PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



R.12-06-013 Residential Rate Rulemaking Workshop Best Practices and Lessons Learned in Time Variant Pricing TVP*

July 30-31, 2014
CPUC | Auditorium | 505 Van Ness Ave. | San Francisco
AGENDA

<u>Day 1 9:30 AM – 4:30 PM</u> Conference Phone Line: 866-778-0461 Participant Code: 3664376

Webcast Information: https://van.webex.com/van/j.php?MTID=me2552fc93944a2cfa528a3ad10abf0f5

<u>Day 2 9:00 AM – 1:00 PM</u> Conference Phone Line: 866-778-0461 Participant Code: 3664376

Webcast Information: https://van.webex.com/van/j.php?MTID=m8c731574f76c7b18b358772dfbf90a0f

Workshop Objectives:

<u>Day 1</u>: Identify available factual data for the assessment of best practices and lessons learned in TVP rates in the areas of rate design and program implementation, load impacts (coincident and non-coincident), bill impacts (including low-income and mainstream customers), evaluation, measurement and verification, pilot programs, and the use of technology.

<u>Day 2</u>: (a) Best practices & lessons learned from other TVP marketing, education & outreach (ME&O) programs; (b) Discuss California Investor Owned Utility (IOU) ME&O plans and identify any stakeholder concerns and gaps in the IOU proposals.

*AB 327 (Sec. 745a) defines "time-variant pricing" to include time-of-use (TOU) rates, critical peak pricing (CPP), and real-time pricing (RTP). For purposes of this workshop, TOU will be the primary focus with consideration of CPP when appropriate. RTP is beyond the scope of this workshop.

Day One - July 30, 2014

9:30 – 9:45 am Welcome, Objectives, and Overview,

ALJ Jeanne McKinney

Gabe Petlin, Moderator, Energy Division

9:45 am - 10:30 am Overview of Time-Variant Pricing Programs

Energy Division presentation on technical foundations of TOU rate design

- Dr. Bob Levin, CPUC Energy Division

Expert perspective on existing TVP programs compared to

CPUC Rate Design Principles

- Dr. Ahmad Faruqui, Brattle Group

10:30 am - 12:00 pm

Rate Design & Program Implementation Issues for Existing TVP Programs

- Jennifer Potter, SMUD
- Gordon Kaiser, Vice Chairman Ontario Energy Board (formerly) invited
- Leland R. Snook, Arizona Public Service
- CA IOU Representatives (covering relevant IOU programs):
 - Chris Yunker, SDG&E
 - Russ Garwacki, SCE

Primary questions include:

- What role has marginal cost played in the design of TOU rates?
- What factors were considered in setting short vs. long peak periods?
- What factors were considered in deciding to offer multiple TOU and/or CPP options simultaneously?
- What characteristics of your TVP tariffs are designed to change over time to meet changing system needs and conditions?
- Have peak periods been determined based on past or forecast load curves?

12:00 - 1:00 pm

LUNCH

1:00 - 2:45 pm

TVP Load and Bill Impacts, Role of Technology, and Operational Considerations

- Dr. Ahmad Faruqui, Brattle Group
- Leland R. Snook, Arizona Public Service
- Dr. Stephen George, Nexant
- CA IOU Representative (covering relevant IOU programs)
 - Gregory Mandelman, PG&E
 - Leslie Willoughby, SDG&E

Primary questions include:

- Have TVP rates led to reduced peak demand and energy savings?
- Is there empirical evidence showing whether opt-in or default TVP produces larger average and aggregate load reductions?
- Is there data showing how different customer groups perform on TVP rates?
- Have TVP rates shown a "snap-back" effect?
- What is the empirical evidence on how TVP rates impacts customer bills (including bills for low-income customers and customers located in different climate zones)?
- What is the persistence of reduced peak demand and energy savings over time? Does it increase, decrease or remain constant?

- Is there empirical evidence that TVP customers using in-home devices (IHDs) achieve greater reductions in peak demand and overall energy use?
- What are the most effective strategies to deploy IHDs?
- Is there empirical evidence that TOU rates reduce or increase GHG emissions due to heat rate differentials between energy consumed in peak vs. off-peak periods and between tiered rates and TOU rates?

2:45 - 3:00 pm

BREAK

3:00 - 4:30 pm

TVP Pilot Design and TVP Load Impact Measurement & Evaluation

- Dr. Ahmad Faruqui, Brattle Group
- Leland R. Snook, Arizona Public Service
- Dr. Stephen George, Nexant
- Jennifer Potter, SMUD
- CA IOU Representative (covering relevant IOU programs)
 - Leslie Willoughby, SDG&E
 - Gregory Mandelman, PG&E

Primary questions include:

- What are the best practices for designing TVP pilot programs?
- What research questions can TVP pilots help answer?
- What are the primary methods and metrics to measure end-use conservation and peak reduction for TVP rates?
- How do measurement and evaluation methodologies account for load response from energy efficiency (EE), demand response (DR) and TVP rates? Are metrics and guidelines developed in EE/DR relevant for measurement and evaluation of residential TVP?
- How is cost-effectiveness measured for TVP rates?

4:30 pm

Adjourn Day 1

DAY TWO July 31, 2014

Best Practices and Lessons Learned in Customer Marketing, Education and Outreach for Time-Variant Pricing (TVP)

9:00 - 9:15 am

Welcome, Objectives, and Overview

9:15 - 11:00 am

Best Practices & Lessons Learned from other TVP Marketing, Education & Outreach Programs

- Dr. Stephen George, Nexant
 - Jennifer Potter, SMUD
 - CA IOU Representative (covering relevant IOU programs)
 - Maril Pitcock, PG&E
 - Brandi Anderson, SCE
 - Alex Kim, SDG&E

Primary questions include:

- What marketing, education and outreach strategies were used?
- What were key successes and failures in ME&O strategies?
- What have you learned about customer perception? Are there relevant preference surveys from your utility's service territory or other areas?
- How did you explain to customers the difference between TVP rates, flat rates and inclining block rates?
- What evaluation criteria are you using to evaluate TVP ME&O?

11:15 – 1:00 pm

CA IOU TVP Marketing and Outreach Proposals

- Jessica Lim, SCE
- Maril Pitcock, PG&E
- Alex Kim, SDG&E

Primary questions include:

- Are there general concerns about evaluating IOU ME&O proposals?
- How will ME&O for pilot programs and for opt-in TVP rates implemented in 2015-2016 inform longer term ME&O strategies for residential TVP rates?
- Should TVP ME&O be different from ME&O for other residential rate changes or for energy efficiency and clean energy programs?
- What is the expected enrollment in the pilot and short and long-term TVP rates proposed in R.12-06-013 rulemaking?
- Should TVP marketing and outreach be conducted in–house by the IOUs, by third parties, or by a state-wide campaign?

1:00 pm

Adjourn