SESSION 2C

EVALUATING RESIDENTIAL AND COMMERCIAL LIGHTING PROGRAMS

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

PAPERS:

Interim Process Evaluation of the Efficient Lighting Initiative: 1999-2001
Edward Vine, Lawrence Berkeley National Laboratory
Luisa Freeman, Applied Energy Group
Joseph Lopes, Applied Energy Group
Martin Adelaar, Marbek Resource Consultants, L.L.C.
Barbara Atkinson, Consultant
Rafael Friedman, Consultant
Iris Sulyma, Habart & Associates Consultants

Evaluation of a Small Commercial Prescriptive Lighting Program
Cynthia M. Austin, Heschong Mahone Group, Inc.
Catherine Chappell, Heschong Mahone Group, Inc.
Ed Hamzawi, Sacramento Municipal Utility District

A Novel Approach to the Evaluation of Lighting Programs: The National Grid Energy Initiative Lighting Program
Alan Bailey, National Grid
M. Sami Khawaja, Quantec, LLC
Shon Kraley, Quantec, LLC

SUMMARY:

This panel focuses on evaluation of lighting programs. The first paper (Vine, et. al.) discusses the early progress and challenges of conducting a cross-cultural, multinational market transformation lighting program. The authors conclude that practical issues associated with this type of research are as much of a limiting factor as the methodological approaches to the evaluation itself. The second paper (Austin, et. al.) discusses an evaluation of prescriptive lighting program directed at a "hard to reach" small commercial market sector. This paper describes a comprehensive impact methodology that relied on individual site analysis of engineering assumptions, and included results from data loggers and on-site surveys, and the calculation of net savings using decision-maker surveys. The final paper presents a novel approach to statistically adjusted engineering (SAE) models, where building simulation and engineering models were used to refine engineering priors. These results were used to develop SAE models on a sample of participants, which were then extrapolated to the participant population. Results were calculated for lighting type and commercial market segment. These three papers present a wide range of methodological approaches and challenges, and taken together, are testimony to the continuing evolution of evaluation strategies in our profession.