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Announcing a NERA Course:

Electricity Marginal Costs and Rate Design in a Changing Utility Environment

When: **19–21 October 2016**
Where: **New York, NY**

Reserve Your Space Today

To reserve your space, please respond by **9 September 2016**.

Please send your contact details to:

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What is covered?

Electricity Marginal Costs and Rate Design in a Changing Utility Environment provides in-depth discussions about the importance of marginal cost-of-service analysis in a future of increasing distributed electricity resources (DERs), e.g.- distributed generation (DG), demand response, behind-the-meter storage, and electric vehicles. The right combination of rate design reforms, regulatory approaches, and organizational structures can lead to an economically-efficient expansion of DER. By reforming residential and commercial rates so that they more closely mimic the structure of marginal costs, utilities can take full advantage of advanced metering and communications while preventing uneconomic bypasses of the utility system and reducing cross-subsidy concerns. The instructors will explain the process for designing cost-reflective, multi-part rate structures in both bundled, full-service tariffs and unbundled delivery charges in restructured states, involving Time-Of-Use (TOU) rates, and smart-meter-enabled pricing options that will provide better incentives for demand response and expansion of DG. The discussion of pricing mechanisms will also cover Value-Of-Solar (VOS) rates and other emerging value-based methods for pricing customers with rooftop solar generation. Finally, the instructors will incorporate real-life examples of innovative rate designs, as well as methods for allocating the utility revenue requirement to customer classes that rely on marginal cost information. Students will have many opportunities to practice these methods during group exercises.

Registration Fee: $2,795
Student materials and meals are included in the fee.

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Course Testimonials

"I found the course to be useful. The instructors were very knowledgeable about marginal cost concepts. I enjoyed the discussions with the instructors and the attendees about how certain concepts are handled in different jurisdictions. I would highly recommend the training to anyone in the field."

—Tony Castro
Costing & Energy Analysis Manager, Southern Company

"I found the training to be very informative. The material allowed for good dialogue between the presenters and participants. Participating in the group activities cemented the material with concrete examples and provided an opportunity to work with folks from other utilities and regulatory structures. I would recommend this training to both experienced analysts and those new to marginal cost."

—Adam Rue
Senior Energy Resource Analyst, Eugene Water & Electric Board (EWEB)

"It gave me a better understanding of the [marginal cost] theory and helped with the direct application of the theory to rate design. I knew about it before, but this class helped me to organize, sort things out and clear up some concepts. I was really happy to meet our instructors in person. They were very helpful and direct, great teaching skills and courteous personality. I appreciated that they answered our questions right away."

—Lana Fedje
Pricing Analyst, Otter Tail Power Company (OTPCO)

"This course frames the use of marginal cost and associated considerations very well. The diverse experiences exchanged by attendees as well as the course information provide a good approach for using marginal costs if not already in place in ratemaking. It seemed equally valuable for those who have never broken down the component to their basics."

—Rene Gonzalez
Finance Analyst, El Paso Electric Company

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Who should attend?

This NERA course is designed for utility managers and senior to mid-level analysts, as well as regulatory commission personnel responsible for reviewing or conducting utility cost-of-service studies and/or electricity rate design proposals. Students will gain deeper knowledge about marginal cost estimation methods and applications of cost estimates for improving rates, ensuring that changes in revenues more efficiently track changes in cost of service and reduce existing cross-subsidies.

On-Site Sessions

NERA also offers on-site seminars on costing and pricing issues to individual utilities. Please contact us if you would like information about hosting a session at your company or agency.

For information on NERA's other training programs, visit: http://www.nera.com/news-events/events.html

About the Instructors

NERA Vice President **Amparo Nieto** and Affiliated Consultant **Dr. Hethie Parmesano** are renowned experts in energy pricing and marginal and avoided cost modeling in the US and abroad. For more than 20 years, they have advised utilities and energy regulatory commissions around the world on a broad range of energy regulatory policy issues, including electricity and gas tariff reviews, strategies for designing and implementing cost-effective time-of-use rate options, smart-meter-enabled demand response programs, and reforming distributed generation rates. Ms. Nieto and Dr. Parmesano have international expertise, offering clients global insight into incentive regulation, cost analysis, and tariff reform.

NERA Vice President Amparo Nieto is an economist with over 20 years of experience in energy sector regulation, competitive wholesale and retail markets, and electricity ratemaking. She has served as an expert witness in rate cases, cost-of-service filings, and other regulatory proceedings. Ms. Nieto has assisted entities and regulatory commissions in Europe, the US, Canada, Africa, Latin America, and the Caribbean on all aspects of energy rate cases, including revisions to cost allocation methods to effectively monitor forward-looking cost and load forecasts, developing avoided cost estimates associated with distributed generation, demand response and interruptible programs, the design and/or review of power purchase agreements, unbundled transmission and distribution rate structures, and the design of incentive regulation schemes for electricity networks. Ms. Nieto has also advised Independent System Operators in the US, Canada, and Australia on methods for introducing non-wires alternatives in transmission planning, improvements to cost allocation and open access transmission tariffs, design of financial transmission rights, electricity auctions for default service, and revisions to capacity markets. She is currently the Director of the Marginal Cost Working Group (MCWG), a forum for energy utilities in the US and Canada that meets twice a year to discuss rate issues and cost of service studies.

NERA Affiliated Consultant Dr. Hethie Parmesano has over 30 years of experience with costing, pricing, and restructuring issues in the US and Canadian utility industries. Her work in the US and abroad has involved the regulation of distribution companies, metering and settlement for customers with retail access, transmission pricing, rate structure for Provider-of-Last-Resort service, backup rates for distributed generation, real-time pricing and other innovative pricing options, and efficient pricing of bundled service. In each case, her recommendations were tailored to specific regulatory arrangements as well as the level of unbundling in the region. She teaches seminars on costing and pricing topics, and has testified widely in regulatory proceedings. She holds a PhD in economics from Cornell University.

Learn more about Ms. Nieto at http://www.nera.com/experts/amparo-nieto.html and Dr. Parmesano at http://www.nera.com/experts/dr-hethie-parmesano.html.

About NERA

NERA Economic Consulting (**www.nera.com**) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For over half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

Contact

For more information about the course content, please contact:

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AGENDA

Part 1 - Marginal Cost Estimation

Day 1	*Wednesday, 19 October 2016*
8:30 am – 9:00 am	*Breakfast and Introductions*
9:00 am – 9:30 am	**Overview of Marginal Cost Theory**
9:30 am – 10:30 am	**Marginal Generation Costs**
10:30 am – 10:45 am	*Coffee Break*
10:45 am – 12:00 pm	**Marginal Transmission and Ancillary Service Costs**
12:00 pm – 1:00 pm	*Lunch*
1:00 pm – 2:00 pm	**Annualization Using Economic Carrying Charge**
2:00 pm – 3:15 pm	**Marginal Distribution Costs**
3:15 pm – 3:30 pm	*Coffee Break*
3:30 pm - 4:00 pm	**Marginal Customer Costs**
4:00 pm – 4:30 pm	***Group Exercises***

Day 2	*Thursday, 20 October 2016*
8:30 am – 9:00 am	*Breakfast*
9:00 am – 9:45 am	**Working Capital**
	Loading Factors
	Marginal Losses
9:45 am – 10:15 am	**Marginal Cost Model Summary**
10:15 am – 10:30 am	*Coffee Break*
10:30 am – 11:00 am	**Choosing TOU Costing Periods**
11:00 am – 12:00 pm	***Group Exercises***
12:00 pm – 1:15 pm	*Lunch*

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Part 2 - Retail Ratemaking

Day 2 (cont.)	*Thursday, 20 October 2016*
1:15 pm – 2:00 pm	**Overview of the Pricing Process**
	Use of Marginal Cost Data to Define Class Revenue Target
	Bill Impact Analysis and Gradualism Techniques
2:00 pm – 3:00 pm	**Decisions on Rate Structures**
	Fixed Charges/Minimum Bills
	Facilities Charges
	TOU Energy Charges
	Block Energy Charges
	Demand Charges
3:00 pm – 3:15 pm	*Coffee Break*
3:15 pm – 4:30 pm	**Dynamic Rates (RTP, CPP)**
	Demand Response Program

Day 3	*Friday, 21 October 2016*
8:30 am – 9:00 am	*Breakfast*
9:00 am – 11:00 am	**Distributed Generation and Microgrids**
	Standby Rates
	Net Energy Metering
	Grid Access Charges
	Feed-in Tariffs
	Value-of-Solar (VOS) Rate
	Environmental Avoided Cost Adders
11:00 am – 12:00 pm	***Rate Design Exercise***
12:00 pm – 1:00 pm	*Lunch*
1:00 pm – 1:30 pm	***Group Exercises***
1:30 pm	**Workshop Adjournment**