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, 2014 | 9:30 am – 4:30 pm July 31, 2014 | 9:00 am – 1:00 pm CPUC | Auditorium | 505 Van Ness Ave. | San Francisco **DRAFT AGENDA**

> Conference Phone Line: TBD Participant Code: TBD Webcast Information: TBD

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
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 Faruqi, 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?

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?

11:15 – 1:00 pm