

TIME OF USE (TOU) AND RESIDENTIAL DEMAND CHARGES CONFERENCE

May 13-14, 2020
Online | Central Time

PRE-CONFERENCE WORKSHOP

Building an Innovative Residential Rate Portfolio

WEDNESDAY, MAY 13, 2020

“

“EUCI did a great job of bringing in experts with varying perspectives in order to provide attendees with a diverse and comprehensive study of relevant residential demand and TOU topics.”

Manager-Rate, City Utilities of Springfield, MO



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HOST UTILITY

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OVERVIEW

Rapid changes in the electric utility industry continue to drive utilities to propose new ways of collecting revenues from residential customers. Among these changes are flat or declining electric sales, increased penetration of advanced metering infrastructure, EV adoption and growing numbers of residential customers with rooftop solar. As a result, equity arguments arise because regardless of where you come out on efficient electricity pricing, those prices may not raise enough revenue to cover a utility's total costs. To make up some of the lost revenue, utilities must get creative with innovative rate offerings.

Does it make sense to offer these new rates as opt-in, opt-out, or mandatory? Should TOU rates be offered with a significant reduction in off-peak rates so customers will have some motivation to reduce and shift peak loads? Should the new rates including a dynamic pricing element, or should they be just plain old TOU rates? Should the new rates include demand charges? If so, should they be based on maximum customer demand or customer's demand at the time of system peak?

These questions and more will be addressed at EUCI's annual residential demand charges and TOU conference. 2020 is a milestone year as a new decade begins and there will be a tremendous need for dynamic load flexibility. Conference attendees will take away valuable knowledge and have the opportunity for quality networking with industry peers.

LEARNING OUTCOMES

- Discuss different rate design options utilities are implementing to address the challenges and opportunities of the new grid
- Evaluate lessons learned in testing residential demand billing
- List examples of optional and mandatory TOU and mandatory demand charges
- Examine the effect of rate design on electric vehicle (EV) charging behavior
- Evaluate different utilities' offering of a demand rate to their residential customer base
- Discuss accelerating the adoption of advanced residential rates
- Explain why traditional demand charges are due for a makeover
- Discuss how to market new TOU rates to your customer base

WHO SHOULD ATTEND

Professionals working in the following areas will benefit from attending this event:

- Rate design, product development and customer strategy
- Pricing and load research
- Cost of service
- Financial analysis
- Utility "customer-facing" executives
- Regulators and staff
- Legal counsel
- Regulatory affairs
- Ratepayer advocacy



"Great conference! EUCI always does a great job in putting together interesting relevant conference."

Pricing Manager, Alabama Power

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AGENDA

WEDNESDAY, MAY 13, 2020

- 12:30 – 1:00 pm** **Login**
- 1:00 – 1:10 pm** **Conference Announcements**
- 1:10 – 1:30 pm** **Opening Address from Evergy**
 Evergy, Inc., which was formed in 2018 through the combination of KCP&L and Westar, provides clean, safe and reliable energy to 1.6 million customers in Kansas and Missouri. Evergy is committed to delivering clean, safe, reliable sources of energy today and well into the future. This opening segment will review how innovative rate design supports the accomplishment of that long-term Evergy mission.
Darrin Ives, Vice President, Regulatory Affairs, Evergy
- 1:30 – 1:40 pm** **Short Break Between Speakers**
- 1:40 – 2:20 pm** **Demand Rate Implementation: When Failure is Not an Option (The Sequel)**
 Demand rate billing is a promising option for utilities seeking to align their cost and revenue structures while reducing the sharp spikes in demand that occur during peak times. But will customers accustomed to a consumption model understand and accept a completely new way of thinking about how they use energy? JEA initially presented the details of their new Residential Demand Pilot at a previous residential demand charges conference. Now that the Pilot is almost complete, Program Manager Brian Pippin details the lessons JEA has learned in testing demand billing. Did their initial assumptions ring true or did they have to pivot a lot? Come find out and track how the Pilot evolved from its initial planning in rate development to actual Pilot implementation and the implications for a full rollout.
Brian Pippin, Strategic Segment Manager, JEA
- 2:20 – 2:30 pm** **Short Break Between Speakers**
- 2:30 – 3:15 pm** **The Changing Marketplace at TVA: Seasonal Time of Use Rates and Grid Access Charges**
 In response to the changing electric marketplace, TVA is in the middle of a multi-year process to change its rate structure to ensure the safety, reliability and resilience of the electric system for the business customers and local power companies serving the 10 million people in the Tennessee Valley.
- TVA's wholesale rate structure – Seasonal Time of Use Demand & Energy with a new Grid Access Charge
 - Retail pass-through examples of optional and mandatory TOU and mandatory demand charges
 - o Effects on revenue less power cost (RLPC or "margin") from misaligned retail rates (i.e. no retail changes/not aligned with wholesale power cost)
- Jay Erickson, Manager, Retail Rate Design, Tennessee Valley Authority (TVA)**
- 3:15 – 3:25 pm** **Short Break Between Speakers**
- 3:25 – 4:05 pm** **Innovative Rate Structures at Cooperatives**
 Advances in technology are bringing major changes to the energy industry, which is exciting news for energy consumers, but they're also changing the cost structure. Since electric cooperatives use costs to determine their rates, changing costs require corresponding changes to rates. In this session, hear how electric cooperatives are working hard to ensure their rates are fair to all members and using innovative rate design so that the bill each member receives matches the cost of serving that member as closely as possible.
Allison Hamilton, Senior Principal Markets & Rates, NRECA

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AGENDA

WEDNESDAY, MAY 13, 2020 (CONTINUED)

4:05 – 4:15 pm

Short Break Between Speakers

4:15 – 5:00 pm

The Effect of Rate Design on Electric Vehicle (EV) Charging Behavior

In this presentation, the speaker will present the effect of rate design on electric vehicle (EV) charging behavior. Two EV rates implemented by a utility will be discussed: a whole-house time-of-use (TOU) rate that includes a very low overnight rate; and an hourly rate applied at EV charging stations. The results provide an indication of the extent to which home EV charging behavior can be influenced by rates; and whether workplace EV charging is affected by the energy price and whether the charging session is paid by the EV driver or the station host.

Dan Hansen, Vice President, Christensen Associates

THURSDAY, MAY 14, 2020

8:15 – 8:30 pm

Login

8:30 – 9:15 am

Bringing 40+ years of Residential Demand Charges Knowledge to the Audience

There continues to be a great deal of discussion about residential demand rates, as utilities grapple with finding a solution to fixed cost recovery for DER's. While the DER piece is relatively new, residential demand rates are not. Since the early 1970's, more than 45 electric utilities in the US have now, or have had in the past, residential demand rates. There are multiple examples of past and existing residential demand rates that are attractive to residential customers and some that are not. In this session, Bill Brayden, an expert on residential demand control, will pass along to attendees what he has learned working with residential customers and utilities for the last 40+ years.

Bill Brayden, President, Brayden Automation

9:15 – 9:25 pm

Short Break Between Speakers

9:25 – 10:10 am

Arizona's Continued Adoption of More Advanced Residential Rates

In 2018, APS completed a full migration to a new suite of residential rates. As part of this effort, existing rates were cancelled rather than being frozen, which aligns all time-of-use customers on a common on-peak period of 3:00 pm to 8:00 pm. This new residential rate structure also ended net metering for new rooftop solar installations, allowing an offset to the retail rate for energy consumed on site, but compensating a customer through a bill credit for energy exported to the grid. While APS has historically led the nation in voluntary adoption of time-of-use energy and demand rates, this rate transition has accelerated the adoption of advanced residential rates in the APS service territory. In this session, Leland Snook will bring the attendees up to speed on the most recent developments of these advanced residential rates.

Leland Snook, Director, Rates & Rate Strategy, Arizona Public Service Company

10:10 – 10:20 am

Short Break Between Speakers



"Delivered exactly as advertised!"

Director Rates Modernization, NB Power

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AGENDA

THURSDAY, MAY 14, 2020 (CONTINUED)

- 10:20 – 11:05 am** **TOU Design Best Practices in an Increasing DER Environment**
In this session, the presenter will review alternative rate designs including TOU rates applied to both delivery and SOS components and assess their cross-subsidy implications under different net metering arrangements. In addition, TOU design best practices will be discussed and presenting different ways to design TOU rates based on different objectives such as incentivizing customers to reduce system costs and minimizing cross subsidies from PV installations.
Dr. Sanem Sergici, Principal, The Brattle Group
- 11:05 – 11:15 am** **Short Break Between Speakers**
- 11:15 am – 12:00 pm** **Are Demand Charges Due for Reform? A Vermont Review:**
Demand charges took hold in Vermont about a century ago and have existed largely unaltered despite significant advances in metering, better communications capabilities, opportunities for load management, and regional wholesale market reforms. After an 8-month conversation with utilities and stakeholders, the Department concluded a report finding that traditional demand charges are indeed due for a makeover. A new and separate stakeholder collaborative is underway providing an opportunity to model the system impacts of alternatives to demand charges. In this session, Riley Allen, Deputy Commissioner, discusses the nature of the changes needed and will bring the attendees up to speed on the most recent developments.
Riley Allen, Deputy Commissioner, Vermont Department of Public Service
- 12:00 – 12:45 pm** **Lunch Break**
- 12:45 – 1:30 pm** **Awareness, Education and Success: How Evergy Marketed New Residential Rate Options**
In preparation for new time of use (TOU) and demand rates for residential customers, Evergy developed a comprehensive marketing plan to help drive awareness and adoption of the new rate options. Learn how Evergy used a multi-phase education and marketing approach, paired with new interactive tools, to help test messages, educate employees, build early customer advocates, and ensure customer success. In this session, you'll learn how Evergy:
- Used bold creative and easy to understand messaging to embrace new rate options
 - Created new online tools to help customers understand the best rate plan for them
 - Helped customers maintain success on their new rate with weekly "rate coach" reports
- Jeff Beeson, Manager, Marketing, Evergy*
- 1:30 – 1:40 pm** **Short Break Between Speakers**
- 1:40 – 2:20 pm** **Residential Rate Design Changes & Net Energy Metering**
Where is Action Being Taken? Residential demand charges, fixed charge increases, and time-of-use rates - particularly for solar customers - are receiving more attention from utilities and regulators. This session will provide a 50 state perspective, and discuss where these rate design changes and net metering revisions have been proposed recently.
Brian Lips, DSIRE Project Manager, North Carolina Clean Energy Technology Center
- 2:20 – 2:30 pm** **Short Break Between Speakers**

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AGENDA

THURSDAY, MAY 14, 2020 (CONTINUED)

2:30 – 3:15 pm

Washington’s Experience with Time of Use (TOU) Rates for Electric Investor Owned Utilities

In the early 2000s Puget Sound Energy (PSE) offered a TOU rate for residential customers; unfortunately, the program was terminated early for several reasons. Fast forward twenty years and TOU rates are once again being considered in Washington. There is renewed interest in evaluating all innovative pricing structures to meeting the requirements of the Clean Energy Transformation Act which requires utilities to use 100% clean energy by 2045. This presentation will provide an overview of why TOU rates have taken so long to gain traction in Washington. Further, it will discuss how the rate structures could be changing soon with emphasis on proposed criteria for pilot projects.

Elaine Jordan, Regulatory Analyst Energy, Washington Utilities and Transportation Commission

3:15 – 3:25 pm

Short Break Between Speakers

3:25 – 4:15 pm

Innovative Rates Panel Discussion

Electric and natural gas utilities are undergoing sweeping changes as their industries transform. Advanced metering, distributed generation (including rooftop solar), home battery storage, electric vehicles and alternative regulatory approaches all influence utility rate design. In this panel session, this group of industry experts will bring to bear their years of experience to weigh the opportunities and constraints associated with pursuing innovative rate options. This is an open Q&A discussion, so attendees are encouraged to ask questions.

Moderator: Dan Hansen, Vice President, Christensen Associates

Panelists:

Larry Wilkus, Director, Regulatory Affairs, Evergy

Leland Snook, Director, Rates & Rate Strategy, Arizona Public Service Company

Jay Erickson, Manager, Retail Rate Design, Tennessee Valley Authority (TVA)

Allison Hamilton, Senior Principal Markets & Rates, NRECA

Brian Pippin, Strategic Segment Manager, JEA

4:15 pm

Conference Adjourns



“This was my fourth EUCI conference and I always bring a new perspective back to my organization. I recommend EUCI conferences whether you’re an industry novice or an energy CEO.”

Environmental Regulatory & Legislative Analyst, Golden Spread Electric Cooperative



“The information presented was very valuable for those considering a TOU pilot or full implementation. The information provided was a great first step.”

Controller, Bandera Electric Coop



“A great conference to learn the latest regarding rate design the issues surrounding it.”

Pricing Analyst II, Tucson Electric Power

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PRE-CONFERENCE WORKSHOP

Building an Innovative Residential Rate Portfolio

WEDNESDAY, MAY 13, 2020

8:45 – 9:00 am **Login**

9:00 – 12:00 pm **Workshop Timing**

OVERVIEW

This workshop nests the issues of innovative designs such as residential demand charges and TOU rates in the larger question of what your residential rate portfolio should look like. Traditionally, portfolio choice has meant revenue attrition and needless complexity. But now, customers are becoming increasingly diverse. They're opting for electric vehicles, exploring customer-site generation, eager to take on home energy monitoring for conservation and cost control. How does the utility meet those needs and avoid revenue loss at a time when loads have ceased growing? This workshop prepares you for Rates Summit by exploring the sources of customer complexity and approaches to developing a responsive residential rate portfolio that is flexible enough to meet customer needs but sound in recovering required revenues.

LEARNING OUTCOMES

- Review why customer diversity is increasing with the arrival of electric vehicles and customer-site generation
- Critique the pitfalls of traditional ratemaking
- Explore the range of alternative designs and discuss how to choose what rate options to offer customers
- Strengthen your understanding of the challenges of customer choice vs revenue attrition and avoiding cross subsidy while meeting diverse customer needs

WORKSHOP AGENDA

- Emerging customer diversity (peak management, electric vehicles, site generation)
- Traditional ratemaking: "any color you want, as long as it's black"
- Ratemaking with increasing metering capability: the growing choice list
- Preparing a portfolio
 - o What happens under competition?
 - o How do I choose what to offer?
- Price setting guidelines
- Filling the niche: meeting specialized needs
- Summary: portfolio principles

WORKSHOP INSTRUCTOR

Bruce Chapman

Vice President, Christensen Associates

Bruce R. Chapman is a Vice President at Christensen Associates Energy Consulting. He specializes in the design and pricing of retail electricity pricing products that improve the efficiency of pricing relative to traditional rates, and in costing methods that underpin these prices. He has managed and participated in projects that have developed such innovative products as critical-peak pricing, real-time pricing, and fixed billing. He has also reviewed and recommended modifications to distributed generation and standby rate designs. Mr. Chapman regularly presents costing and pricing principles to industry stakeholders.

INSTRUCTIONAL METHODS

Case Studies, Panel Discussions and PowerPoint presentations will be used in the program.

IACET CREDITS



EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

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Upon successful completion of this event, program participants interested in receiving CPE credits will receive a certificate of completion. **EUCI is authorized by CPE to offer 12.0 credits and 4 credits for the workshop.**

There is no prerequisite for this course. **Program Level 1:** Beginner and Intermediate, **Delivery Method:** Group-Live, **Advanced Preparation:** None

ONLINE COURSE DELIVERY & PARTICIPATION DETAILS

We will be using Microsoft Teams to facilitate your participation in the upcoming event. You do not need to have an existing Teams account in order to participate in the broadcast – the online course will play in your browser and you will have the option of using a microphone to speak with the room and ask questions, or type any questions in via the chat window and our on-site representative will relay your question to the instructor.

- You will receive a meeting invitation which will include a link to join the meeting.
- Separate meeting invitations will be sent for the morning and afternoon sessions of the online course.
 - o You will need to join the appropriate meeting at the appropriate time.
- If you are using a microphone, please ensure that it is muted until such time as you need to ask a question.
- The remote meeting connection will be open approximately 30 minutes before the start of the online course. We encourage you to connect as early as possible in case you experience any unforeseen problems.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

You must be logged in for the entire presentation and send in the evaluation after the online course is completed.

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BUNDLE PRICE: TIME OF USE (TOU) AND RESIDENTIAL DEMAND CHARGES CONFERENCE AND PRE-CONFERENCE WORKSHOP
MAY 13-14, 2020: US \$1595

TIME OF USE (TOU) AND RESIDENTIAL DEMAND CHARGES CONFERENCE ONLY: MAY 13-14, 2020: US \$1195 US \$1195 (Single Connection)

PACK OF 5 CONNECTIONS: US \$5,375

PACK OF 10 CONNECTIONS: US \$8,965

PRE-CONFERENCE WORKSHOP ONLY: BUILDING AN INNOVATIVE RESIDENTIAL RATE PORTFOLIO: WEDNESDAY, MAY 13, 2020: US \$595

For volume discounts call +1.303.770.8800 for quote

** all other discounts do not apply to license packs*

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Online course Delivery & Participation Details

See page 8 for information

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

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OR Enclosed is a check for \$ _____ to cover _____ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before April 10, 2020 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of conference cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800. EUCI reserves the right to alter this program without prior notice.

