



CALIFORNIA'S SMART GRID

California Public Utilities Commission Smart Grid Rulemaking R.08-12-009

WORKSHOP 1 — CONSUMER ISSUES

**MAY 27, 2009
10:00AM – 4:00PM**

AUDITORIUM

The purpose of the workshop is to identify policies that the Commission should implement related to the interface of consumers with the Smart Grid. What unreasonable or unnecessary barriers should the Commission remove to support customer adoption of Smart Grid technologies, practices, and services? How can the Commission encourage innovation by utilities and developers of Smart Grid products and services focused on consumers?

Each section will begin with several brief presentations by parties and/or relevant experts, of no more than 5 minutes each. Presenters will be announced prior to the workshop. The presentations will be followed by discussion moderated by Commission staff.

For each section of the agenda, some relevant questions are listed.

AGENDA

Welcome and Opening Comments – 10:00 a.m. – 10:10 a.m. Commissioner Rachelle Chong

10:10 a.m. – 11:30 a.m. – Consumer access to usage information and prices, including cybersecurity

- Once advanced meters are deployed, what regulatory and technical barriers need to be addressed to allow individual residential, commercial, industrial, and agricultural consumers to access their energy usage information in a timely manner?
- What regulatory barriers need to be addressed to allow individual consumers to provide their energy usage information to third parties?
- What policies, if any, should the CPUC adopt to ensure that customer privacy is protected with regards to energy usage information?

Panelists:

- *Michael Terrell, Program Manager, Google.org*
- *Cameron Brooks, Senior Director of Market Strategy & Policy, Tendril*
- *Rebecca Lee, Division of Ratepayer Advocates*
- *Deirdre K. Mulligan, Assistant Professor, School of Information, UC Berkeley*

LUNCH BREAK – 11:45 a.m. – 1:00 p.m.





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1:00 p.m. – 2:30 pm – Interaction of consumer-owned devices, including distributed energy resources, with the Smart Grid

- How should the CPUC facilitate the development and deployment of consumer-owned devices that interact with advanced meters and the Smart Grid?
- What role, if any, should the utilities play with regards to testing, subsidizing, or otherwise supporting consumer-owned devices that interact with the Smart Grid?
- What policies should the CPUC adopt to facilitate the installation and interconnection of distributed energy resources, including generation and storage?
- In addition to advanced meters, what additional investments, if any, do the utilities or individual consumers need to make to allow a consumer to measure and monitor the performance of a distributed energy resource that is owned by the consumer?

Panelists:

- *Dr. Angela Chuang, Senior Project Manager, EPRI*
- *Charlie Smith, GE Appliances (by phone)*
- *Mary Ann Piette, Director of Demand Response Center, Lawrence Berkeley National Lab*
- *Rich Creegan, Vice President of Strategy & Marketing, Itron*
- *Tom Tansy, Vice President of Marketing, Fat Spaniel*

Break – 2:30 p.m. – 2:40 p.m.

2:40 p.m. – 3:50 p.m. – Developing Consumer-related Metrics to Measure Progress Towards Developing a Smart Grid (see next page for further detail)

On June 19-20, 2008, the U.S. Department of Energy's (DOE) Office of Electricity Delivery and Energy Reliability held a technical workshop to identify potential metrics for measuring progress toward implementation of Smart Grid technologies, practices, and services. DOE issued a report discussing the key metrics identified by workshop participants.¹ At the workshop we will discuss applying some of these metrics in California. Parties will have to opportunity to comment on these metrics and propose alternative metrics.

Below are metrics related to consumers. Further detail can be found in DOE's report.

From Chapter 1, "Enables Active Participation by Consumers":

- Percent of customers/premises capable of receiving information from the grid
- Percent of customers opting to make decisions and/or delegate decision-making authority
- Number of communication-enabled, customer-side of the meter devices sold
- Number of customer-side of the meter devices sending or receiving grid related signals
- Amount of load managed
- Measurable energy savings by customers

¹ See "Metrics for Measuring Progress Toward Implementation of the Smart Grid," Results of the Breakout Session Discussion at the Smart Grid Implementation Workshop, June 19-20, 2008, Washington, DC, prepared by Energetics, Incorporated, July 31, 2008 (http://www.oe.energy.gov/DocumentsandMedia/Smart_Grid_Workshop_Report_Final_Draft_08_12_08.pdf).





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From Chapter 2, “Accommodates All Generation and Storage Options”:

- Penetration—percent of load as measured by kWh served by distributed resources
- Deployment process applications—number of days from initial application to build distributed resources to operation (split by size class of the distributed resource)

Panelists:

- *Brian Abrahamson, Senior Director of Strategic Planning & Architecture, Pacific Gas & Electric*
- *Seth Kiner, Director of Customer Experience Management and Marketing, Southern California Edison*
- *Lee Krevat, Director of Smart Grid, San Diego Gas & Electric*
- *Walt Johnson, Principal for Technology Strategies, California Independent System Operator*

Wrap-up – 3:50 p.m. – 4:00 p.m.

