

SESSION 8D

BIG IMPACTS—EVALUATING LARGE C&I PROGRAMS

Moderator: Lauren Miller Gage, Bonneville Power Administration

PAPERS:

Large Lessons Learned: Impact Evaluation of Projects That Reported Over 1,500,000 kWh/yr Savings

Jonathan Maxwell, ERS, College Station, TX
Cherie Gregoire and Jennifer Meissner, NYSERDA, Albany NY
Lori Medgal, Ph.D., Megdal and Associates, LLC. Acton, MA

Taking A Byte Out of Data Center Energy Use!

Carol Sabo, PA Consulting Group
Susan T Andrews, NYSERDA
Kimberly Bakalars, PA Consulting Group

CHP—the “Ugly Duckling” of Energy Efficiency

William Steigelmann, Lockheed Martin, Rockville, MD
Barry Hinkle, Lockheed Martin, Rockville, MD

SESSION SUMMARY:

This session covers three key areas of assessing large projects and programs targeted for commercial and industrial programs. Each paper describes the tailored approach that is required in assessing savings and markets in niche areas.

The first paper by Jonathon Maxwell focuses on evaluating projects that claim large savings and their inherent issues. The paper includes unconventional and successful approaches used by the evaluation team to assess twenty-five projects which together reported 128 million kWh in electricity savings. The paper describes the background of the project, including the NYSERDA portfolio and the measures utilized in these large projects. The approach describes the assignment of senior engineering staff and development of detailed M&V plans for each project. The approach to net-to-gross measurement was a unique by including all decision-makers in the interviews.

The second paper by Carol Sabo describes the evaluation undertaken for NYSERDA for large data center energy use. Large data centers are considered an emerging area for energy efficiency and the research described in this paper includes a market scan to identify and categorize the full range of practices and technologies and the programs available to reduce the energy use of data centers and servers. In addition, a market assessment was conducted to determine the level of energy efficiency measures implemented for key end-user customer segments that could be targeted for prescriptive measures.

The final paper by William Steigelman describes an approach to estimating energy potential for combined heat and power (CHP) systems utilized in Maryland and the Pacific Northwest. The paper describes the CHP technology and in the context of the electrical industry in general. It describes the approach to estimate potential for the Bonneville Power Administration during the mid-1980s and a similar approach taken recently for the state of Maryland.