

What's New at Opinion Dynamics?

Opinion Dynamics is pleased to welcome the following senior members to our team:



Rick Winch returns home to Opinion Dynamics after close to a decade. As a Director, Rick will provide his technical expertise on a variety of energy projects, including developing methodologies and evaluation plans, reviewing reports, and making recommendations. He will also serve as a mentor to project management and analyst staff. Previously, Rick was Director of Strategic Planning, Research and Development at Wisconsin Energy Conservation Corporation.



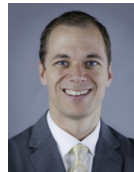
Dr. Katherine Randazzo joins us as Director of Advanced Analytics. Katherine provides expertise on statistical design, billing analysis, sampling, and other powerful analytic techniques. She brings over 30 years of experience in evaluation, and has provided senior direction on some of our most methodologically challenging evaluation efforts, including employing such techniques as CART analysis, structural equation modeling, and other efforts.



Adam Burke joins us as a Senior Project Manager after 15 years with Abt Associates, where he managed large-scale government energy and environment research projects. Our clients are benefiting greatly from Adam's 20 years of experience in research, analysis, and project management. With an engineering background, Adam is also adept at analyzing the technical aspects of energy efficient designs and equipment.



Sara Van de Grift will lead our newly formed Madison, Wisconsin office as a Senior Project Manager. Sara is a gifted energy efficiency professional who brings core strengths in program design and implementation along with a strong background in making evaluations meaningful and actionable. Sara was previously Director of Residential Programs for Wisconsin Energy Conservation Corporation.



Dr. Jon Norman joins us as a Project Manager with direct and applicable experience in research design and management and a background in social science research methodology, data analysis, and evaluation design. Previously, Jon was a professor of sociology and public policy at Loyola University Chicago, and has worked at the Public Policy Institute of California, various research centers at the University of California, Berkeley, and Abt Associates.

Opinion Dynamics Corporation

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Does EISA Represent the End of Residential Lighting Programs?

by Scott Dimetrosky, Vice President

CFLs, typically promoted through “upstream” incentives to retailers or manufacturers, have become the cornerstone of many energy efficiency portfolios around the country. Program administrators and regulators, therefore, are asking what impact the 2007 Energy Independence and Security Act (EISA) legislation will have on the existing CFL programs. Does EISA represent the end of residential lighting programs?

What EISA Says

EISA requires that most screw-based light bulbs become approximately 28% more energy efficient—as measured by the lumens per watt (LPW)—beginning in 2012. The legislation is phased-in, beginning with 100-watt equivalents in 2012, 75-watt equivalents in 2013, and 60/40-watt equivalents in 2014. The standards are technology neutral, which means the law does not ban the incandescent, although most current incandescent bulbs do not meet the requirements. The law does include a number of exemptions, including three-way bulbs, candelabras, and appliance lights.

Consumer Awareness

A recent Opinion Dynamics survey found that approximately two-thirds of consumers are still unaware of the legislation. To help consumers understand light bulb efficiency, the EISA legislation directed the Federal Trade Commission to change its current labeling requirements for all medium-based general service incandescent, halogen, LED, and CFL bulbs. Manufacturers are required to provide brightness (lumens) and energy-cost information on packaging within a detailed “Lighting Facts” label. The new labels are expected to be available by January 2012.

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INSIDE THIS ISSUE**Opinion Dynamics
at IEPEC**

PAPERS • POSTERS • PANEL

Message from the President

Welcome to Boston!

It's exciting to have the energy evaluation community in my hometown, and the Home of Champions!

In this special IEPEC edition of our newsletter, we are pleased to announce more staff additions that deepen and broaden our expertise. Read about Dr. Katherine Randazzo, Sara Van de Grift, Rick Winch, and more in this issue. We're proud to be the largest independently owned company with a core competency in energy evaluation.

In this issue, you can learn about the impending EISA law and its potential effect on energy efficiency portfolios. If you are here at the IEPEC conference, turn the page for a summary of papers, posters, and panel we're presenting this week—and come meet some of our staff. You can also find these presentations on our website at www.opiniondynamics.com.

Brad Kates, President and CEO

(Continued from front page)

What Effect Will EISA Have on Energy Efficiency Programs?

As evaluators, we can help answer that question by focusing on the key parameters. Most importantly, we need to understand both the available technologies and likely consumer reaction to the legislation. While conservative opposition to the legislation has suggested that CFLs will be the new standard, the expanding EISA-compliant offerings—and rapidly decreasing prices of the energy efficient bulbs—appear to prove that a variety of options will proliferate throughout the lighting market. In addition, despite years of aggressive CFL promotion among many program administrators, the highest CFL saturation is still under 30% of sockets. CFLs have faced some consumer resistance, partially driven by technology limitations. Evaluators, therefore, need to continue to closely monitor the availability and price of EISA-compliant bulbs, as well as consumer acceptance of CFLs and the newer product offerings.

Secondly, evaluators need to crunch the numbers on the lifetime savings and incremental costs. Since the new legislation will replace 100-watt, 75-watt, and 60/40-watt bulbs with more efficient alternatives, the baseline will shift, meaning that the savings claimed from every program CFL will go down by the new standard (approximately 28%). So a portfolio with 40% savings from CFLs would lose about 11% of total savings ($40\% \times 28\% = 11\%$).

While the decreased savings might appear to make CFL programs less cost-effective, the decrease in savings may be offset by the decreased incremental cost: EISA-compliant bulbs cost more than today's standard incandescent bulbs and thus the incremental cost of going from baseline to a CFL should drop (although recent shortages of rare earth metals are leading to 25% increases in CFL costs). Evaluators, therefore, will need to track changes in lifetime savings and incremental cost, key inputs into future program cost-effectiveness.

Finally, evaluators need to closely track the progress of LED technology. LEDs, while the most efficient technology, still face performance and incremental cost issues that limit their application, although that is likely to change quickly over the next few years. As evaluators, we can closely monitor the rapidly changing LED product offerings, prices, and quality.

Light at the End of the Tunnel?

The evidence seems to be building that consumers will have a lower-priced alternative to CFLs, and that these EISA-compliant bulbs will offer light quality and features more comparable to today's incandescent bulb. Furthermore, future CFL programs might even turn out to be more cost-effective than they are today due to lower incremental costs.

Evaluators need to closely monitor available technologies, prices, and consumer reactions so that program administrators, regulators, and other stakeholders can determine exactly how to position future lighting programs.

Consumer Choices

Manufacturers have already responded to the legislation, and are actively producing bulbs that meet the EISA requirements.

These EISA-compliant bulbs employ a number of technologies, mostly halogen based. The EISA-compliant bulbs cost more than current incandescent bulbs, mostly in the \$1.50 to \$2.00 per bulb range, but have dropped steadily since their introduction. EISA-compliant bulbs look like current incandescent bulbs, provide similar light output, and can fully dim. Some EISA-compliant bulbs last longer (up to two times longer) than today's incandescent bulb.

Compact Fluorescent Lamps (CFLs) provide a more energy-efficient alternative to the EISA-compliant bulbs, but have faced some consumer resistance due to dissatisfaction with the light output, limited dimming capability, higher cost, and concern over mercury.

Light Emitting Diodes (LEDs), or solid state lighting, offer the most efficient lighting options, and last far longer than incandescent bulbs or CFLs (approximately 30 years). LEDs, however, are still extremely expensive (most are well over \$20, even over \$40/bulb), are mostly available in only lower wattage equivalents, and are still best for directional lighting.



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Papers

Think before You Do: The Importance of Survey Design in Program Evaluation

by Tami Buhr



T. Buhr

In this paper, we review the survey design literature and best practices. We also discuss the importance of survey testing and monitoring to help determine if, in fact, the respondents understand the questions asked—just because a respondent answers a question does not mean he or she comprehends the question. The information presented will be useful for utility managers who must review many survey instruments but often do not have the background to understand effective survey design.

Wed., Aug. 17, 8:30-10:30 am, Harborview Ballroom 3

Posters

Energy Efficiency Program Marketing: Methodological Approaches to Quantifying Program Success

by Hannah L. Arnold and Jennifer Mitchell-Jackson



H. Arnold

With the national expansion of energy efficiency programs, several states and regions are working towards a single overarching brand or marketing effort to promote energy efficiency. The goal is to improve the customer experience and provide one message, one source of information, and one initiative to customers. This poster explores methods used nationally to evaluate integrated energy efficiency marketing campaigns and the benefits/drawbacks of the approaches.

Examining Organizational Legitimacy as a Norm-based Theory Practice

by Anne Dougherty, Katherine Randazzo, and Mary Sutter



A. Dougherty

Mid and upstream market actors participate in energy programs for different reasons than residential customers, yet the same behavior change theories are applied to both groups. This poster explores "legitimation" as a way to evaluate program causality and participant free ridership when targeting large, multinational organizations. Legitimation is a process where organizations justify their market position in response to existing social norms, and offers a paradigm to explore normative influences on corporate decision-making.

Moving Beyond Econometrics to Examine the Behavioral Changes Behind Impacts

by Anne Dougherty



A. Dougherty

Interest in behavioral programs has exploded, and while many evaluations have demonstrated savings from these efforts, few have shown *how* program participants are saving energy. Without this knowledge, implementers are deprived of the insight they need to create innovative programs. With subcontractor Navigant, we conducted an evaluation for multiple Massachusetts utilities to assess the impact, value, and scalability of behavioral programs. This paper outlines findings from the OPOWER program, detailing how we paired market research techniques with econometrics analysis to examine behavior changes that drive energy savings.

Tues., Aug. 16, 3:30-5:00 pm, Cityview Ballroom 1

FIND ME A REBATE! The Role of Rebate Agents in Utility C&I Programs and in the Market

by Garrick R. Wahlstrand and Mary Sutter



G. Wahlstrand

Evaluators and program managers need to understand the role of "rebate agents," third parties hired by commercial or industrial clients to locate, apply for, and collect utility incentives for energy efficient upgrades. Most rebate agents have national clients, usually retailers. Based on findings from our two evaluations, this poster explores who these rebate agents are, where they operate, their role in the market, the challenges they pose for evaluators and program managers, and the pros and cons of collaborating with them.

Portfolio Evaluations: Allocating Resources and Integrating Results

by Scott Dimetrosky



S. Dimetrosky

Nearly all utilities around the county have moved away from individual program evaluations to portfolio evaluations. This has yielded distinct advantages, but has also led to questions for program administrators: How do we incorporate the results? Should results be incorporated retroactively? Should results be accounted for when assessing utility incentive or penalty calculations? This poster examines how a number of states, including those with the largest DSM programs in the country, are addressing these critical questions.

Panel: The Use of Regional Deemed Savings Databases – Too Much of a Not-So-Good Thing?



B. Norton

DSM program administrators typically develop a Technical Reference Manual which stipulates assumed energy and demand savings values derived from engineering assumptions for prescriptive energy efficiency measures. This panel asks: Is the use of standardized regional savings assumptions a good idea? Panelists include Marian Brown, SCE; Mike Messenger, Itron; Rick Morgan, Morgan Marketing Partners; Charles Michaelis, DataBuild; and Mary Sutter, Opinion Dynamics.

Moderated by Bill Norton, Wednesday, Aug. 17, 11:00 am-12:30 pm, Cityview Ballroom 1