

SESSION 9B

RESIDENTIAL PLUG LOADS

Moderator: Sarah Castor, Energy Trust of Oregon

PAPERS:

The New Frontier in Energy Efficiency: Estimating the Impact of a Consumer Electronics Program

Ken Tiedemann, BC Hydro

Measuring Success in Midstream Programs: Design and Evaluation Recommendations from a Television Program

Marti Frank, Research Into Action

Ty Stober, Northwest Energy Efficiency Alliance

Jane Peters, Research Into Action

Joe Van Clock, Research Into Action

Alex Dunn, Research Into Action

Nicole DeHoratius, University of Chicago

Designing for Evaluation in Residential Plug Loads

A.J. Howard, Energy Market Innovations, Inc.

Brian Arthur Smith, Pacific Gas and Electric Company

Rick Ridge, Ridge and Associates

SESSION SUMMARY:

This session brings together three papers to discuss outcomes and lessons learned from the midstream energy efficient television programs run on the West Coast. While many programs addressing residential plug loads have been directed at end users, implementers are frequently turning to retailers to maximize program impact in a product space that changes constantly. But midstream programs offer special challenges for evaluators accustomed to looking at downstream incentives. This session provides an overview of recent and ongoing evaluation work in this fast-growing area of potential for residential energy efficiency.

We begin in British Columbia with a study estimating the impact of BC Hydro's Power Smart Consumer Electronics program. This paper clearly and carefully lays out the methods involved in the impact evaluation, and there are many, including logic modeling, trade ally surveys, a showroom presence study and an end-use metering effort. The author brings together these efforts to draw conclusions about the program's influence on the television market and quantify the associated energy and demand savings.

Moving down the coast to the Pacific Northwest, our second paper discusses the past and present evaluations of the Business and Consumer Electronics (BCE) television program operated by the Northwest Energy Efficiency Alliance. After an early evaluation failed to establish program influence in the market, evaluators and implementers regrouped to explore additional methods for documenting program impact. The paper summarizes the challenges of midstream program evaluation along with the innovative approaches the team took to overcome these challenges.

Arriving finally in California, our last paper discusses the BCE television program operated by California's investor-owned utilities and lessons learned from its evaluation. The authors make a strong

case for the importance of quality evaluation of plug load programs, while showing how evaluators and implementers can work together in the program design phase to support a new generation of midstream retail product programs.