Advanced Workshop in Regulation and Competition

29th Annual Western Conference

Hyatt Regency, Monterey, California, on June 22-24, 2016

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: Robert Kenney, Vice President, CPUC Regulatory Relations, Pacific Gas and Electric Company

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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973-353-5761 ● 973-353-1348 (fax)
# 29th Annual Western Conference

## Wednesday, June 22, 2016

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<th>Time</th>
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<td>2:00 - 4:00</td>
<td>Registration</td>
<td>MGB Terrace</td>
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<td>4:00 - 6:00</td>
<td>Welcome to Conference: Victor Glass</td>
<td>Pacific Room</td>
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<td></td>
<td>Ramzi Kahlon: The California Drought</td>
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<td>Carl Danner: Internal Auditing in a Regulatory Agency Context</td>
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<td>Tim Brennan: Merger Conditions in Regulated Industries</td>
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<td>6:00 - 7:00</td>
<td>Cocktail Hour</td>
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<td>7:00 - 9:00</td>
<td>Dinner &amp; Keynote Speech: Robert Kenney, Vice President, Pacific Gas and Electric Company</td>
<td>Beach Room</td>
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<td>9:00 - 10:00</td>
<td>Reception</td>
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## Thursday, June 23, 2016

### Concurrent Sessions

#### Wholesale Markets

- **Chair:** Eric Korman
- **Discussants:**
  - Matthew Arenchild: Analyzing Changes in Western Markets: CAISO EIM (Costs, Benefits, and Regulatory Considerations)
  - Keith Collins: Expanding Electricity Markets through an Energy Imbalance Market
  - Paul D. Nelson: Opportunities for Energy Market Expansion in the West
  - Kevin Woodruff: Benefits and Costs of “Regional Integration” in the WECC

- **Time:** 10:00 – 10:20

- **Time:** 10:20 - 11:50

#### Capital and Rate of Return

- **Chair:** Carl Peterson

- **Time:** 11:50 - 1:20

- **Time:** 1:20 - 2:50

#### Regulatory Frameworks

- **Chair:** Bradley Leong
- **Discussants:**
  - Karl McDermott: Regulatory Lag and the Incentives Question: Fact, Fiction and Myth
  - Richard White: Valuing Risk Information: A New Tool for Cost-Effective Regulation
  - Darryl Biggar & Bruce Mountain: The Transactions Cost Approach to Public Utility Regulation and the Role of Customers

- **Time:** 2:50 - 3:00

- **Time:** 3:00 - 4:00

#### Resource Integration

- **Chair:** Gary Stern
- **Discussants:**
  - Carl Linvill: Teaching the Duck to Fly at Least Cost and with Least Resistance
  - Gigio Sakota, Tomislav Galjanci, Muir Davis & Raymond Johnson: CAISO Market Integration of Demand Response – Experience and Challenges

### Retail Pricing

- **Chair:** Andre Ramirez

### Program Measurement

- **Chair:**

### Renewables

- **Chair:**
- **Discussants:** Gigio Sakota, Jeff Brown & Ray Williams: Impacts of State GHG Program Design in Implementing EPA’s Clean Power Plan, Jiong Gong: Optimal Sizing of Portable Modular Batteries for Electric Vehicles, Adrian Tuohy, Eamonn Lannoye & et.al.: Capacity Adequacy and Variable Generation

### Power Market, Market Power

- **Chair:** Charlene Zhou
- **Discussants:** Megan H. Accordino: Detecting Manipulation of Related Spot and Futures Markets, Hjalmar Pihl: Natural Gas Price Volatility at Western Trading Hubs
29th Annual Western Conference
FRIDAY, JUNE 24, 2016
8:30 - 10:30  Concurrent Sessions

**METHODODOLOGY**
Chair: 
Discussants:
**Josephine Duh & Ahmad Faruqui:** Emerging Issues in Forecasting Energy Consumption, Peak, and Hourly Load Shapes

**Amin Faharkarazi & Amitava Dhar:** A Stochastic Approach To Quantify Load Diversity Factors on Distribution Circuits

**Lamadrid, Aberto, W. Jeon, H. Lu and Tim Mount:** Using a Receding-Horizon Optimization to Manage Renewable Generation Efficiently II

**Brian Lubeck:** Using a Gaussian Copula within a Monte Carlo Simulation Framework to Model Load Uncertainty

10:30 – 11:00  Coffee Break

11:00 - 12:30  Concurrent Sessions

**OPERATIONAL CONSIDERATIONS**
Chair: 
Discussants:
**Lamine Akaba & Christine Hartmann:** Machine Learning, Performance Predictors, and Demand Response

**Robert Entreniken, et al:** Operating Reserve Determination: Test Cases and Market Design Insights

**Ledyard, John & Karl McDermott:** The Behavior of Public Utilities in the Face of Demand Uncertainty, Costly Adjustments and Prudence Reviews

12:30- 12:35  Concluding Remarks – Victor Glass

**DISTRIBUTED GENERATION & STORAGE**
Chair: Nguyen Quan
Discussants: Andrew Dugowson

**Rasika Athawale:** Small to Big, and Again Small: Will Distributed Generation Achieve Success?

**David Brown & David Sappington:** Optimal Policies to Promote Efficient Distributed Generation of Electricity

**Cynthia Fang & Josh Mondragon:** Solar Adoption and Customer Demand in the Residential Sector

**Udi Helman; J Eichmann, P Denholm, & J Jorgenson:** Economic Benefits of Energy Storage under California’s Storage Mandate: Assessment of Different Storage Attributes and Applications under 33% and 40% RPS Scenarios

12:30 - 1:30  Concurrent Sessions

**WATER**
Chair: Stanley Lee
Discussants: Eric Korman & Viet Truong

**Michael Crew & Rami Kahlon:** Franchising Revisited: Developments in the Water Sector

**Richard McCann, Edward Spang & Frank Loge:** Using Water Utility Systems to Better Integrate Distributed Energy Resources

**Bob Kelly:** A Brief History Of The California WRAM

3:30 – 5:00  Concurrent Sessions

**SPEAKERS DISCUSSIONS & CHAIRS**
**ORGANIZING COMMITTEE**

Matthew Arenchild (Navigant Consulting, Inc.)  
Michael A. Crew (Rutgers University)  
Carl Danner (California Public Utilities Commission)  
Robert Earle  
Robert Entriken (EPRI)  
Cynthia Fang (San Diego Gas & Electric)  
Ahmad Faruqui (Brattle Group)  
Victor Glass (Rutgers University)  
Rami Kahlon (California Public Utilities Commission)  
Dennis Keane (Pacific Gas & Electric)  
Neil Lessem (The Brattle Group)  
Paul Nelson (Southern California Edison)  
Amparo Nieto (NERA Economic Consulting)  
Kevin D. Woodruff (Woodruff Expert Services)

**CONTACTING CRRI**

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**HOTEL RESERVATIONS**

Sufficient Rooms are reserved at the Hyatt Regency Monterey for all of the Conference participants. Reservations should be received by **June 2, 2016**. Hotel reservation can be made by using the following Passkey Link:  

**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 16, 2016. Registrations received after May 16, 2016 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 22, 2016, all receptions and coffee breaks, but do not include lodging and other meals. The government registration fee is available for government employees.

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**REGISTRATION FORM: 29th Annual Western Conference**

**Name:**

**Title:**

**Company:**

**Complete Address:**

**Telephone:**

**Fax:**

**Email:**

**Billing Information:**

__ Payment enclosed $1,135 U.S. Dollars  
__ Send invoice to participant at above address.  
__ Send invoice to__________________________  
___ Credit Card: ___ VISA ___ MC Exp. ____/____ CVC Code: ___ Card # ____________________________

**GOVERNMENT RATE:** Government employees may apply for reduced enrollment fees.  
___I would like to apply for the govt rate of $610

**CANCELLATION POLICY:** Until May 2, 2016 cancellation is allowed without penalty and refunds will be allowed in full. After this date, the indicated fee is due in full whether or not the participant actually attends. Substitutions may be made at any time.

**Signature of Participant:**  
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**REGISTRATION INFORMATION**

**Address:**  
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.