl Peterson and Eric Woychik

Wesley W. Wilson: Competition and Prices over Railroad

Udi Helman & Joshua Eichman: Economic Benefits of

Energy Storage under California's Storage Mandate

**Pacific** 

# FRIDAY, JUNE 26, 2015

8:30 - 10:30 *Concurrent Sessions* 

THE DEATH SPIRAL

Chair: Carl Peterson

Discussants: Carl Danner and Karl McDermott

Darryl Biggar: Electricity Network Tariff Reform in Australia:

The Current Debate and the Way Forward

**Amparo Nieto & Cliff Rochlin**: Utility Regulation in the Era of Renewables: Is there a need for a New Business Model? **Stephen St Marie**: Will there be a "Death Spiral" for

California Electric Utilities?

Ashley Spalding & Catherine Elder: Cable and Electric

Utilities: Do We Need Them?

10:30 – 11:00 Coffee Break

11:00 - 12:30 Concurrent Sessions

WHOLESALE MARKETS Grove GHG Pacific

Chair: Darryl Biggar

Discussants: Eric Korman & Kevin Woodruff

**Paul Nelson**: Review of CAISO's Energy Imbalance Market **Shmuel Oren, Ruoyang Li & Alva J. Svoboda**: Efficiency Impact of Convergence Bidding on the California Electricity

Market

Ryan Kurlinski & Roger Avalos: Allocating CRR Revenue

Inadequacy by Constraint to CRR Holders

Residential Customers

Robert Levin: Time-of-Use Rates For 2020 and Beyond: Can

Cynthia Fang: Unlocking the Value of Distributed Resources

Frank A. Monforte: Incorporating Behind-the-Meter Solar

Josephine Duh, Ahmad Faruqui, Ryan Hledik & Toby

**Brown**: A Template for Designing the Optimal Tariff for

MGB Terrace

Chair: Michael A. Crew

**OPTIMAL RATES** 

They Tame the Duck?

Chair: Fred Curry

through Pricing

Discussants: James Fine and Charlene Zhou

Generation into a Load Forecasting System

Discussants: Scott Murtishaw and Mark Fulmer

Janos Kakuk & Gary Stern: Clean Energy Standard – A Framework to Achieve California's Carbon Reduction Vision

**Gigio Sakota & Andrew Dugowson**: A Uniform Cost-Comparison Metric for GHG Reduction Measures in the

Electric Sector

**Ray Williams, Jeff Brown, Xantha Bruso**: Western Electric Market Impacts from US EPA 111(d) Policy Alternatives

12:30- 12:35 Concluding Remarks-Michael A. Crew

#### **SPEAKERS DISCUSSANTS & CHAIRS**

Joseph Abhulimen, Program Supervisor, California Public Utilities Commission

Lamine Akaba, Pacific Gas and Electric

Shivani Ballesteros, Regulatory Case Manager, San Diego Gas & Electric Nicole Belle Isle, Utilities Engineer, California Public Utilities Commission

Darryl Biggar, Australian Competition and Consumer Commission Timothy Brennan, University of Maryland Baltimore County

**David Brown**, University of Alberta

Jeff Brown, Principal Long Term Energy Policy, PG&E

Janie M. Chermak, Professor and Chair, University of New Mexico

Michael A. Crew, CRRI Professor of Regulatory Economics, Rutgers University

Matthew Croucher, Director of Demand Analytics, CPS Energy

Anne-Marie Cuneo, Director of Regulatory Operations, Public Utilities Commission of Nevada

Fred Curry, Consultant, Submission Solutions

Carl Danner, Chief Internal Auditor, California Public Utilities Commission

Wade Davis, Research Analyst, The Brattle Group

Andrew Dugowson, Southern California Edison Company

Josephine Duh, Associate, The Brattle Group

Khai Duong, California Public Utilities Commission

Catherine Elder, Practice Director, Energy Resource Economics, Aspen Environment Group

Robert Entriken, Senior Manager, Policy Analysis, EPRI

Cynthia Fang, Electric Rates Manager, San Diego Gas & Electric

Frank Felder, Rutgers University

Alan Finder, Managing Director, Global Regulatory Advisors LLC

James Fine, Senior Economist, Environmental Defense Fund

Mark Fulmer, Principal, MRW & Associates

Stephen S. George, Nexant Inc.

Jiong Gong, Henan University

Scott Harvey, FTI Consulting

Udi Helman, Consultant

Rami Kahlon, Director of the Water Division, California Public Utilities Commission Janos Kakuk, Principal Manager, Market Strategy and Resource Planning, Southern California Edison

Dennis Keane, Senior Manager, Rate Design and Quantitative Analysis, Pacific Gas & Electric

Robert Kelly, Vice President Regulatory Affairs, Suburban Water Systems

Eric Korman, Vice President, Analysis Group, Inc.

Ryan Kurlinski, California Independent System Operator

Alberto Lamadrid, Lehigh University

Neil Lessem, Consultant, The Brattle Group

**Robert Levin**, Senior Analyst, Energy Division, California Public Utilities Commission **Carl Linvill**, Director, Energy Planning and Analysis, The Regulatory Assistance

Richard McCann, Partner, M.Cubed

Karl A. McDermott, Ameren Professor of Government and Business, University of Illinois-Springfield & Special Consultant, NERA Economic Consulting

Frank A. Monforte, Itron

Timothy D. Mount, Professor, Cornell University

Scott Murtishaw, Advisor, California Public Utilities Commission Paul Nelson, Market Design Manager, Southern California Edison

Luke Nickerman, Pacific Gas and Electric

Amparo Nieto, Vice President, NERA Economic Consulting

Edward O'Neill, Senior Advisor to the Governor on CPUC Modernization and Reform

Shmuel Oren, University of California Berkeley

Robert H. Patrick, Associate Professor, Rutgers University

Carl Peterson, Assistant Professor, University of Illinois - Springfield & Special

Consultant, NERA Economic Consulting
Nguyen Quan, Manager Regulatory Affairs, Golden State Water Company

Andre Ramirez, Regulatory Operations – Pricing Design & Research, Southern California Edison

Gregory Rybka, Lawrence Berkeley National Laboratory

Gigio Sakota, Senior Project Manager, Southern California Edison Company

Andrew Satchwell, Lawrence Berkeley National Laboratory

David Sawaya, Pacific Gas and Electric

Carl Silsbee, Manager of Resource Policy and Economics, Southern California Edison

Ashley Spalding, Energy Analyst, Aspen Environmental Group

Stephen St. Marie, Policy & Planning Division, California Public Utilities Commission

Gary Stern, Director of Energy Policy, Southern California Edison

Michael J. Vilbert, The Brattle Group

Joseph B. Wharton, Principal, The Brattle Group

Ray Williams, Director, Long Term Energy Policy, PG&E

Wesley W. Wilson, University of Oregon

Jocelyn Wong, California Public Utilities Commission

Kevin Woodruff, Principal, Woodruff Expert Services

Eric Woychik, Executive Consultant and Principal, Strategy Integration, LLC

Charlene Zhou, Associate, Analysis Group, Inc.

### **ORGANIZING COMMITTEE**

Matthew Arenchild (Navigant Consulting, Inc.) Michael A. Crew (Rutgers University) Fred Curry (Submission Solutions) Carl Danner California Public Utilities Commission)

Robert Earle (Analysis Group) Robert Entriken (EPRI)

Cynthia Fang (San Diego Gas & Electric)

Ahmad Faruqui (Brattle Group)

Rami Kahlon (California Public Utilities Commission)

Dennis Keane (Pacific Gas & Electric) Neil Lessem (The Brattle Group)

Carl B. Linvill (The Regulatory Assistance Project) Amparo Nieto (NERA Economic Consulting) Cliff Rochlin (Southern California Gas) Carl Silsbee (Southern California Edison) Kevin D. Woodruff (Woodruff Expert Services)

#### **HOTEL RESERVATIONS**

Sufficient Rooms are reserved at the Hyatt Regency Monterey for all of the Conference participants. Reservations should be received by June 2, 2015. Hotel reservation can be made by using the following Passkey Link:

#### https://resweb.passkev.com/go/CRRIAnnual2015Conference

**Hyatt Regency Monterey** 

1 Golf Course Road Monterey, California, 93940, USA 1-888-421-1442

If you are not making reservations through the link above please identify yourself as being held under the group block: Rutgers University CRRI Program.

#### **CONTACTING CRRI**

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#### REGISTRATION INFORMATION

To Register: Please complete and return the form to CRRI. Registrations are accepted by mail, email, fax, and telephone. Please confirm telephone registrations by sending in a completed and signed registration form. The deadline for registrations is May 15, 2015. Registrations received after May 15, 2015 will be admitted on a space available basis.

Volume discount: Second and subsequent applications received in the same envelope, fax, email, or made at the same time by phone will receive a 5% volume discount.

Payment Information: Make checks payable to "Rutgers University" and mail to the attention of at the above address. Fees include prescribed learning materials, dinner on Wednesday night, June 24, 2015, all receptions and coffee breaks, but do not include lodging and other meals. The government registration fee is available for government employees.

Title:	
Company:	
Complete Address:	
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CANCELLATION POLICY: Until May 1, 2015 cancellation	GOVERNMENT RATE: Government employees may apply for reduced enrollment fees. I would like to apply for the govt rate of \$600  Code: Card #  a is allowed without penalty and refunds will be allowed in full. After icipant actually attends. Substitutions may be made at any time.