

Tuesday, August 23, 2016

ACEEE Summer Study at Asilomar, California

What to do when your little labeling initiative grows up?

At the 2012 Buildings Summer Study, a few of us got together at an informal session for coffee and biscuits, and to discuss the potential of creating a performance label or mark for motor-driven commercial and industrial (C&I) equipment. I was new at ACEEE, so this made little sense to me at the time, but I subsequently learned that most of the standards in the C&I space are device specific: motor, transformer, pump, or fan. Device-level efficiency is tied to the design and engineering of the product. We wanted to capture system-level savings that is all too often tied to application. How might we go about doing such a thing?

The term “Extended Product” had recently entered the vernacular and it fit our need to describe a drive-motor-load combination. If you have an extended product whose components are all of high quality, the net result would be a more efficient system. With a control loop, you could have a high degree of confidence in your ability to achieve system-level savings

through superior control.

A year later, at the 2013 Summer Study for Energy Efficiency in Industry, we held another informal session to share our vision for capturing some system-level energy savings through promoting high-efficiency extended motor-driven products. This time we asked people if they thought it was a good idea and, if they did, would they be interested in participating. The answers were “yes” and “yes.” Extended Motor Product Label Initiative (EMPLI) was born. Oh, and I was put in charge.

The EMPLI initiative includes five trade organizations: Air Movement and Control Association International (AMCA), Compressed Air and Gas Institute (CAGI), Fluid Sealing Association (FSA), Hydraulic Institute (HI), and National Electrical Manufacturers Association (NEMA). It includes several utilities:



Ethan Rogers, Industry Program Director, ACEEE

Continued on page 2

America’s Clean Energy Revolution

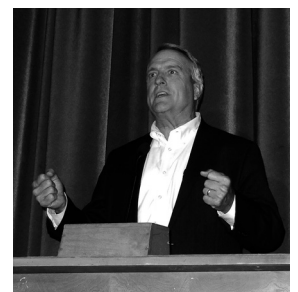
Bill Ritter has been working on the policies of energy efficiency for years now. A native of Colorado, he served as the State’s governor from 2007 through 2011. Soon after leaving the governorship, he founded the privately funded Center for the New Energy Economy (CNEE) at Colorado State University, where he serves as the director.

Ritter recently published the book *Powering Forward: What Everyone Should Know About America’s Energy Revolution*. In it, he describes a far-reaching vision for the steps needed to create a truly energy-efficient economy:

“We cannot count on good luck, good karma, cool new technologies, or serendipity to accomplish the disruptive shift we need in our energy and environmental policies. If we wait for climate impacts to become so destructive that all political resistance has been swept away, we will have allowed global warming to progress so far that many of its impacts will be irreversible.”

It appears that Ritter is backing up this call-to-action with initiatives underway at CNEE. These include the State Policy Opportunity Tracker (SPOT) for Clean Energy, the Advanced Energy Legislation Database, and the Natural Gas Symposium. CNEE has also been convening discussions on the Clean Power Plan among key players in the Western states: governors’ offices, the EPA, state environmental offices, tribal organizations, utilities, and utility regulators.

The former governor’s plenary remarks at the 2016 Summer Study revealed a broad approach toward the current energy transition – technology, politics, and culture were all represented in his comments.



Continued on page 2

Ethan Rogers, continued

Bonneville Power Administration (BPA), Energy Trust of Oregon (ETO), National Grid, Pacific Gas and Electric Company (PG&E), and Southern California Edison (SCE). And it includes a couple of NGOs for good measure: ACEEE and the Northwest Energy Efficiency Alliance (NEEA).

It is now three years later, and we have identified products in the fan, pump, and air compressor product categories; identified test standards; and are working on performance metrics that can be used to differentiate superior performance. We are now at a stage to take this to market.

And to give it a new name. While EMPLI may be fun to say (we pronounce it IMP-Lee), it is not a viable name for a registration mark or compliance program. NEMA and NEEA have come to the rescue with the Energy Aware compliance mark for qualifying products and the XMP Database (for Extended Motor Product—clever isn't it!) that will be the foundation for a marketplace website for efficiency program stakeholders.

Once again we are organizing an informal session Thursday 2:00-4:00 pm to share information, invite discussion, gather more input, and eventually, participation in using the mark.

We are in discussion with NEMA about expanding the use

of their Energy Aware compliance mark to cover qualifying products. Having an umbrella mark that spans multiple product categories will simplify purchasing decisions and give customers and procurement professionals confidence in their choices. The trade association-certified label will clearly show the performance of the system, either tested or calculated, so that buyers can compare performance.

NEEA is in the early stages of scoping the development of the database and market exchange website. The site will integrate certified products with available incentives so that stakeholders in efficiency programs can easily navigate utility incentives. The website will be national in scope.

We will start with listing pumps, fans, and air compressors identified through the EMPLI Initiative and the incentives of the pilot programs to be launched in the next year. Our goal is to expand the listing to many more product categories and make it available to all interested programs.

I'm sure you can already envision the power of such a compliance mark and marketplace combination. If this excites you, please join us on Thursday 2:00-4:00 to learn more about what we're contemplating and to participate in the conversation.



Revolution, continued

On community engagement: “We owe a lot to the communities that rely on coal-mining and other traditional resource extraction. They are experiencing a lot of pain, and we should listen to that. You have to learn how to talk to people in the middle—spend some time and listen to their stories. See where you can find common ground.”

On opportunity and risk: “There is a real risk to our communities if we don't manage the risk of climate change. We are the innovators – we invent things and export them to the rest of the world. That is the opportunity.”

On justice: “At the Center, we believe that a just transition to a clean energy economy is possible and necessary. It's important that we provide opportunities across all income categories.”

On false dichotomies: “Some people will force you to make a choice of free markets or nothing. I think we need a combination of policy, markets, and technology to move us to the future.”

On Congress: “We believe that there is a growing group of Republican senators who will come out in support of clean energy in January 2017. They couldn't do so earlier because of pressure in the caucus.”

Ritter describes a clear vision for creating a sustainable low-energy economy. And he's helped build networks that can help this happen. It'll be interesting to see what he does next. Again, from his new book: “The bottom line is that we need to accelerate and complete a transformative energy revolution in the United States. It is not the only thing we must do to secure a better future, but we cannot achieve that future without it.”

Learn more: Center for the New Energy Economy:
www.cnee.colostate.edu.

State Policy Opportunity Tracker:
www.spotforcleanenergy.com

CNEE's Summer Series on Energy Efficiency and Renewable Energy Policy: <http://cnee.colostate.edu/summer-series/>



50 SHADES OF FOG

Only true natives of Asilomar fully appreciate the subtle distinctions in the fog drifting over us. The Inuit may have 23 different words to describe snow but linguists have identified at least 31 unique words used by Asilomarites to describe fog and translated them into their nearest English terms. Some are linked to the fog's color—“old-man gray”—and to the odor—“moldy-leaf”—and moisture—“drippy nose.” Still others reflect the sounds of the planes flying overhead—one is roughly translated as “hawk's fart”.



TODAY'S INFORMAL SESSIONS 2-4 pm

International Collaborations in Buildings Energy Efficiency with China and India

Reshma Singh, Lawrence Berkeley National Laboratory

ROOM: Scripps

CEIP: An Opportunity for Low-Income Energy Efficiency under the Clean Power Plan

Martin Kushler and Sara Hayes, American Council for an Energy-Efficient Economy

ROOM: Kiln

Where the Rubber Hits the Road: Energy Efficiency Impact Measurement in an All-source Procurement Framework

Christina Lawson, Evergreen Economics

ROOM: Toyon

Strategies, Methods, and Best Practices for Estimating Behavior-based Energy-efficiency Potential

Karen Ehrhardt-Martinez, Navigant

ROOM: Heather

Supporting Industry Advancements in Next Generation M&V (M&V 2.0) Methods, Tools, and Applications

Ellen Franconi, Rocky Mountain Institute

ROOM: Nautilus

Leveraging Geo-Targeting and Data Integration to Tailor Energy Efficiency Program Delivery and Strategy

Rich Crowley, DNV GL

ROOM: Oak Shelter

Where are the Deltas? – Opportunities for Energy Efficiency Programs in a Time of Rising Baselines

Chris Granda, Appliance Standards

Awareness Project

ROOM: Triton

Shining a Spotlight on the Shadow Economy HVAC Changeouts in California

Amber Watkins, DNV GL

ROOM: Evergreen

Strategies, Methods, and Best Practices for Estimating Behavior-based Energy-efficiency Potential

Karen Ehrhardt-Martinez, Navigant

ROOM: Heather

Tackling Climate Change through Zero-Energy Urban Districts

Chuck Kutscher, National Renewable Energy Laboratory

ROOM: Acacia

HVAC Market in Flux: What Does the Data Say?

Chris Cloutier, D+R International

ROOM: Fred Farr Forum

Assessing the Impact of Benchmarking and other Building Performance Policies

Jayson Antonoff, Institute of Market Transformation

ROOM: Dolphin

Fixing the Window Gap – What's Happening in Insulating Window Covering Options?

Stacy Lambright, Hunter Douglas

ROOM: Chapel

Is a Green Bank Right for My State? Insights from the ACEEE Green Banks Study

Chris Kramer, Energy Futures Group

ROOM: Marlin

The Next Standby Power Specification Will be 0-watt

Alan Meier, Lawrence Berkeley National Laboratory

ROOM: Sanderling

Energy Codes of Cooperation: Better Implementation through International Exchange

Meredydd Evans, Pacific Northwest National Laboratory

ROOM: Afterglow

Energy Efficiency in the Higher Education Curriculum

Joel Swisher, Western

Washington University

ROOM: Hearth Living Room

Energy Efficiency for All Project

Stephen Morgan, Clean Energy Solutions

ROOM: Oak Knoll 1

Pushing Building Integration for Grid Integration

Brendan Owens, US Green

Buildings Council

ROOM: Embers Living Room

Sociocultural Factors Influencing Home EE Upgrade Adoption

Laura Parsons, Center for

Sustainable Energy

ROOM: Manzanita 2

Community Optimization Planning Tools: What's Needed to Help Local Governments, Developers, and Utilities Move Forward in Creating Sustainable and Resilient Communities

Joan Glickman, US Department of Energy

ROOM: Willow Inn 1



Anybody want to play Golf?

**Dave is looking for golfing partners on Wednesday afternoon during the break from 1 to 6pm.
Call Dave at (970) 209 1216.**

PANEL 13: DISPLAYS & POSTERS – MERRILL HALL

4:00 pm – 6:00 pm Tuesday, August 23

The U.S. Department of Energy High Impact Technology Catalyst Program

Amy Jiron, U.S. Department of Energy

Commercial Building Energy Saver: An Energy Retrofit Analysis Toolkit

Tianzhen Hong, Lawrence Berkeley National Laboratory

Helping Schools Save Energy Dollars: The Evolution of Behavior Change in Programs - Leveraging Technology for Success

Auriane Koster, Pierce Energy Planning

Accelerating LED Streetlight Adoption

Jun Suzuki, Research Into Action

Do Activities of the California Regional Energy Networks and Community Choice Aggregator Influence Participation in IOU Energy Efficiency Programs?

Aaiysha Khursheed, Itron, Inc.

Energy Efficiency Savings Tool

Patrick Knight, Synapse Energy Economics, Inc.

Energy Cost Impact of Non-Residential Energy Code Requirements

Jian Zhang, Pacific Northwest National Laboratory

Hannah Arnold, Opinion Dynamics

An Innovative Community Approach: The Small Commercial Toolkit

Kevin Settlemire, Sustainable-IQ

Australian Energy End-Use – Trends and projections to 2030

Paul Ryan, EnergyConsult Pty Ltd.

Grid Interactive Water Heaters - How Water Heaters Have Evolved Into a Grid Scale Energy Storage Medium

David Podorson, E Source

Move over Rebates-Influence beyond Financial Incentives

Kari Binley, Pacific Gas & Electric Company

Simulation on Demand for Deep Energy Retrofits

Damon Woods, University of Idaho

Tools for Improving Home Energy Retrofit Work

Rachel Romero, NREL

Green Islanding in the Virgin Islands: Energy Efficiency and Microgrid for Resiliency and Economic Development on St. Croix

Robert Dahowski, Pacific Northwest National Laboratory

National Certification for High Performance Building Technicians

Larry Chang, BEST Center

Sustainable Energy Management for Wastewater Treatment Facilities

James McCaughey, Narragansett Bay Commission

EnergyCodeAce: CA's energy codes & standards resource network

Kelly Cunningham, PG&E

Fans – A Look At The Extended Motor Product Labeling Initiative

Trinity Persful, Twin City Fan Companies

Commercial/Industrial Fans Efficiency Index as a Basis of DOE Regulation

Wade Smith, Wade W. Smith Consulting, LLC

Sub Wet-Bulb Evaporative Chillers For Building Cooling Systems

Theresa Pistochini, University of California Davis

And They All Fall Down: The Domino Effect in Building Material Selection

Rebekah Burke, Arizona State University

Load Disaggregation Technologies: Real World and Laboratory Performance

Ebony Mayhorn, Pacific Northwest National Laboratory

Innovative Business Customer Engagement: Integrating Technology, Data Visualization, and Outreach for Successful Implementation

John Lux, Agentis Energy

The Lazy Man's Guide to Achieving 80 x 50 in NYC (80% Carbon Reductions by 2050)

Laurie Kerr, Urban Green Council

Assessment of a Holistic Energy Assessment Program from a Survey of Participants

Kevin Ketchman, University of Pittsburgh

Sustainable Buildings 2030: Creating an Effective Climate Change Program for Buildings

Richard Graves, Center for Sustainable Building Research

C&I Lighting Controls Savings and Persistence: Better Than Expected

Erika Kociolek, Energy Trust of Oregon

Beach Party on Wednesday!

7:30 – 10:30 pm

at the Monterey Beach House

Admission costs are included with full-week registrations. Tickets for daily registrants and guests are available in Surf & Sand until 11:00 a.m.

Wednesday. The cost is \$50 for adults and \$25 for children, ages 2-12.

the grapevine

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