



THE GRAPEVINE

ACEEE Summer Study at Asilomar, California

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Utility Sector Energy Efficiency: More Flavors Than Ever



Martin Kushler, Utilities Program Director, ACEEE

by **Martin Kushler**

The utility industry in the United States is presently in a period of substantial uncertainty. The much ballyhooed move to restructuring and retail competition in the late 1990s has ground to a standstill. Several states have rescinded their restructuring policies, and those states that have it are still

attempting to identify the details of a workable regulatory paradigm. Meanwhile, half the states in the nation never embraced restructuring and show no signs of doing so. A pessimist would characterize the current U.S. utility system as being in a state of confusion.

However, an optimist might characterize the situation as a dynamic and exciting time of innovation and experimentation. That certainly seems to be the case in terms of utility-sector energy efficiency programs, where a gourmet feast of approaches is available.

The most popular current dish is something called public benefits funding, whereby a small non-bypassable surcharge provides revenues to support statewide energy efficiency efforts. ACEEE recently completed a comprehensive national assessment, (Five Years In: An Examination of the First Half-

Straight Talk



Brian Silverstein and Alison Silverstein

Did anyone expect to hear a former member of the Bush Administration addressing ACEEE? Alison Silverstein, Tuesday night's first plenary speaker, asked that question, and expressed surprise, as well as pleasure, that she, a recent senior advisor to FERC, was invited to address us. It was Ms. Silverstein's first address outside of her position with FERC, and she found it, in her words, "refreshing."

Ms. Silverstein first discussed her experience as a member of a team that investigated the blackouts in the Northeast in the summer of 2003. It turned out that the failure was due to a combination of several untrimmed trees being in the wrong place relative to transmission lines; alarm systems not functioning at First Energy, which shall remain nameless; frozen computer screens that kept showing the same old data; and some clueless operators sitting in front of those computer screens.

So what makes a transmission system reliable? "A guy with a chainsaw can be the difference," Silverstein said, "He can make a system reliable, or have the opposite effect, unfortunately." Reliability

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Decade of Public Benefits Energy Efficiency Policies.) we found these programs to be generally very successful, enjoying solid support from key stakeholders in the states that have adopted these policies.

A great variety of recipes are being used for this dish, including administration by utility companies, state agencies, and independent nonprofit entities. Through our research we have found that there is no single best approach, but rather that states should tailor their approaches to fit their particular strengths and circumstances.

For extra spice, many states are adding demand response programs to the mix, and ACEEE is currently conducting a national study to examine the concept of integrating

demand response and energy efficiency efforts.

To help round out the national menu, another eight to ten states that never restructured continue to provide more traditional regulatory-based energy efficiency programs. That meat-and-potatoes approach is known for its ability to deliver hearty portions of cost-effective energy efficiency savings.

Recently an old culinary favorite has reemerged: natural gas energy efficiency. Sky-high natural gas prices have sparked interest in natural gas public benefits funds and other strategies such as decoupling mechanisms for gas utilities.

Finally, a newly emerging flavor trend is the concept of capturing energy efficiency savings as a part

of resource procurement responsibilities, which are being re-assigned to utilities in restructured states (particularly for the default service needed by the vast majority of customers who do not participate in a competitive market). California is leading in the development of this promising new concept.

In summary, amid the tumult of the current U.S. utility industry, there exists a robust smorgasbord of energy efficiency policies and approaches. From the Utility Regulation and Deregulation panel at this year's Summer Study, you'll be able to hear about recent developments in many of these topic areas, and in tonight's plenary session on global warming, you'll hear some of the reasons why these energy efficiency efforts are so urgently needed.

Exciting Plenary Finale

Marilyn Brown, director of the energy efficiency and renewable energy program at Oak Ridge National Laboratory, will start off tonight's final plenary. She will discuss approaches to achieving a climate-friendly built environment.

Joel Levin, vice president of business development for the California Climate Action Registry, will be the second speaker. Levin is responsible for recruiting participants from all economic sectors and regions of California to register and certify their greenhouse gas emissions. In this role, he has gained extensive experience in talking to the business sector about climate change, which will be the subject of his talk tonight. To learn more about the Registry's work, visit www.climateregistry.org.

Come to Surf and Sand!

Will the following people report to Surf and Sand (ACEEE's office) as soon as possible:

Nigel Isaacs

Jaap Jelsma

Kiichiro Tsuji

Ask for Glee Murray or Rebecca Lunetta.

PowerPlay—The Energy Efficiency Game

The Pentagon has its war games. Now the ACEEE Summer Study has PowerPlay—the energy efficiency game. On **Thursday** afternoon in Nautilus and Triton, you will match your wits against the other players in the energy efficiency arena—irrational consumers, domineering utilities, sleazy providers of energy-efficient products, and politicians out to get re-elected.

Through all of this, will the lights stay on? The goal of this game is to learn more about the complex dynamics of our energy system, with a unique focus on the demand side, and to observe responses to technical, political, and economic surprises. Up to 50(!) persons will be able to play, conspire, and backstab their way through the evening.

For more information, please contact Skip Laitner, Alan Meier, Matthias Ruth, or Clark Bernier.

Wireless Access

Asilomar offers free wireless access in the lobby of the Hearst Social Hall (Administration Building). A personal computer is available for word processing needs. Conference calls can be held in the Business Center; ask the Front Desk staff for assistance.

Informal Sessions

2:00-4:00 pm

Consumer Attitudes, Motivators, and Behaviors Related to Energy Use and Energy Efficiency

Rozanne Weissman, Alliance to Save Energy
Location: Kiln

Understanding the True Cost of Commissioning: What is the Most Useful Way to Tally Costs in a Fragmented Design and Construction Environment?

Tudi Haasl, Portland Energy Conservation, Incorporated.
A skit will be performed called "Death of a Commissioning Provider."
Location: Scripps

Opportunities in High-Performance Healthcare Buildings

Tengfang (Tim) Xu, LBNL
Charlie Middleton, PG&E
Chris Scruton, California Energy Commission
Location: Nautilus

2005 RECS Data User Needs

Stephanie J. Battles,
Michael T. Laurence, Energy Information Administration, DOE
Location: Heather

An Efficient Set-top Box: Coming Soon to Your Home?

Alan Meier, International Energy Agency
Location: Evergreen

Defining Energy Star Criteria for Multifamily Buildings

Jim Mapp, Wisconsin Division of Energy
Location: Triton

California Demand Responsive Hardware and Tariffs: From Vision to Reality

Art Rosenfeld, California Energy Commission
Location: Curlew

An Initial Look at Laboratory Test Results of Residential Furnace Air Handler Performance

Jim Lutz, LBNL
Location: Oak Shelter

Refrigerant Charge and Airflow Verification Program

Robert J. Mowris, P.E.,
Robert Mowris & Associates
Location: Hearst Social Hall

Advanced Buildings

Jeff Johnson, New Buildings Institute
Location: Fred Farr Forum

Energy Star Residential Lighting Fixtures: New Developments in Technology and Program Design

Peter Banwell, US EPA
Paul Vrabel, ICF Consulting
Location: Toyon

The Green Building Studio CEC PIER Project—Mobilizing Industry Support Establishing the Green Building Studio Consortium

John Kennedy, GeoPraxis
Nancy Jenkins, California Energy Commission
Grant Duhon, PG&E
Jon Pitman, Autodesk
Location: Sanderling

Facilitated Exposition and Discussion of the CPUCs Proposed Decision for Administration of California Public Goods Charge Programs

Chris Ann Dickerson, Freeman and Sullivan Consultants
Location: Pirates' Den

Evaluation Implications of Rate Decoupling and Competitive Generation

Monica Nevius, Consortium for Energy Efficiency
Location: Acacia

HUD-Code Manufactured Housing: Accomplishments & Challenges

Michael Lubliner, WSU Energy Program
Location: Manzanita

Distributed Generation and Combined Heat and Power: A Building Energy Supply Revolution?

Chris Marnay, LBNL
Location: Willow Inn 1

Benchmarking in the DSM Business

Dennis J. Nelson, BC Hydro
Location: Oak Knoll 1

Energy/Economics/Environment—How to Maximize Value at Each Point in the Cycle

Stephen Kapp, San Diego Regional Office
Location: Chapel

4:00-10:00 pm

CLASP Board Meeting

James Termin, CLASP
Location: Dolphin

Jobs! Jobs! Jobs!

The Vermont Energy Investment Corporation, located in beautiful Burlington, has three job openings. For more information about these positions, speak to VEIC staff here at the conference or leave a message for Blair Hamilton or Chris Neme at the registration desk. Cover letters and resumes can be e-mailed to resume@veic.org (attn: Jessica Staats).

Retail Market Manager: Lead Efficiency Vermont's activities in the retail efficient products market. Develop relationships with consumers, suppliers, and manufacturers of energy-efficient products sold at retail. A Bachelor's degree and experience supervising people and planning and managing energy efficiency activities required. Familiarity with markets for retail sales of Energy Star lighting, appliances, windows, HVAC equipment and/or other efficient products desirable. Professional training/experience in retail marketing/merchandising also desirable. Open until filled.

Project Manager: Manage energy efficiency projects in large and small industrial, commercial, and institutional buildings, including technical and financial analysis. Work with building owners, developers, architects, engineers, and contractors. Bachelor's degree in engineering or related field required. Mechanical or electrical engineer or CEM preferred. Application deadline: 9/3/04.

Senior Analyst/ Project Manager: Senior position in VEIC's Planning and Evaluation division. Lead projects assessing efficiency markets and developing, implementing, and evaluating cutting edge DSM programs. Some of the work will be for Efficiency Vermont, providing strategic planning support to market managers to help make our programs models for the nation. There will also be considerable work on consulting projects out of state. Ideal candidate will have at least seven years of experience, substantial knowledge of successes and failures of DSM programs from different parts of the continent, and experience managing both client relationships and other staff. Open until filled.

Job Opening in San Francisco

The San Francisco office of Architectural Energy Corporation has an opening for an **Energy Policy/Regulatory Analyst**. Knowledge of energy codes, standards, and policy required; engineering background preferred. Contact celey@archenergy.com or call (415)957-1977 (SF office) or (415)606-3098 (cell) to discuss the position.

Straight Talk

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does not mean that there won't be clueless operators in front of broken computers, ice storms, earthquakes, or guys—maybe terrorists—with chainsaws. The idea is to redesign transmission systems so that failures become graceful. With 20 seconds of lead time, lots of things can happen to prevent large system failures; backup generators can be turned on, operators in neighboring states can be notified that a problem is on the way, and so on.

An audience member asked Ms. Silverstein what she would do if she were president to improve transmission reliability. She said that she would focus on energy efficiency, demand response programs, distributed generation, redesigned systems that are more responsive than present systems, mandatory reliability standards, and she would see that clear goals were set in all those areas. That response drew a large round of applause.

The second speaker, Brian Silverstein, acting vice president for transmission planning for the Bonneville Power Administration (BPA) and no relation to Ms. Silverstein, also drew applause. Brian Silverstein has been a strong advocate of incorporating non-wires solutions into the transmission planning process and toward that end has chaired a roundtable of 18 stakeholder representatives.

He strongly urged the energy efficiency community to communicate with folks on the wires side. "You need to understand their problems and they need to understand how you can help them," he said. In a pilot program started up last winter, four demand response tests aggregated 22 MW. While these savings may not seem gigantic, they are equivalent to one to two years of load growth in the Olympic Peninsula. Other ongoing pilot tests include building a biogas digester in Idaho and a two-way Web-based load control program in Ashland, Oregon. So, clearly energy efficiency and transmission folks can help each other out.

In questions after the presentation, Mr. Silverstein observed that renewable generation is typically far from load centers, so some new transmission capability may be needed.

THE GRAPEVINE

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