

## 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:

Day 1: 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.

Day 2: (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**

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|---------------------------|--|
| <b>9:30 – 9:45 am</b>     | <b>Welcome, Objectives, and Overview</b>   |
| <b>9:45 am – 10:30 am</b> | <b>Overview of Time-Variant Pricing Programs</b><br><i>Energy Division presentation on technical foundations of TOU rate design</i> <ul style="list-style-type: none"> <li>- Dr. Bob Levin, CPUC Energy Division<br/><i>Expert perspective on existing TVP programs compared to CPUC Rate Design Principles</i></li> <li>- Dr. Ahmad Faruqui, Brattle Group</li> </ul> |

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 Faruqi, 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?*

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