Advanced Workshop in Regulation and Competition

33rd Annual Western Conference

Hyatt Regency, Monterey, California on June 24-26, 2020

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: Commissioner Jordan White

CENTER FOR RESEARCH IN REGULATED INDUSTRIES



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*.

crri@business.rutgers.edu www.business.rutgers.edu/CRRI

Rutgers Business School ● 1 Washington Park, Room 1104 ● Newark, NJ 07102-1897 973-353-5761

| Wednesday, June 24, 2019 | |
|---|---|
| 2:00 – 4:30 Registration | Mark Thomas Foyer |
| 4:30 – 6:05 Welcome to Conference: Victor Glass | Cypress |
| 4:35 – 6:00 | |
| Karl A. McDermott "The Origin and Role of Capital Attra | ction in the Regulation of Public Utilities" |
| Alice Stebbins Michael Colvin | |
| Michael Colvin | |
| 6:00 – 7:00 Cocktail Hour | Mark Thomas Foyer |
| 7:00 – 9:00 Dinner & Keynote Speech : <i>Commissioner J</i> | ordan White Big Sur |
| 9:00 – 10:00 Reception | Mark Thomas Foyer |
| Thursday, June 25, 2019 | |
| 8:30 – 10:00AM Concurrent Sessions | |
| Cypress | Spy Glass |
| Climate Change | Long Term Planning |
| Chair: TBA | Chair: TBA |
| Discussants: | Discussants: |
| Tim Brennan: Willingness to pay to avoid higher | Erica Bowman: Pathway 2045: Changing California's Electric |
| temperatures: A Simple Model with complex implications Eric Haglund: Weather Normalization in Warming Climate | Supply in 25 years Trina Horner: How Much for a Full Tank? Sifting Through EV |
| Elic Hagiund. Weather Normanzation in Warming Chinate | Rates |
| Lulu Tian: Environmental Regulation and Fair Competition: | Richard Stevie, Ken Skinner, Mehdi Gangi, Patrick Burgess, |
| Evidence form Enterprise Markup | Wei Tien, and Eric Woychik: Advanced Grid Planning for |
| | Carbon and All Resources: Where, When, and How the Details Matter |
| 10:00 – 10:20AM Coffee & Tea Break | Mark Thomas Foyer |
| 10:20 - Noon Concurrent Sessions | |
| Customer Response | Distributed Energy Resource Planning |
| Chair: TBA | Chair: TBA |
| Discussants: | Discussants: |
| Ahmad Faruqui, Ryan Hledik, Tony Lee, and John Higham: How Demand Response and Load Felxability Can | Cindy Fang, Josh Mondragon, and Rina Tefiku: An Update on Customer Demand and Consumption of Solar Customers in the |
| Help Meet the Needs of Decarbonized Grid | Residential Sector |
| Janie Chernak, Jesse Kaczmarski, and Benjamin Jones: | JP Carvallo: A Capacity Expansion Model under Various Rate |
| Consumer Response to a Utility Controlled Conservative | Structures |
| Program Robert Patrick and Janie Chermak: Disaggregating | Eric Woychik, Mark S. Martinez, and Ken Skinner: Customer |
| Consumer Water Demand Response by End Use and the | Innovation Futures: Value Mapping for DERs and Electrification |
| Impacts on Optimal Incentives | 11 0 |
| James Fine: Virtual Power Plants in California's | |
| | |
| Disadvantaged Communities: Successes, Gaps and Solutions | |
| Noon – 1:15PM Lunch | |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions | |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering | Renewable Intergration |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA | Chair: TBA |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA Discussants: | Chair: TBA Discussants: |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA Discussants: Larry Blank and Doug Gegax: Do Residential Net Metering | Chair: TBA Discussants: Ephram Glass and Victor Glass: Enabling Supercapacitors to |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA Discussants: | Chair: TBA Discussants: Ephram Glass and Victor Glass: Enabling Supercapacitors to Compete for Ancillary Services: An Important Step Towards |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA Discussants: Larry Blank and Doug Gegax: Do Residential Net Metering Customers Pay Their Fair Share of Electricity Costs? Evidence from New Mexico | Chair: TBA Discussants: Ephram Glass and Victor Glass: Enabling Supercapacitors to Compete for Ancillary Services: An Important Step Towards 100% Renewable Energy |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA Discussants: Larry Blank and Doug Gegax: Do Residential Net Metering Customers Pay Their Fair Share of Electricity Costs? | Chair: TBA Discussants: Ephram Glass and Victor Glass: Enabling Supercapacitors to Compete for Ancillary Services: An Important Step Towards |
| Noon – 1:15PM Lunch 1:15 – 2:45PM Concurrent Sessions Net Energy Metering Chair:TBA Discussants: Larry Blank and Doug Gegax: Do Residential Net Metering Customers Pay Their Fair Share of Electricity Costs? Evidence from New Mexico Megshan Cui: Demand and Supply for Rooftop Solar: | Chair: TBA Discussants: Ephram Glass and Victor Glass: Enabling Supercapacitors to Compete for Ancillary Services: An Important Step Towards 100% Renewable Energy Matthew Arenchild and Mike Kline: Intergrating New |

33rd Annual Western Conference

| CRRI - | Rutgers | University |
|--------|---------|-------------------|
|--------|---------|-------------------|

| for Rooftop Solar | David Salant and Matthew DeCourcey: Renewable Portfolio Standards—Recent Experience and Auction Design Options |
|--|--|
| | |
| 2:45 – 3:15PM Break | |
| 3:15 – 4:30PM | |
| Resource Adequacy | Panel |
| Moderator: Tim Brennan | Panelists: Edward Randolph, Stephen Keehn, Peter Griffes |
| | |
| | |
| Privacy | |
| William Kovacic, The Do-Not-Call Rule at 15 and the Future of U.S. Privacy Policy | |
| | |
| | |

| FRIDAY, JUNE 26, 2019 | |
|---|--|
| 8:30 – 10:00AM Concurrent Sessions | |
| Cypress | Spy Glass |
| Rate Design 1 | Resource Planning |
| Chair: TBA | Chair: TBA |
| Discussants: Amparo Nieto | Discussants: |
| Tim Mount, Alberto J. Lamadrid, and Wooyoung Jeon: A Simple Alternative to Peaking-Load Pricing | E. Ela, R. Entriken, R. Hytowitz, V. Singhvi, and E. Vittal: Power Systerm Supply Resilience |
| Jan Grygier: What the Heck is the Marginal Unit, Anyway? | Udi Helman: Energy Storage in Resource Planning-Findings from Recent Surveys |
| Cindy Fang: New Considerations for Residential Rate Reform to Support California's Pursuit of Decarbonization | Joseph Cavicchi and Edmund Downie: Resource Adequacy Through Wholesale Markets: Challenges to Revenue Self- Suffciency Amidst VRE Growth and Electrification |
| 10 – 10:30AM Coffee and Tea Break, & Check out | Mark Thomas Foyer |
| 10:30 – 12:15PM Concurrent Sessions | |
| Rate Design 2 | Whole Sale Markets |
| Chair: TBA | Chair: TBA |
| Discussants: | Discussants: |
| Edward Cazalet: The Subscription Transactive Tariff | Darryl Biggar and Mohammad Hesamzadeh: Merchant Transmission Investment Using Generalized FTRs |
| Hung-po Chao:Pricing Strategy for Clean Power Under Uncertainty | Darryl Biggar and Mohammad Hesamzadeh: Time Inconsistency and Looking-ahead dispatch |
| Colin Kerrigan: PG&E's Historical Rate Designs | Joseph Duggan Jr.: Tacit Collusion in Repeated Unit Commitment Auctions |
| | |
| | |

SPEAKERS DISCUSSANTS & CHAIRS

Matt Arenchild, Managing Direcctor, Navigant

Darryl Biggar, Australian Competition and Consumer Commission

Larry Blank, Associate Professor New Mexico State University

Erica Bowman, Direcotr, SCE

Tim Brennan, University of Maryland Baltimore County

JP Carvallo, Sr. Scientific Engineering Associate, Lawrence Berkeley National Laboratory

A. Joseph Cavicchi, Vice President, Analysis Group

Michael Colvin: Director Regulatory and Legislative Affairs, Environmental Defense Fund

Edward Cazalet, President, TeMix

Hung-po Chao, Chief Economist and Senior Director Economics – Operations and Markets, PJM Interconnection

Janie M. Chermak, Professor, University of New Mexico

Michael Colvin, California Legislative and Regulatory Director, Environmental Defense Fund

Megshan Cui, Associate, Analysis Group

Naim Dargouth, Senior Science Engineer, LBL

Joseph Duggan Jr., Assistant Professor, University of Dayton

Eric Hagland, Trial Staff, Colorado PUC

Trina Horner, Director, Navigant

William Kovacic, Professor, George Washington Law School

33rd Annual Western Conference

Carl Danner, Managing Director, Berkeley Research Group

Erik Ela, Senior Technical Leader, EPRI

Robert Entriken, Principal Technical Leader, EPRI

Cyndee Fang, Manager of Customer Pricing, SDG&E

Derek Fong, Senior Utilities Engineer, CPUC

James Fine, Environmental Defense Fund

Ephram Glass, Consultant

Victor Glass, Director CRRI and Professor of Professional Practice, Rutgers University

Peter Griffes, Chief, Market Design, PG&E

Jan Grygier, Principal Data Scientist, PG&E

Udi Helman. Consultant

Ryan Hledik, The Brattle Group

Stephen Keehn, Manager of Energy Regulatory and Legislative Affairs,

Monterey Bay Community Power

Colin Kerrigan, Principal Strategic Analyst, PG&E

Ryan Kurlinski, Manager, Analysis and Mitigation Group, CAISO

Martin Kurtovich, Policy and Planniung Analysit, CPUC

Karl A. McDermott, Ameren Professor of Government and Business, University of Illinois-Springfield

Andrew Mills, Research Scientist, Lawrence Berkely National Laboratory

Gwen Morien, Rate Strategy Project Manager, San Diego Gas and Electric

Tim Mount, Professor, Cornell University

Amparo Nieto, Senior Vice President, Economists Inc.

Robert H. Patrick, Associate Professor, Rutgers University

Edward Randolph, Deputy Executive Director, CPUC

David Salant, Senior Managing Director, FTI Consulting Group

Alice Stebbins, Executive Director, CPUC

Lulu Tuan, SDTBU

Aidan Tuohy, Senior Project Manager, EPRI

Jordan White, Commissioner Utah Public Service Commission

Kevin Woodruff, Woodruff Expert Services

Eric Woychik, Senior Vice President, Willdan Group

ORGANIZING COMMITTEE

Matthew Arenchild (Navigant Consulting, Inc.)

Carl Danner (California Public Utilities Commission)

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)

Eric Korman (Analysis Group)

Paul Nelson (Barkovich and Yap)

Amparo Nieto (Economists Inc.)

Ryan Kurlinkski, Caiso

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 <u>May 26, 2020</u>. Hotel reservation can be made by using the following Passkey Link:

https://www.hyatt.com/en-US/group-booking/MRYDM/G-RUT6

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.

CRRI - Rutgers University

33rd Annual Western Conference

CONTACTING CRRI

Victor Glass, Director - CRRI and Professor of Professional

Practice, Rutgers University

Home Page: www.business.rutgers.edu/CRRI

Address: Center for Research in Regulated Industries

Rutgers Business School, Rutgers University,

1 Washington Park, Room 1120 Newark, NJ 07102-1897

Phone: 973-353-5761

Email: <u>vglass@business.rutgers.edu</u> (Victor Glass)

cri@business.rutgers.edu (CRRI Admin Asst)

Signature of Participant:

REGISTRATION INFORMATION

CRRI – Rutgers University

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 24, 2020. Registrations received after May 24, 2020 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, 2020, all receptions and coffee breaks, but do not include lodging and other meals. The government registration fee is available for government employees.

REGISTRATION FORM: 32nd Annual Western Conference Name Title: Company: Complete Address: Telephone: Fax: Email: Billing Information: __ Payment enclosed \$1,135 U.S. Dollars GOVERNMENT RATE: Government employees may apply for reduced enrollment fees. Send invoice to participant at above address. I would like to apply for the govt rate of \$610 Send invoice to Credit Card: ___VISA ___ MC Exp. ___/___ CVC Code: Card # CANCELLATION POLICY: Until May 9, 2019 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.