Advanced Workshop in Regulation and Competition

30th Annual Western Conference

Hyatt Regency, Monterey, California on June 28-30, 2017

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: Catherine Sandoval, former Commissioner – California Public Utilities Commission Center for Research in Regulated Industries

Rutgers

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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30th Annual Western Conference

CRRI – Rutgers University

JULI AIIIL		CRRI - Ruigers University
WEDNESD/	AY, JUNE 28, 2017	
2:00 - 4:00	Registration	Monterey Terrace
4:00 - 6:00	Welcome to Conference: Victor Glass	Grove Room
William E	. Kovacic: Academic Hubs – The Intellectual Infrastr	ucture of Economic Regulation
	nan: Michael Crew's Contributions to the CRRI Conf	
Karl McD	ermott: The Paths Not Taken – Alternatives to "Trad	itional" Cost Based Regulation in the Pre-Hope Era
6:00 - 7:00	Cocktail Hour	Monterey Terrace
7:00 - 9:00	Dinner & Keynote Speech: Catherine Sandoval	Beach Room
9:00 - 10:00	Reception	Monterey Terrace
THURSDAY	, JUNE 29, 2017	
8:30 - 10:00	Concurrent Sessions	
	TED ENERGY RESOURCES I Grove	WATER AMID DROUGHT Pacific
Chair: Gary		Chair: Dennis Keane
	: Joseph Abhulmen, Scott Murtishaw	Discussants: Nguyen Quan
	triken: StorageVET Use Cases	Rami Kahlon: California Drought
	hy, Ben Kaun, Erik Ela, and Udi Helman:	Janie Chermak and Robert Patrick: Residential Water
	uation in Bulk Power System Planning	Consumer Response to Price
	hik and Mark S. Martinez: To Integrate and	Stephen St. Marie: Water Rate Design
1	e Grid – Locate and Customize Distributed Energy	
Resources		
10:00 - 10:20	Coffee Break	Monterey Terrace
10:20 - 11:50	Concurrent Sessions	
	C FORECASTING Grove	ELECTRIC WHOLESALE MARKET DESIGN Pacific
Chair: Dha		Chair: Tim Brennan
	: Armando Levy, Trina Horner	Discussants: Hung-po Chao, Tim Mount
	ng, Josh Mondragon, and Gwen Morien: Solar	Udi Helman and Erik Ela: Wholesale Electricity Market
	nd Customer Consumption in the Residential Sector	Design Initiatives in the U.S.: Survey and Research Needs
	ruqui, Zhen Wang, and James Hall: Estimating of DSM on Energy Sales Forecasts – A Survey of	Ryan Kurlinski and Roger Avalos : Ancillary Service Demand Curves Based on Expected Value of Avoiding Power
Utility Prac		Balance Constraint Violations
•	rwacki, Lifan Pan, and Cyrus Sorooshian-Tafti:	Carl Linvill and Michael Hogan : Hitting the Mark on Missing
	Pricing (RTP) program	Money – How to Ensure Reliability at Least Cost to Consumers
11:50 - 1:20	Lunch Break	
1:20 - 2:50	Concurrent Sessions	
		ISSUES FOR FERC & STATE COMMISSIONS Pacific
Chair: Mar		ISSUES FOR FERC & STATE COMMISSIONS <i>Pacific</i> Chair: Kevin Woodruff
	:: Carl Peterson, Eric Woychik	Discussants: Andrew Dugowson and Michael Vilbert
	an: NARUC vs. NYPSC	Andrew Kleit: Looking Back at ENRON After Almost Two
	ieto: Designing a Value-Based Tariff Framework	Decades – Were California's Electricity Markets Manipulated?
-	ted Energy Resources	E. Korman, C. Zhou; M. Accordino; and L. Omondi: Murky
	ta and Raymond Johnson: Demand Response	Markets – A Review of FERC's Determination of Submarkets
	echanism (DRAM) Pilot – An Initial Look	in Wholesale Electric Power Mergers
		Robert Mudge and Akarsh Sheilendranath: An Examination
		of Plausible Drivers of Elevated Market to Book Ratios of
		Regulated Utilities
2:50 - 3:00	Break	
3:00 - 4:00	Concurrent Sessions	
SAFETY 8	SMART METERING Grove	Chair:
Chair: Gigi		Discussants: Tim Brennan
-	: Catherine Elder	Victor Glass and Timothy Tardiff: Is Wholesale Pricing of
Jiong Gong	g: What to Do When Railroad Tariffs Not Reflecting	Dedicated Broadband Services no Longer Relevant in a Packet
Risk of Acc	vidents?	World?
	er and Paul Schulman: Rethinking Risk	John Mayo, Jeffrey Macher, Olga Ukhaneva, and Glenn
	for Safety Regulation	Woroch: Universal Service – Now It's Getting Personal
	McShane: Leveraging Gas Smart Meter	Menahem Spiegel:, Compliance
	to Improve Energy Choice	
	JNICATIONS & COMPLIANCE Pacific	

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FRIDAY, JUNE 30, 2017

MORE ON WHOLESALE MARKETS

Chair: Menahem Spiegel

Discussants: Carl Linville, Megan Accordino

Hung-po Chao and William Hogan: Competitive Equilibrium of Two-Settlement Electricity Market with Virtual Bidding A. Lamadrid, W. Jeon, H. Lu and Tim Mount: The Potential Role of Aggregators in a Simple Two-Sided Electricity Market Kevin Woodruff: Regional Markets and Greenhouse Gases – Part II

10:30 – 11:00 Coffee Break

11:00 - 12:30 Plenary Session

ELECTRIC SERVICE PLANNING

ELECTRIC RATE DESIGN

Chair: Paul Nelson

Discussants: Carl Danner, Amparo Nieto Ken Schiermeyer and Will Matsuoka: Long-Term Hourly Forecasting

Ahmad Faruqui; Ryan Hledik, and Angela Gunn:

Simulating the Impact of Demand Charges in the Absence of Empirical Data

Paul Nelson and Ben Baker: Using Loss of Load Expectation to Allocate Generation Capacity to Peak and Flexibility Need *Monterey Terrace*

Grove

Pacific

Chair: Catherine Sandoval Discussants: Anne-Marie Cuneo, John Cole Daniel Brooks, Robert Entriken, Adam Diamant, and Tom Wilson: Planning Framework for Integrated Energy Networks

Janie Chermak and Robert Patrick: Optimizing Production of Hydrocarbons and Water

Ahmad Faruqui, Neil Lessem, and Henna Trewn: Promoting Energy Efficiency by Leasing High Efficiency Equipment

James P. Griffin, John Cole and Mark Glick: Hawaii's Progress and Lessons Learned in Reaching a 100% Renewable Portfolio Standard

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

SPEAKERS DISCUSSANTS & CHAIRS

 Megan Accordino, Associate, Analysis Group Inc.
Benjamin Baker, Senior Financial Analyst, Southern California Edison
Tim Brennan, University of Maryland Baltimore County
Meredith Burnett, Assistant Staff Counsel, Nevada Public Utilities Commission
John Candelaria, Policy Advisor, Nevada Public Utilities Commission
Hung-po Chao, Chief Economist and Senior Director Economics – Operations and Markets, PJM Interconnection

Joseph Abhulmen, Program Supervisor, California Public Utilities Commission

Janie Chermak, Professor, University of New Mexico

John Cole, Energy Analyst, Hawaii Natural Energy Institute

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

Carl Danner, Chief Internal Auditor, California Public Utilities Commission Dhaval Dagli, Principal Manager, Southern California Edison

Andrew Dugowson, Energy & Environmental Policy, Southern California Edison Catherine Elder, Director, Energy Resource Economics, Aspen Environment Group

Robert Entriken, Principal Technical Leader, EPRI Cynthia Fang, Rate Strategy and Analysis Manager, San Diego Gas & Electric

Ahmad Faruqui, Principal, The Brattle Group

Russell Garwacki, Director, Pricing Design and Research, Southern California Edison Victor Glass, Director CRRI and Professor of Professional Practice, Rutgers University Jiong Gong, Henan University

Udi Helman, Consultant

Trina Horner, Director of Energy Practice, Navigant

Rami Kahlon, Director of the Water Division, California Public Utilities Commission Dennis Keane, Senior Manager, Rate Design and Quantitative Analysis, Pacific Gass &

- Electric Andrew Kleit, Professor of Energy and Environmental Economics, Penn State University
- **Robert Kelly**, Vice President, Regulatory Affairs, Suburban Water Systems
- William E. Kovacic, Global Competition Professor of Law and Policy, The George Washington University Law School
- Ryan Kurlinski, Manager, Analysis and Mitigation Group, California Independent System Operator
- Armando Levy, Principal, The Brattle Group
- Pui-Wa Li, Utilities Engineer, California Public Utilities Commission
- Kim Lighthart, Policy Advisor, Nevada Public Utilities Commission
- Carl Linvill, Principal, The Regulatory Assistance Project
- Mark S. Martinez, Manager, Emerging Markets & Technologies, Southern California Edison
- John Mayo, Professor of Economics, Business and Public Policy, Georgetown University
- Karl A. McDermott, Ameren Professor of Government and Business, University of Illinois-Springfield & Special Consultant, NERA Economic Consulting

Michael K. McShane, Manager Energy Supplier Services, BG&E

Sreeja Meluveettil, Associate Program Analyst, California Public Utilities Commission Timothy D. Mount, Professor, Cornell University

Robert S. Mudge, Principal, The Brattle Group Scott Murtishaw, Energy Advisor, California Public Utilities Commission Paul D. Nelson, Market Design Manager, Southern California Edison Amparo Nieto, Vice President, NERA Economic Consulting Robert Patrick, Associate Professor, Rutgers University Carl Peterson, Professor, University of Illinois Springfield Nguyen Quan, Manager, Regulatory Affairs, Golden State Water Gigio Sakota, Senior Strategic Planning Manager, Southern California Edison Catherine Sandoval, former Commissioner - California Public Utilities Commission Ken Schiermeyer, Forecasting & Analysis Manager, San Diego Gas & Electric Paul Schulman, Senior Research Fellow, Center for Catastrophic Risk Management, University of California, Berkeley Akarsh Sheilendranath, Associate, The Brattle Group Cyrus Sorooshian-Tafti, Manager Load Research, Southern California Edison Menahem Spiegel, Professor, Rutgers University Stephen St. Marie, Policy Planning Analyst, California Public Utilities Commission Gary Stern, Director of Energy Policy, Southern California Edison Steve Traxler, Policy Advisor, Nevada Public Utilties Commission Aidan Tuohy, Senior Project Manager, EPRI Michael J. Vilbert, Principal, The Brattle Group Zhen Wang, Associate, The Brattle Group Kevin Woodruff, Principal, Woodruff Expert Services

Eric C. Woychik, Senior Vice President, Willdan Group

Marzia Zafar, CPUC, Director of Policy and Plannin

Charlene Zhou, Manager, Analysis Group, Inc.

Cristina Zuniga, Policy Advisor, Nevada Public Utilities Commission

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ORGANIZING COMMITTEE	CONTACTING CRRI
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Ahmad Faruqui (Brattle Group) Victor Glass (Rutgers University) Rami Kahlon (California Public Utilities Commission) Dennis Keane (Pacific Gas & Electric) Eric Korman (Analysis Group) Neil Lessem (The Brattle Group) Carl B. Linvill (The Regulatory Assistance Project) Paul Nelson (Southern California Edison) Amparo Nieto (NERA Economic Consulting) Kevin D. Woodruff (Woodruff Expert Services)	Address:Center for Research in Regulated Industries Rutgers Business School, Rutgers University, 1 Washington Park, Room 1120 Newark, NJ 07102-1897Phone:973-353-5761 973-353-1348Email:vglass@business.rutgers.edu crri@business.rutgers.edu(Victor Glass) crri@business.rutgers.edu
HOTEL RESERVATIONS	
Sufficient Rooms are reserved at the Hyatt Regency Monterey for all of the Conference participants. Reservations should be received by <u>May 28, 2017</u> . Hotel reservation can be made by using the following Passkey Link: <u>https://resweb.passkey.com/go/CRRIannualConference2017</u> <u>Hyatt Regency Monterey</u>	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 24, 2017. Registrations received after May 24, 2017 will be admitted on a space available basis.
1 Golf Course Road Monterey, California, 93940, USA <i>1-888-421-1442</i>	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.
If you are not making reservations through the link above please identify yourself as being held under the group block: Rutgers University CRRI Program.	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 28, 2017, all receptions and coffee breaks, but do not include lodging and other meals. The government registration fee is available for government employees.

REGISTRATION FORM: 30th Annual Western Conference Name

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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	GOVERNMENT RATE: Government employees may apply for reduced enrollment fees. I would like to apply for the govt rate of \$610
Credit Card:VISAMC Exp/ CVC Code: CANCELLATION POLICY: Until May 9, 2017 cancellation is allow this date, the indicated fee is due in full whether or not the participant as	red without penalty and refunds will be allowed in full. After

Signature of Participant: _____