



2003 International Energy Program Evaluation Conference

EVALUATION: MEETING DIVERSE NEEDS

Pre-Conference Workshops: August 19, 2003

Conference: August 20-22, 2003

The Renaissance Madison Hotel
Seattle, Washington

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Energy program evaluation professionals have long appreciated the value of the bi-annual IEPEC conference, which is scheduled for August 20-22 in Seattle. Here's why:

- All papers were selected on content merit – abstracts were selected using a blind peer-review process.
- All work is new – abstracts were not considered if the content had already been presented in a public forum.
- All papers are top quality – only 80 papers out of 180 submissions were accepted.
- The Conference proceedings CD includes full-text peer-reviewed papers.
- Your choice of six pre-conference workshops.

We have structured this conference to provide outstanding networking opportunities:

- A reception, hosted by Seattle City Light will offer informal discussions with professional evaluators from around the world.
- A Poster Session will offer the opportunity to discuss research results with over 20 poster presenters.
- 30-minute breaks between sessions.
- An evening cruise and dinner on a channel island featuring Native American food.

IEPEC offers new, as yet unpublished high quality research, networking opportunities, and is only held every other year. Our proceedings are in constant use by evaluation professionals looking for new ideas, methods, case studies and contacts.

Finally, we believe that the strength of the conference is reflected in the fact that an impressive list of over 40 organizations is supporting the conference as sponsors. They invested in us because they know that this conference is the showcase event for energy evaluation professionals.

See you in Seattle!

Ed Vine

Since 1984 the International Energy Program Evaluation Conference has represented excellence in the field of evaluating public and privately sponsored energy programs, products and services.

This conference is organized and managed by the National Energy Program Evaluation Conference, Inc., a 501(c)(3) federally certified non-profit organization founded and dedicated to the educational development and use of energy evaluation research. The Conference is managed and operated by a volunteer group of energy professionals.

Six Preconference Workshops:

Workshop #1: Monitoring, Evaluation, Reporting, Verification and Certification of Greenhouse Gas Emissions: Energy-Efficiency Projects

Coordinator: Ed Vine, *California Institute for Energy Efficiency*

Length: full day

Intended Audience:

This workshop is targeted towards evaluators interested in the evaluation of energy projects designed to reduce GHG emissions. *Beginning evaluators are welcome. Advanced evaluators may find the course interesting for the discussions of: non-energy related issues regarding verification and certification, learning about the international efforts in implementing the Kyoto Protocol, and the recent decisions made by the Clean Development Mechanism's Executive Board.*

The focus of this workshop is on the evaluation of energy-efficiency projects that seek to reduce greenhouse gas (GHG) emissions. Because of concerns with the growing threat of global climate change from increasing concentrations of greenhouse gases in the atmosphere, more than 176 countries (as of October 7, 1998) have become Parties to the U.N. Framework Convention on Climate Change (FCCC).

The objective of this workshop is to inform participants about the key issues regarding monitoring, evaluation, reporting, verification, and certification (MERVC) that need to be addressed for the design, development, implementation, evaluation, or verification of an energy-efficiency project for climate change mitigation. In this course, we first present an overview of the international climate change discussions related to joint implementation and the Clean Development Mechanism. We then describe the MERVC process and the conceptual framework underlying the measurement and evaluation activities. After examining key evaluation issues such as the establishment of realistic and credible baselines, free riders, positive project spillover, and market transformation, we analyze the different methods for evaluating projects, with special emphasis on the International Performance Measurement and Verification Protocol (IPMVP). We then briefly review the need for quality assurance and for accounting for environmental and socioeconomic impacts, followed by a review of reporting, verification, and certification.

Workshop #2: Methods and Practices for Evaluating Demand Response Programs

Coordinator: Bernard Neenan and Donna Pratt, *Neenan Associates LLC*

Length: full day

Intended Audience:

- Regulators and staff in search of a foundation for justifying and evaluating the performance of demand response programs
- Utility pricing and planning staff charged with transforming legacy curtailment programs to competitive market situations
- Competitive commodity suppliers seeking to incorporate demand response into their product portfolio
- Performance contractors and control technology firms looking to realize greater value from their marketing and sales organizations
- DSM program evaluation professionals interested in expanding their expertise into this rapidly expanding area of interest and opportunity

As electricity markets are transformed, short-term demand response programs must be adapted to the new market circumstances. Legacy load management programs, such as curtailable, DLC, and RTP programs, must be overhauled so that their provisions align with how wholesale markets value curtailed load. Otherwise, the programs will not deliver full value, and not live up to the expectations of participants. Moreover, the structures of these markets provide new opportunities for customers to participate in ways that benefit them, and all other stakeholders. But, how is this transformation going to take place, and who will lead it?

This workshop will introduce participants to the methods and practices needed to design and evaluate the performance of demand response programs attuned to competitive market conditions. The discussion will cover the complete range of theoretical, functional, and practical aspects of program design and evaluation.

Principles will be demonstrated using results from markets where new DR programs have been implemented, and through interactive sessions where workshop participants can try their hand at bidding and dispatching loads under ISO market rules. Practices will highlight the ISO-based programs and discuss criticisms that have been levied against them.

Workshop participants will leave with a practical working knowledge of all issues related to the valuation and implementation of DR in competitive environment, and carry away extensive materials, references, and contact information that will support subsequent inquiries.

Workshop #3: Logic Modeling for Designing Evaluations and Performance Measurement

Coordinator: Gretchen Jordan, *Sandia National Laboratories*

Length: full day

Intended Audience:

Evaluators and program managers. The workshop assumes no previous experience. Examples and approach may also be of interest to those already using this technique.

Program planners, managers and implementers, evaluators, regulatory organizations, and policy-makers all can benefit from having a concise, clear theory or "story" of how a program will work under certain conditions to solve an identified problem—such as the need to transform a market. Even better, when stakeholders of a program come together and agree on a single program theory, they are likely to agree on measures of program success that are made explicit by that theory.

This skill building workshop includes a hands-on exercise to develop a logic model based upon the case of a public program that seeks to increase the use of efficient and clean energy through research and technology development and deployment. A second hands-on exercise uses the logic model to identify formative and summative evaluation issues and key performance measures that meet the needs of internal and external stakeholders.

Tuesday, August 19, 2003

Workshop #4: Necessary Statistics for Evaluation and Performance Measurement

Coordinator: Dan Violette, *Summit Blue Consulting*
Length: full day

This workshop addresses the special needs of metering and monitoring for load profiling. Topics include:

- Defining the evaluation problem
- Concepts and issues for statistical testing
- Essentials for applications including the definition of key terms ranging from statistical inference, randomness, distribution of the population, distribution of a sample, sampling distribution of an estimate, and measures of central tendency
- Sampling and principles of good sample design
- Applied concepts and examples
- Regression-based models
- Introduction to customer choice models and analyses

Workshop wrap-up:

- Key Pitfalls—things to certainly avoid
- Review relative strength and weaknesses of select standard methods
- Presenting results for action

Workshop #5: Evaluation Management 101

Coordinator: Shel Feldman, *Shel Feldman Management Consulting* and Nick Hall, *TecMarket Works*

Length: full day

Intended Audience:

Non-evaluators responsible for developing, overseeing, or managing an evaluation contract.

This workshop is designed for non-evaluators who are responsible for developing, overseeing, or managing an evaluation contract, and will include tips on setting objectives, communicating with stakeholders, and identifying resource needs. It will be taught by a team of experience evaluation professionals including a representative from a non-profit organization, a utility evaluation manager, and evaluation consultants with over 80 years of evaluation experience who have implemented, managed, or directed over \$80 million worth of evaluation activities.

Workshop attendees will come away with the ability to:

- Frame an evaluation study based upon the intended audience(s) and study objectives.
- Select appropriately from among the various types of evaluation studies that might be conducted.
- Develop planning and operational communications procedures that will increase the likelihood of producing useful results.
- Identify and prioritize the resources needed, both human and financial, to get the job done.
- Create an effective budget for and carry out day-to-day management of the evaluation study.
- Specify the key considerations when developing a Request for Proposals (RFP) and then evaluating responses to the RFP.
- Integrate evaluation planning and results effectively with implementation efforts.

Workshop #6: Evaluating Programs Targeting the Commercial Buildings Sector

Coordinators: John Reed, *Innovologie, LLC*;
Rick Kunkle, *Washington State University*;
Loren Lutzenhiser, *Portland State University*

Length: half day

Intended Audience:

The target audiences are program implementers who are conducting programs and evaluators

This workshop will present a profile of the commercial buildings market, key concepts that are important to understanding the commercial buildings market, decision-making, key players in the market, submarkets and market segmentation, an approach to developing evaluations of the commercial buildings market programs, and examples of the application of the approach to evaluating commercial markets. The workshop is designed to be highly interactive with interaction during presentations encouraged.



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DAY ONE: Wednesday, August 20

8:30 - 9:30 **Opening Plenary—Al Destribats, JD Powers**
JD Powers' results on both a regional and national level on topics spanning restructuring, customer satisfaction, product quality, and energy awareness.

9:30 - 10:00 BREAK

10:00 - 11:30 **Demand Response Programs and Tariffs—Lessons Learned and Future Measurement Challenges**

This session reviews the estimated peak demand savings from energy efficiency and demand response programs in California and New York over the last two years, and provides an analysis of the accuracy and bias in existing methods used to "measure" peak savings from demand response programs.

Moderator: Mike Messenger, California Energy Commission

Development of a Standard Baseline Calculation Protocol for Demand Response, *Ken Agnew, KEMA-XENERGY*

Evaluating California Peak Load Reduction Programs: What's So Hard About That?, *Terry Fry, Nexant, Inc.*

Demand Response Programs: Evaluators to the Rescue, *Bill Saxonis, New York Dept. of Public Services*

Evaluating National Labeling Programs: A Survey of Research from the U.S. and Canada

This session, using several evaluation methodologies, looks at the evaluation of the effectiveness of Canada's EnerGuide for Equipment Labeling Program, the US EnergyGuide label, and brand awareness of Energy Star at the national and regional level.

Moderator: Angela Coyle, US Environmental Protection Agency

Estimating the Supply and Demand Impacts of Natural Resources—Canada's Energuide for Equipment Labeling Program, *Mallika Nanduri, Natural Resources Canada*

Data Rich and Information Poor: Regional Uses and Comparisons of National and Massachusetts Survey Data on Energy Star Brand Awareness, *Timothy Pettit, Nexus Market Research*

An Evaluation of the FTC EnergyGuide Label: What We Learned, *Jennifer Thorne, American Council for an Energy Efficient Economy*

Better Living Through Statistics

Statistics can be used to either obscure or illuminate issues. This session features diverse and judicious applications of statistical analysis to shed welcome light on three distinct evaluation issues.

Moderator: Les Baxter, Pew Charitable Trusts

Market Penetration of Competing New Technology: A Maximum Likelihood Estimation (MLE) Approach to Modeling the Emergence of the Electronic Ballast, *Eihab Fathelrahman, Pacific Northwest National Laboratory*

Controlling for Non-Program Effects in a Statistical Engineering Analysis, *Michael Gallaher, RTI International*

Measurement of DSM Program Savings: Comparing Estimates From Treatment—Effects and Fixed-Effects Model, *Eric Solberg, California State University, Dept. of Economics*

PANEL—What's in the Tool Box for Effective Evaluation of Federal and State Energy Programs?

This panel provides a glimpse into the evaluator's tool box. The panel will (1) identify methods most useful for federal and state energy programs, (2) discuss tools to facilitate the use of evaluation results, and (3) examine what evaluator's can do to stimulate more evaluation.

Moderator: Jeff Dowd, US Dept. of Energy, Office of Energy Efficiency & Renewable Energy

Panelists:
Gretchen Jordan, Sandia National Laboratories
Bruce Tonn, Oak Ridge National Laboratory (also Univ. of Tennessee)
Faith Lambert, U.S. Department of Energy

11:30 - 1:00 LUNCH: Lifetime Achievement Awards

1:00 -2:30 **Demand Response Program Evaluations and Technologies**

This session highlights a number of recent utility demand response programs, evaluation methods and results. The session also offers insights into some of the existing and new technologies being used and covers useful background information on the historical and current rationales for continuing demand response programs in the evolving/restructured utility environment.

Moderator: Scott Albert, GDS Associates

Evaluating Mass Market Demand Management Offerings: Evaluation Methods Assessment and Results from Three Utilities, *Dan Violette, Summit Blue Consulting*

Making Decisions Regarding New Technology Upgrades Within Existing Load Management Programs, *Vikki Wood, Sacramento Municipal Utility District*

Results From California's Small Commercial Demand-Responsiveness Pilot Program, *Roger Wright, RLW Analytics*

Energy Efficiency Market Intervention: Theoretical Perspectives, Econometric Results

This session includes three broad-based papers about intervention in energy efficiency markets, including: a think piece on the usefulness of the concept of market barriers in analyzing markets and evaluating programs; an assessment of the proper role of rebates in mounting successful programs; and an econometric analysis of the cumulative, nationwide savings from commercial sector energy efficiency programs and policies over the past decade.

Moderator: Ralph Prah, Prah & Associates

Addicted to Rebates? Or Do We Really Believe That Removing Barriers Leads to Improved Efficiency?, *Jeff Erickson, PA Consulting Group*

Does Talking About Barriers Just Get in the Way?, *Miriam Goldberg, KEMA-XENERGY*

An Era of Energy Efficiency in the Commercial Sector: Investigation and Findings, *Marvin Horowitz, Demand Research*

Lighting—Commercial

Moderator: Ben Bronfman, Energy Trust of Oregon, Inc.

Evaluation of a Small Commercial Prescriptive Lighting Program, *Cynthia Austin, Hescong Mahone Group*

A Novel Approach to the Evaluation of Lighting Programs: The National Grid Energy Initiative Lighting Program, *Shon Kraley, Quantec*

Process Evaluation of the Efficient Lighting Initiative: 1999-2001, *Ed Vine, California Institute for Energy Efficiency*

PANEL—What Should Guidelines For Evaluation Look Like—In California, the Northeast, and Nationally?

Several movements are afoot to develop new, common guidelines for the evaluation of energy efficiency programs. Participants in this session will learn about the current status of three of these movements and will be able to make suggestions to the people involved in them.

Moderator: Marian Brown, Southern California Edison Co.

Panelists:
Elizabeth Titus, Northeast Energy Efficiency Partnerships
Marc Hoffman, Consortium for Energy Efficiency
Nick Hall, TecMarket Works
Lori Megdal, Megdal & Associates

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DAY ONE: Wednesday, August 20

2:30 - 3:00 BREAK

3:00 - 4:30

Evaluation and Market Assessment of Renewable Energy Programs

This session includes four papers that deal with renewable energy programs and technologies. Specific programs covered include the Wisconsin Focus on Energy Program and California's self-generation incentive. Wind energy and its diffusion into the marketplace will also be presented.

Moderator: Elizabeth Hicks, KEMA-XENERGY

Methods for Evaluation of Market Introduction and Diffusion of Wind Power Technologies, *Kerstin Astrand, Lund University, Dept. of Environmental and Energy System Studies*

California's Statewide Self-Generation Incentive Program—What is Consumer Response and Is It Cost-Effective?, *Patrick Lilly, ITRON, Inc.*

Assessing Wisconsin's Public Benefit Renewable Energy Program, *Adam Serchuk, Serchuk Associates*

Evaluating RE and CE Programs—EE's Emergent Siblings, *William Steigelmann, Aspen Systems Corp.*

It's in the Details—Understanding the Commercial Sector

Do you view your commercial customers as somewhat of a mystery? This session highlights some cutting-edge approaches useful for demystifying this sector. It also highlights Vermont's large-scale effort to characterize their small, yet complex, market.

Moderator: Sharyn Barata, B&B Resources

Assessing Energy Efficiency in California's Nonresidential New Construction Market, *Matt Brost, RLW Analytics*

Getting the Big Picture of a Small Place, *Jane Peters, Research Into Action*

Examining Networks of Building Professionals, Developers, Owners, and Contractors in the Commercial Buildings Sector, *John Reed, Innovologie, LLC*

A New Way to Cut Taxes? Energy Savings in Public Buildings

This session presents the results of two programs targeted at reducing energy consumption in public buildings, the first through encouraging building commissioning practices, the second through low-cost energy efficiency measures.

Moderator: Luisa Freeman, Applied Energy Group

Estimating the Energy Savings Potential for Low-Cost, Easy-to-Implement Measures in County Government Offices, *Katherine Johnson, KJ Consulting*

Determining the Total Costs and Benefits of Commissioning Public Buildings, *Bing Tso, SBW Consulting, Inc.*

PANEL—Catch of the Day

This panel tackles the summer's hottest evaluation topic. To ensure "freshness", the subject of the panel and the panelists will be announced before the conference.

Moderator: Bill Saxonis, New York Dept. of Public Services

Panelists: To Be Announced

5:00 - 6:30 Evening Reception and Poster Session: Sponsored by Seattle City Light

Join our reception host, Seattle City Light, and enjoy light refreshments and stimulating one-on-one discussions with the authors of 20 research papers.

Non-Energy Benefits (NEBs) Modeling: A Comprehensive Analysis of NEBs for Commercial and Residential Programs, *Blake Bear, Skumatz Economic Research Associates*

Shedding Light on the Lab—Evaluation of a Daylighting Market Transformation Program, *Catherine Chappell, Hescong Mahone Group*

Natural Gas Energy-Efficiency Savings Potential in the California Commercial Sector, *Fred Coito, KEMA-XENERGY*

Industrial Energy Efficiency Case Studies, *Fred Coito, KEMA-XENERGY*

Residential Energy Efficiency Potential in California, *Rafael Friedmann, Pacific Gas & Electric*

Designing a Needs Assessment For Low-Income Customers, *Brenda Gettig, ITRON, Inc.*

District Thermal Ice Storage—DSM Success, *Matthew Gibbs, Nexant Inc.*

Xcel Energy Minnesota DSM Potential Study, *Randy Gunn, Summit Blue Consulting*

Advantage or Not? Evaluation of the Sacramento Municipal Utility District Residential New Construction Program, *Ed Hamzawi, Sacramento Municipal Utility District*

Close, But No Cigar: Lost Savings From Unsuccessful Performance Contracts, *Julia Larkin, KEMA-XENERGY, Inc.*

Understanding the Potential of Weatherization Programs for Low Income Households From 150% to 200% of the Federal Poverty Level, *Lark Lee, PA Consulting Group (PA Government Services, Inc.)*

Developing Program Evaluation Tools: Lessons Learned, *Barry Liner, Applied Engineering Management Corp.*

Evaluating the Gumby Program: WarmChoice Across the Years and From All Angles, *Lauren Miller, Quantec*

Energy Savings: Do They Really Persist Following Home Weatherization?, *Kevin Monte de Ramos, KMDR Research Inc.*

Utilizing GIS Software to Define and Understand Target Markets, *Tami Rasmussen, KEMA-XENERGY*

Calibrated Simulation Model for Energy Assessment and Verification, *David Robinson, Stellar Processes*

DSM—From Theory to Practice: The Portuguese Case Study, *Sofia Simoes, Science & Technology College, New University Lisbon*

Comparability of Evaluation Results, *Mikael Togeby, Elkraft System*

Verification of Interstate Power & Light's Performance Contracting Projects: A Practical Application of the IPMVP, *Eben Twombly, kW Engineering*

How to Compare Impacts of Types of Policy Measures Targeted to Reduce GHG Emissions. An International Evaluation Guidebook Based on Evaluation Experiences in Eight Countries Outside the USA., *Harry Vreuls, Novem*

Moderator: Pierre Landry, Southern California Edison Co.



DAY TWO: Thursday, August 21

8:30 - 10:00

Low Income Program Evaluations in the Dairy States

This session approaches low income energy program evaluation with a different focus. California's example looks at cost effectiveness and standardization across the state, New York on energy burden progress toward achieving policy goals and program objectives, and Wisconsin on longitudinal program impacts.

Moderator: Bobbi Tannenbaum, KEMA-XENERGY

Evaluating the New York Energy Smart Low-Income Energy Affordability Program, *Mark Coleman, II, New York State Energy R&D Authority*

An Evaluation of Wisconsin's Low Income Programs—Are Clients Moving Toward Self-Sustainability?, *Lark Lee, PA Consulting Group (PA Government Services, Inc.)*

Evaluating Low Income Energy Efficiency in California: The Intersection of Cost Effectiveness, Energy Efficiency, Equity and Politics, *Mary O'Drain, Pacific Gas & Electric*

Industrial Energy Efficiency Evaluation

A kaleidoscope session of significant industrial efficiency savings and persistence; electric efficiency potential; and targeting small industrial customer program design.

Moderator: Lori Megdal, Megdal & Associates

Industrial Assessment Center Program Client Impact Study, *Michaela Martin, Oak Ridge National Laboratory*

The Mom and Pop Machine Shop: Designing Programs for Small Industrial Customers, *Marissa Myers, Quantum Consulting, Inc.*

Integrating MA&E and Planning Studies to Increase Industrial Program Accomplishments, *Michael Rufo, Quantum Consulting, Inc.*

Customer Response to Mass Marketing

Can information move markets? This session provides a detailed examination of this issue. The first paper covers the effects of the 2000-2001 California energy crisis on residential energy consumption and how information helped customers. The other two papers focus on the design and results of program marketing campaigns and the effects of these campaigns on people's awareness, attitudes and actions.

Moderator: Faith Lambert US Department of Energy

Estimating Demand Savings From an Advertising Campaign, *Victoria Engel, New York State Energy R&D Authority*

How Am I Doing? Benefits (and Costs) of Tracking the Effectiveness of Marketing for an Energy Efficiency Program, *Shel Feldman, Shel Feldman Management Consulting*

Changes in Household Energy Use as a Result of the California Energy Crisis, *Loren Lutzenhiser, Portland State University*

PANEL—Evaluation Ethics: What is the Best Way to Ensure Third Party Program Evaluations Are Objective and Without Conflict of Interest?

Many firms provide program design, delivery and evaluation services to the energy industry. This creates potential problems due to real or perceived conflicts of interest when firms are simultaneously implementing and evaluating efficiency programs for the same entity. This panel discusses public policy issues in search of a set of principles to guide future work in the evaluation and implementation areas.

Moderator: Mike Messenger, California Energy Commission

Panelists:
Eli Kollman, CPUC
Mike Rufo, Quantum
Jane Peters, Research Into Action
Miriam Goldberg, KEMA-Xenergy

10:00 - 10:30 BREAK

10:30 - noon Attribution

Presentations address the challenge of determining whether energy savings and market changes are the result of program efforts through surveys and mystery shopping as well as regression modeling.

Moderator: Shel Feldman, Shel Feldman Management Consulting

How a Multi-Phase Statewide Market Transformation Study Was Able to Successfully Address Program Attribution in the Wake of the California Energy Crisis, *Tami Rasmussen, KEMA-XENERGY*

Innovative Approach Applied to Estimating Net Impacts of Residential Equipment Programs, *Mitchell Rosenberg, KEMA-XENERGY*

Evaluating Attribution in a Business Markets Program, *Mark Thornsjo, Summit Blue Consulting*

Information and Energy Efficiency: What Do Customers Want to Know?

This session explores how various types of consumers use energy information. One paper examines how large commercial customers used on-line access to load profile data; a second paper investigates how customers responded to real-time energy metering information; and the third paper looks at the relationship of information seeking and how it relates to intent to act.

Moderator: Linda Dethman, Dethman & Associates

Customer Response to Internet-Based Hourly Usage Data—An Evaluation of California's Real-Time Energy Metering Program, *Steven Braithwait, Christensen Associates*

Seattle MeterWatch: Using Customer Feedback to Build an Internet-Based Energy Use Service, *Linda Lockwood, Seattle City Light*

What Is It I Need To Know? The Relationship Between Information-seeking and Intended Action Relating to Energy Efficiency, *Eric Rambo, PA Consulting Group*

Does Practice Trump Theory in the Evaluations of MT?

Evaluating Market Transformation programs usually means hitting a moving target. This set of papers challenges us to understand how we define success; describes some templates for setting up evaluations in a changing market and program environment; and how evaluation works with programs to make program changes faster and more responsive to evaluation findings.

Moderator: Ken Keating, Bonneville Power Administration

Is One Model of Market Transformation Enough for Public Benefit Market Transformation Programs?, *Harley Barnes, Aspen Systems Corp.*

Real-Time Evaluation for Energy Efficiency Programs, *Robert Bordner, Energy Market Innovations, Inc.*

The Program Theory and Metrics Process, *Jeff Erickson, PA Consulting Group*

PANEL—How to Find Out If Your Market-Based Program is Cost Effective, Cost Effectively

What do regulators and legislators expect from evaluations? How do they define cost effectiveness for market-based programs? Are collaborative, national and regional evaluation efforts effective tools for reducing costs, while maintaining or improving evaluation quality? This panel draws on their experiences to discuss these timely questions.

Moderator: Bill Saxonis, New York Dept. of Public Services

Panelists:
Ben Bronfman, Energy Trust of Oregon
Carol White, National Grid, USA Service Co
Monica Nevius, Consortium for Energy Efficiency



Noon - 1:30 LUNCH

DAY TWO: Thursday, August 21

1:30 - 3:00

Looking at the Big Picture: Three National Studies of Energy Efficiency Program Trends

This session looks at broad national trends in energy efficiency program activity. One paper documents the most recent decade of experience with federal energy efficiency programs; one examines recent trends in utility sector energy efficiency activities; and one describes an ambitious study to identify nationwide "best practices" in energy efficiency program design.

Moderator: Marty Kushler, American Council for an Energy Efficient Economy

Historical Tracking of DOE Technologies, Marketing Transformation, Community Development, and Codes and Standards for Building Programs: A Decade of Accomplishments, 1990-2000, *Eihab Fathelrahman, Pacific Northwest National Laboratory*

A Nationwide Best Practices Study of Energy Efficiency Programs, *Kenneth James, Pacific Gas & Electric*

The Rebound, Renewal and Rebirth of Energy Efficiency Programs in the US: An Examination of Trends in Program Spending and Design, *Dan York, American Council for an Energy Efficient Economy*

Retail Sales and Market Penetration Analysis

This session illustrates a variety of uses of retail sales data in evaluations of market transformation programs. It also provides insights concerning benefits and challenges of studies relying on retail sales data.

Moderator: Elizabeth Titus, Northeast Energy Efficiency Partnerships, Inc.

Regional Comparisons of CFL Market Shares Using Point-of-Sales Data, *Alan Fields, ITRON, Inc.*

Assessing Residential Market Transformation Programs Through Retail Sales Analysis, *Thomas Mauldin, KEMA-Xenergy*

Using Regression Discontinuity Models to Understand Market Transformation, *Ken Tiedeman, Habart and Associates*

Don't Give Up on Small Commercial: Reaching This Challenging Market Segment

This session brings together evaluation research from three corners of the United States: California, Massachusetts, and the Pacific Northwest. All three papers focus on opportunities for achieving energy efficiency in historically difficult to serve cost-effecting the small commercial market segment. Hear about the latest in strategies to overcome market barriers and bring energy efficiency to small commercial customers.

Moderator: Jean Shaffer, Seattle City Light

How to Cost-Effectively Serve Small Nonresidential Hard-to-Reach Customers, *John Cavalli, Quantum Consulting, Inc.*

From Portland to Billings and Back: Challenges and Opportunities for Small HVAC RTU Service Innovations, *Rich Hazzard, Energy Market Innovations, Inc.*

Evaluating the Underserved Small C&I Market: Building a Bridge to Implementation, *Thomas Ledyard, RLW Analytics*

3:00 - 3:30 BREAK

3:30 - 5:00

The Current State-of-the-Art in Using Building Modeling for Evaluation Purposes

These papers explore the use of building models for estimating building use and determining program savings. Among the topics discussed are specification issues, use of calibration, and real-time data monitoring.

Moderator: Bob Wirtshafter, Wirtshafter Associates, Inc.

Calculating Energy Savings in High Performance Residential Building Programs, *Robert Hendron, National Renewable Energy Laboratory*

DrCEUS: Energy and Demand Usage From Commercial On-Site Survey Data, *Tom Mayer, ITRON, Inc*

Non-Energy Benefits: Fully Valuing Energy Efficiency Program Outcomes

Energy savings isn't the only outcome that can be attributed to successful energy efficiency program implementation efforts. This session considers how to quantify non-energy benefits as well as the significance of those benefits both in terms of value and in decision making by customers and trade allies.

Moderator: Carol White, National Grid USA Service Co.

Non-Energy Benefits from Commercial and Industrial Energy Efficiency Programs: Energy Efficiency May Not Be the Best Story, *Nick Hall, TecMarket Works*

Non-Energy Benefits (NEBs) in Offices and Schools: Do They Influence Building Design and Decision-Making?, *Lisa Skumatz, Skumatz Economic Research Associates*

An Approach to Quantifying Economic and Environmental Benefits For Wisconsin's Focus on Energy, *David Sumi, PA Consulting Group (PA Government Services, Inc.)*

Evaluation of Education and Training Programs

This session explores the measurement of qualitative and quantitative results of various programs designed to influence people to adopt energy efficiency measures and practices.

Moderators: Marc Hoffman, Consortium for Energy Efficiency and Elizabeth Titus, Northeast Energy Efficiency Partnerships, Inc.

Education and Training Evaluations that Changed a Program, *Ingo Bensch, Energy Center of Wisconsin*

Education That Changes Behavior: The Impacts of the BOC Program, *Marjorie McRae, Research Into Action*

Demonstrating the Behavioral Effects of Education and Training Programs, *Tom Talerico, Glacier Consulting Group*



5:30 TILlicUM VILLAGE DINNER & CRUISE

Join us for a cruise to Tillicum Village. This trip includes a narrated harbor cruise, a delicious buffet featuring traditional Indian-style baked salmon, a spectacular stage show, and time to explore the forested trails and picturesque beach walks on Blake Island State Park. The cost of this event for each registered conference attendee is \$35. Guests are encouraged to attend. The adult fee (non-registered conference attendee) is \$65 for each additional adult guest(s), and \$25 for each child (5-12 years old). Be sure to make your reservations when you register for the conference!



7:00 - 8:15 Breakfast On Us—Join us one last time for breakfast.

8:30 - 10:00

**Oh Say Can You Oversee?
Effective Program Data,
Reporting and Review Systems**

Program evaluation fits into a broader program administration structure that includes gathering and retaining appropriate program data in accessible and consistent formats, reporting program results in useful and consistent ways, and assessing program reports and evaluations. Each of these three papers focuses on one part of this structure and describes the issues faced in doing the job well.

Moderator: Marian Brown, Southern California Edison Co.

Out From Under the Trees—Successful Energy Conservation Accomplishment Reporting Mechanisms, *Debra Tachibana, Seattle City Light*

Where's The Data? Data Working Groups, Document Management Systems, and Consistent Reporting of Impacts, *Bryan Ward, PA Consulting Group (PA Government Services, Inc.)*

Audit Process in Ontario Provides a Different Perspective on Program Evaluation, *Robert Ziemer, KEMA-XENERGY*

Cost Constrained Cross-Program Evaluation

Across the nation there is less money to spend on energy program evaluation. These three papers discuss a different cross-program evaluation effort along with the authors assessment of how the approach was effective in keeping costs low and getting sound results.

Moderator: Jane Peters, Research Into Action

Getting the Best Evaluation for the Buck, *Valy Goeprich, KEMA-XENERGY*

Getting the Biggest Bang for Your Buck: Process Evaluation Across Programs, *Patricia Gonzales, New York State Energy R&D Authority*

Measurement and Baseline Issues Related to Evaluating a Diverse Portfolio of Federally-Supported Building Energy-Saving Programs, *Donna Hostick, Pacific Northwest National Laboratory*

Upstream/Downstream

The papers in this session explore issues related to different parts of the market for energy products. The first two discuss residential refrigerator programs and cover issues such as program impacts and the used appliance market. The final paper analyzes the supply chain for commercial and industrial HVAC equipment to identify potential points of influence to improve energy efficiency.

Moderator: Jim Mapp, Wisconsin Division of Energy

The Weak Link in the Chain: Commercial and Industrial Supply Chain Market Research in Wisconsin, *Michael Rufo, Quantum Consulting, Inc.*

Evaluation of the Energy and Environmental Effects of the California Appliance Early Retirement and Recycling Program, *Eric Daly, ICF Consulting*

Operations of the Used Appliance Market: Can Our Appliance Collection Programs Influence the Energy Efficiency of the Secondary Market?, *Nick Hall, TecMarket Works*

PANEL—Declining Cooperation: Challenges and Recommendations in Performing Evaluation Work

This panel of survey professionals reviews growing threats (e.g., increased privacy concerns, fallout from telemarketing abuses) to customer research and assesses methods for minimizing sample and response biases to maximize validity and generalizability of results.

Moderator: Shel Feldman, Shel Feldman Management Consulting

Panelists: To Be Announced

10:00 - 10:30 BREAK

10:30 - noon

Residential New Construction Evaluation Methods and Issues

This session offers valuable insights on developing evaluation practices for residential new construction ranging from sampling protocols, triangulation methods, and the use of Delphi Studies.

Moderator: Carol Mulholland, Academy for Educational Development

Dressing the Priestess: Preparation for and Results of a Delphi Study for a Residential New Construction Program, *William Blake, National Grid USA Service Co.*

When a HERO Comes Along: Expanding the Market Share of EnergyStar Homes, *Jill Luedtke, Quantec*

A Case Study in Triangulation: Assessing the Residential New Construction Market From Multiple Perspectives, *Kathryn Parlin, West Hill Energy & Computing, Inc*

Evaluation Methods and Results from Three Large National Programs

This session presents the research methods and results from three evaluations of large national energy efficiency programs. The papers describe the evaluation approach, research challenges, the energy and selected non-energy benefits, and the costs and benefits of these programs.

Moderator: Nick Hall, TecMarket Works

Evaluating the UK's Energy Efficiency Best Practice Programme, *Richard Hartless, Building Research Establishment*

Using Performance Metrics to Quantify Energy Savings and Emissions Reductions for the US Department of Energy's State Energy Program, *Martin Schweitzer, Oak Ridge National Laboratory*

EnergyStar® Retail Store-level Assessment—A Look Across the Nation, *Seth Snell, Applied Proactive Technologies, Inc.*

Residential Lighting Programs: Transforming the Market

This session presents three important evaluations of residential lighting programs in the Pacific Northwest and Canada. The evaluations examine the effectiveness of these programs in transforming the lighting market and try to explain the key elements of program success.

Moderator: Ed Vine, California Institute for Energy Efficiency

A Comparison of Rebates and Non-Rebated Promotions in a Residential Lighting Program, *Stephen Grover, ECONorthwest*

The Magic in the Messaging: Bulk Purchase and Distribution of CFLs Through Retail Outlets, *Iris Sulyma, BC Hydro and Power Authority*

Seattle's Conservation Kit Program—Transforming the Residential Use of Compact Fluorescent Lighting, *Debra Tachibana, Seattle City Light*

REGISTRATIONS WILL BE ACCEPTED BY MAIL, PHONE, FAX, E-MAIL, OR

YOU MAY REGISTER ON-LINE AT OUR WEBSITE...<http://www.IEPEC.org>.

International Energy Program Evaluation Conference
The Renaissance Madison Hotel - Seattle, Washington
August 19 - Pre-conference Workshops
August 20-22 - Conference

Hotel and Transportation Information

Important Deadlines:

- June 20, 2003:** Deadline for "early bird" reduced conference and workshop registration
July 25, 2003: Hotel cut-off date to reserve a room at the special conference rate
August 1, 2003: Cancellation deadline for workshops and conference

The Renaissance Madison Hotel
515 Madison Street
Seattle, Washington 98104
Phone: 206-583-0300 or Toll Free at 1-800-278-4159
Fax: 206-624-8125
<http://www.marriott.com/dpp/PropertyPage.asp?MarshaCode=SEASM>

The conference is being held at The Renaissance Madison Hotel, which is situated in downtown Seattle, and offers beautiful views of Seattle, Puget Sound, and the Cascade and Olympic Mountains. The Renaissance offers deluxe accommodations that are carefully detailed for the business traveler. Amenities include a work desk with lamp, 2-line phone, speaker phone, voice mail, data ports on the phone, incoming facsimile service, and a fully equipped business center. The hotel pampers guests with attentive personal service, such as complimentary coffee and newspaper delivered to your door with your wake-up call, and offers the use of a complete fitness center.

Reservations **Call 206-583-0300 or 1-800-278-4159 (in the U.S. and Canada)**
All conference attendees are responsible for making their own hotel reservations and payments. Please request the IEPEC room rate when making your reservation.



Room Rates **\$155 Single/\$175 Double -These rates expire on July 25, 2003**
All reservation requests must be made with an accompanying check, money order, or a valid major credit card guaranteeing the first night's room rate, plus applicable occupancy tax. Individual deposits are refundable in the event of individual room cancellations, providing notice is received 24-hours prior to scheduled arrival date. Check-in time is 3:00 pm and checkout is at 12:00 pm. Reservations made after July 25, 2003, will be accepted on a space- and rate-available basis only.

Airline Reservations United Airlines is the official airline of the IEPEC. If you or your travel agent calls United's toll-free number (1-800-521-4041) to book your reservations, you will receive a 5% discount off the lowest applicable discount, including First Class, or a 10% discount off full fare unrestricted coach fares, purchased seven (7) days in advance. An additional 5% discount will apply when tickets are purchased at least 30 days in advance of your travel date. Discounts also apply on Shuttle by United and United Express. Call United's Specialized Meeting Reservations Center at 1-800-521-4041 to obtain the best fares and schedule information. Make sure you refer to Meeting ID Number 515BF. Dedicated reservation agents are on duty 7 days a week from 8:00 a.m. to 10:00 p.m. EST.



Transportation Grayline Airport Express Shuttle (206-626-6088 or <http://www.graylineseattle.com/airport.cfm>)
The Gray Line Airport Express provides frequent shuttle service to downtown Seattle hotels between 6:00 a.m. and 11:45 p.m. The cost is \$8.50 per person one-way. Advance reservations are not necessary. Tickets may be purchased from the service desks located on the baggage claim level of the airport.

Taxicab: An approximate fare will be \$30-35 plus tip.

Directions The Renaissance Madison Hotel is located 15 miles from the Seattle-Tacoma International Airport. Take I-5 N.Bound to Seattle, take exit #164A-Madison St., take a left on Madison Street, cross over I-5, and the Renaissance Madison Hotel is located immediately on the left.

Parking Parking is available at the hotel and the rates are: valet parking for a fee of \$21/day or self-parking for \$19/day. Also, there is an uncovered parking lot located on the corner of 7th and Marion (two blocks from the hotel) where the charge is \$10/day.

Onsite Check-in **Details will be posted closer to conference dates at www.iepec.org**

Conference Attire For your comfort, clothing attire at the conference will be business casual-comfortable clothing (no suits/ties), but no t-shirts and/or shorts.

Questions **If you have questions, or concerns, please contact:**
Cara Lee Mahany Braithwait, IEPEC Conference Coordinator
Phone: 608-231-2552
samb@LRCA.com

REGISTRATION FORM (Proforma Invoice)



2003 INTERNATIONAL ENERGY PROGRAM EVALUATION CONFERENCE
EVALUATION: MEETING DIVERSE NEEDS
Pre-Conference Workshops: August 19 Conference: August 20-22
The Renaissance Madison Hotel 515 Madison St. Seattle, WA 98104 206-583-0300

This form may be completed on screen
Please use a separate form for each registrant and type or print clearly.

First Name _____ Last Name _____
Professional Title _____
Company Name _____
Address _____
City _____ State _____ Zipcode _____
Country _____ Email _____
Telephone _____ Fax _____

CONFERENCE REGISTRATION FEE:

These rates apply to all participants, including government and non-profit organization employees, and include one copy of the proceedings on CD.

- | | | |
|--|----------------|--|
| Registration received by 6/20/03 | _____ US \$495 | NEPEC is a 501 C 3, not-for-profit corporation. As much as 50% of your registration fees may be tax deductible. Check with your accountant for complete details. |
| Registration received after 6/20/03 | _____ US \$550 | |
| Student registration | _____ US \$300 | Student verification required. No tasks/responsibilities are assigned at the conference. Arrangements will be made for participation of a limited number of graduate students to attend at this special rate, in return for on-site support as directed by the Conference Coordinator. To be considered for this rate, the conference committee must receive a letter from the student's major professor verifying student status and that work is being done toward a graduate degree that focuses on evaluation of energy or environmental issues. |
| | _____ US \$175 | |
| Conference Sponsor | _____ | Registration Fee Waived - For every \$2500 donated by the sponsor, one of their employees can attend the conference at no charge. |

WORKSHOP REGISTRATION FEE:

All workshops are scheduled for Tuesday, August 19. Participants must be registered for the conference in order to attend a workshop.

- | | | |
|--|----------------|--|
| Workshop 1 (Full Day)
Coordinator: Ed Vine,
California Institute for Energy Efficiency | _____ US \$125 | Monitoring, Evaluation, Reporting, Verification and Certification of Greenhouse Gas Emissions: Energy-Efficiency Projects |
| Workshop 2 (Full Day)
Coordinator: Bernard Neenan and Donna Pratt,
Neenan Associates LLC | _____ US \$125 | Methods and Practices for Evaluating Demand Response Programs |
| Workshop 3 (Full Day)
Coordinator: Gretchen Jordan, Sandia National Laboratories | _____ US \$125 | Logic Modeling For Designing Evaluations and Performance Measurement |
| Workshop 4 (Full Day)
Coordinator: Dan Violette, Summit Blue Consulting | _____ US \$125 | Necessary Statistics for Evaluation and Performance Measurement |
| Workshop 5 (Full Day)
Coordinator: Shel Feldman, Shel Feldman Management Consulting and Nick Hall, TecMarket Works | _____ US \$125 | Evaluation Management 101 |
| Workshop 6 (Half Day)
Coordinators: John Reed, Innovologie, LLC; | _____ US \$55 | Evaluating Programs Targeting the Commercial Buildings Sector |



2003 IEPEC REGISTRATION FORM (Continued)

SPECIAL EVENT:

Cruise to Tillicum Village
Thursday Evening, August 21

This trip includes a narrated harbor cruise, a delicious buffet featuring traditional Indian-style baked salmon, a spectacular stage show, and time to explore the forested trails and picturesque beach walks on Blake Island State Park.

Registered Conference Attendee: _____ US \$35

Non-Registered Conference Attendee: _____ Adults @ US\$65 = Total \$ _____ .00
\$65 per adult

Children (ages 5-12): _____ Children @ US\$25 = Total \$ _____ .00
\$25 per child

AMOUNT DUE FOR SPECIAL EVENT: US \$ _____ .00
Please add to your registration total

PROCEEDINGS: One copy of the 2003 Proceedings on CD is included in the registration fee.

Registered attendees can purchase one bound copy of the proceedings at a reduced cost of \$69. Bound copies of the proceedings will be mailed three weeks after the conference.

2003 Proceedings Book: \$69/copy _____ @ US\$69 = Total \$ _____ .00

Additional 2003 copies:

\$100 for one CD or book _____ / \$125 for both CD and book _____ = Total \$ _____ .00

Limited Copies of Previous Proceedings (\$100 for one CD, one Book, or for a set [both the CD and Book]):

2001 Proceedings CD _____ Hard Copy _____ Quantity _____ @ US\$100 = Total \$ _____ .00

1999 Proceedings CD _____ Hard Copy _____ Quantity _____ @ US\$100 = Total \$ _____ .00

1997 Proceedings CD _____ Hard Copy _____ Quantity _____ @ US\$100 = Total \$ _____ .00

AMOUNT DUE FOR PROCEEDINGS: US \$ _____ .00
Please add to your registration total

SPECIAL NEEDS:

Please indicate any dietary restrictions _____

Other special needs: _____

PAYMENT: Total Amount due for registration US \$ _____

Please include registration fee(s), special event, workshop(s), and additional conference proceedings.

Check enclosed (Make check payable to NEPEC)

Credit card: MasterCard _____ VISA _____ Discover _____

Credit card # _____ Expiration date _____

Signature _____

Cancellation Policy: Conference registration fees will be refunded less a \$50 cancellation fee if notice is received in writing by August 1, 2003. Workshop registration fees will be refunded less a penalty of \$50 for the full-day session(s) and \$25 for the half-day session(s), if notice is received in writing by August 1, 2003.

REGISTRATIONS WILL BE ACCEPTED BY MAIL, PHONE, FAX, E-MAIL, OR YOU MAY REGISTER ON-LINE AT OUR WEBSITE....<http://www.IEPEC.org>. SEND REGISTRATIONS OR DIRECT QUESTIONS TO:

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E-mail: samb@LRCA.com