

THE GRAPEVINE

ACEEE Summer Study at Asilomar, California

Monday, August 23, 2004

Watts on the Farm? Watts in the Water?

by Elizabeth Brown, Industry Research Assistant, ACEEE

In the last few years we've seen interest sprout in energy efficiency in agriculture, and ACEEE has responded. Working with important allies such as EESI and ELPC, we've been cultivating a \$23 million grant and loan program for energy efficiency in the 2002 Farm Bill (Title 9, Section 9006). We have been working to harvest the experiences from across the country by surveying energy efficiency opportunities and programs in the agricultural sector, to show that there are opportunities for energy and cost savings. Our challenge is to clear the weeds from the good data and determine where the savings are in each state and in each farm type. We have found that the agriculture sector is laced with motors and lighting that are ripe for the energy efficiency harvest. You can get the full story at our Web site at www.aceee.org/industry/agriculture.htm. If you are interested in reaping the benefits of energy efficiency in this sector—and in liquid biomass fuel—please join us in a discussion of opportunities and challenges in an informal session this afternoon at 4 pm!

The industry program at ACEEE has plunged feet first into promoting energy efficiency in the water and wastewater sectors. In July, we hosted a water and wastewater sector road map workshop in Washington, D.C. This effort was the culmination of a solid year of preparatory meetings with many stakeholders, including: municipal water and

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Encyclopedia Vivianica



Vivian Loftness, School of Architecture, Carnegie Mellon University

Vivian Loftness, head of the school of architecture at Carnegie Mellon University, crammed almost a semester's worth of material into her talk Sunday night on six ways to improve building energy efficiency. Starting from the outside in, she addressed land use and energy,

emphasizing the need for mixed-use development and multi-modal transportation. She then tackled infrastructure, singing the praises of cool and green roofs, porous pavement, and landscaping for stormwater management. Sustainable enclosures that incorporate daylighting and natural ventilation were then covered.

Loftness's group has searched out case studies on the effects of advanced building efficiency technologies. Among those her group has found were six case studies showing that natural ventilation and mixed-mode conditioning have excellent life cycle payback due to energy savings and productivity increases. Thirteen case studies found productivity increases due to daylighting of between 0.4%-18%.

Loftness then underscored the importance of sustainable HVAC systems that provide indepen-

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wastewater treatment officials; local, state, and national policymakers; researchers; program implementers; and a variety of others. In the workshop, we were successful in accomplishing our goal of saturating the energy efficiency, water, and wastewater communities with avenues for increasing energy efficiency and strengthening the bottom line in the water and wastewater sectors, while maintaining or improving operational performance. Many stakeholders formed networks in the hope that opportunities for energy efficiency will be sopped up for a long time to come. A final report on this project will be posted on the ACEEE Web site this fall. For more information, seek out Neal Elliott. He's here somewhere!

Think Globally, Act Locally (in Oak Shelter at 4pm)

Jet Lagged? Feeling far from home?

You're not alone. Join some of the many international participants of this year's Summer Study at today's 4:00 pm informal session "Leading the Way: International Developments in Public Sector Energy Efficiency." The session will provide an opportunity to get acquainted and to share information about developments in the growing number of government sector energy efficiency initiatives around the globe.

All Time Zones are welcome.

Titular Correction

In Panel 3's second session today, Monday, from 10:30 am–noon, the title of David Watson's paper is wrong. The title should be "Machine to Machine (M2M) Technology in Demand Responsive Commercial Buildings."

Encyclopedia Vivianica

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dent ventilation and thermal conditioning. Finally, she touched on how combined heat and power can transform the energy usage of academic, hospital, and industrial campuses. Buildings can be power plants, she said, rather than a requirement for building new power plants. She asked the audience to help propel buildings research forward by lobbying for more funding at a national level of buildings research. She also emphasized the impacts that efficiency standards have had on reducing building energy use. Altogether, she presented a well-informed case for crafting more livable, sustainable buildings that will ease the nation's energy crisis.

Revitalize the PC

Ecos Consulting, the Northwest Energy Efficiency Alliance, and EPA are cohosting an informal session today, Monday, from 4 pm–6 pm on the 80 Plus program and Energy Star's plans to increase its efficiency specifications for PCs. 80 Plus is a national effort to buy down the cost of highly efficient (at least 80%), power factor-corrected PC power supplies and convince major PC makers like Dell and HP to switch their product lines over. The 80 Plus program will offer a \$5 manufacturer buy-down for each desktop computer containing a qualifying power supply that is sold in the service territory of a participating utility. Spending \$5 extra on a better power supply cuts average PC energy use by \$25 over the product's lifetime.

Energy Star plans to finalize its new PC spec sometime in mid- to late-2006, so utilities have a chance to act now to bring more efficient designs to market to influence the stringency and timing of the spec. We need a critical mass of states participating before the incentives will be large enough to get the major manufacturers to commit. Any help you can offer in spreading the word would be much appreciated. For more details on the program, come to the session or contact Vicki Fulbright at vfulbright@ecosconsulting.com.

Informal Sessions

2:00 pm-4:00 pm

Energy Savings Accounting— Today's Business Requirements

Dennis Nelson, BC Hydro
Location: Acacia

Daylighting Forum

Abby Vogen, Energy Center of
Wisconsin

Location: Curlew

Women In Sustainable Energy

Barbara Farhar, NREL

Location: Dolphin

Miscellaneous and Low-Power- Mode Energy in Zero-Energy Buildings

Rich Brown, Bruce Nordman,
John Busch, LBNL

Location: Evergreen

The 2004 International Energy Conservation Code

Chris Salp, Responsible Energy
Codes Alliance

Location: Fred Farr Forum

High-Performance Buildings for High-Tech Industries: Part 1, Data Centers

Dale Sartor, William Tschudi,
Evan Mills, LBNL
PG&E, Ecos Consulting, CEC,
and EPRI-PEAC

Location: Heather

Energy and Water Management in Buildings: Exploring the Links

Jeff Harris, LBNL

David Broustis, City of Seattle
Gary Wolff, Pacific Institute

Location: Kiln

CFLs and Mercury

Vicki Fulbright, Ecos Consulting

Location: Nautilus

Development of a Utility Star Program

Jim Parks, SMUD

Location: Oak Shelter

Emission Trading and CDMs: Is There a Role for Energy Efficiency Projects?

Paolo Bertoldi

Location: Scripps

Comparing Commercial Building Energy Use Around the World

Adam Hinge, Sustainable Energy
Partnerships

Paul Waide, International Energy
Agency

Location: Toyon

What's Next? Identifying Steps for Improved International Cooperation on Standards and Labeling

Shane Holt, Australian Greenhouse
Office

Location: Triton

4:00 pm-6:00 pm

Monitoring Energy Use in Buildings

Nigel Isaacs, BRANZ

Location: Evergreen

High-Performance Buildings for High-Tech Industries: Part II, Laboratories and Clean Rooms

Dale Sartor, William Tschudi,
Evan Mills, LBNL

PG&E, Ecos Consulting, CEC,
and EPRI-PEAC

Location: Heather

Efforts to Improve Desktop Computer Efficiency and the Role for Utilities and Market Transformation Organizations

Sam Sirkin, Ecos Consulting

Phil Degens, Jeff Harris, Northwest
Energy Efficiency Alliance

Location: Nautilus

Opportunities for Global Collaboration in Appliance Standards and Labeling

Stephen Wiel, CLASP/LBNL

Location: Triton

Energy Efficiency in China Today

Chris Granda, VEIC

John Plunkett, Phil Mosenthal,
Optimal Energy Incorporated

Barbara Finamore, NRDC

Location: Toyon

Leading the Way: International Developments in Public Sector Energy Efficiency

Laura Van Wie McGrory,

Philip E. Coleman,

Jeffrey P. Harris, LBNL

Location: Oak Shelter

Energy Efficiency in Agriculture

Elizabeth Brown, ACEEE

Location: Kiln

Energy Efficiency in Affordable Housing: How Do We Make It Happen?

Kathy Kuntz, Wisconsin Energy
Conservation Corporation

Location: Curlew

Transforming the Market to Energy-Efficient Windows in Hot Climates

Howard Geller, Southwest

Energy Efficiency Project

Kate Offringa, Alliance to Save
Energy

Location: Fred Farr Forum

Development of the National High Performance T8 Lighting Systems Specifications

Afroz Khan, Consortium for

Energy Efficiency

Location: Dolphin

Advanced Energy Technology Portfolio: Conservation, Energy Efficiency, and Renewable Portfolios

Stephen Heins

Location: Acacia

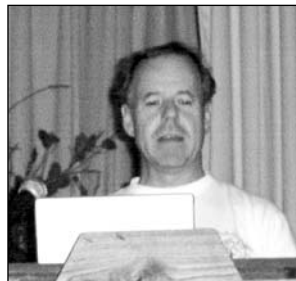
Showcase Preview

Booth 3: Consortium of Energy Efficiency—Lighting for Tomorrow: New Residential Lighting Fixtures

This booth will display high-efficiency lighting fixtures recognized in Lighting for Tomorrow: the National Lighting Fixture Design Competition. The competition includes chandeliers, pendants, portables, sconces, surface-mounts, and task lighting. You will have an opportunity to view the new products, experience the quality of light, learn about the technologies incorporated into the fixtures, and engage competition organizers in discussions about the competition and its impact on the residential fixture market.

Booth 8: Davis Energy Group—OASys Indirect-Direct Evaporative Cooler

OASys is a new indirect-direct evaporative cooler developed by the Davis Energy Group, with support from the California Energy Commission, that is now being introduced by the Clean, Renewable, Sustainable (CRS) division of the Speakman Company. OASys uses a new high performance indirect evaporative heat exchanger and a highly efficient variable speed blower motor to reduce cooling energy consumption by 85%–90% compared to conventional air conditioning systems. The unit draws just over 500 watts while delivering cooling equivalent to that from a two-to-three ton air conditioner. When PV power is available, an optional switching technology allows the unit to seamlessly blend photovoltaic DC power and grid AC power, without the use of an inverter.



Conference co-chairs Aimee McKane and Marc Ledbetter brought out the jokes in their welcoming address. McKane urged conference attendees to engage in debate. In that spirit, Ledbetter solicited opinions on whether he should proceed with his joke, and then told it anyway, amid both groans and chuckles.

A Couple of Silversteins

Today's plenary speakers, Alison Silverstein and Brian Silverstein, who by coincidence share a last name but are not related, will speak in Merrill Hall at 7:30 pm on "Electric System Reliability—Issues and Solutions."

Alison Silverstein is a recent senior advisor to Federal Energy Regulatory Commission Chairman Pat Wood, III. Ms. Silverstein joined the Commission in July 2001, and advised Chairman Wood on various legal, economic, strategic, and administrative issues spanning the agency's electric, hydropower, and pipeline responsibilities. From June 1995 until July 2001, she served in a similar capacity at the Public Utility Commission of Texas. She has a BA in Economics from the Johns Hopkins University, an MSE in Systems Analysis from Johns Hopkins, and an MBA from Stanford University.

Brian Silverstein has been with the Bonneville Power Administration since 1979, where he has focused on transmission reliability, market, and policy issues. Currently he is acting vice president for planning and chief engineer. Mr. Silverstein has an MS in Electric Power from Rensselaer Polytechnic Institute and a BA in Electrical Engineering from The Cooper Union.


Please Note:

The Grapevine headquarters are in the Pirate's Den, Room 510 this year. Bring your submissions for the next day's issue of the Grapevine by 8:00 pm the night before.

THE GRAPEVINE

is published by *Home Energy* magazine,
the voice of the home performance industry.

Managing Editor Mary James
Reporters Steve Greenberg, Jim Gunshinan
Production Leanne Maxwell

 Printed on recycled paper