SESSION 2B

A LOOK AT INCENTIVE PROGRAM LANDSCAPE AND EFFECTIVENESS

Moderator: Jennifer Meissner, NYSERDA

PAPERS:

Comparing Energy Efficiency Program Rebates and Incentive Levels
Carol Sabo, Tetra Tech
Birud Jhaveri, NSTAR Electric and Gas Corporation
Ralph Prahl, Consultant to Massachusetts EEAC

Motivating Residential Customers: Is More Money Really the Answer?
Laura Schauer, Tetra Tech
Carrie Koenig, Tetra Tech
Tom Mauldin, NMR Group

Can Short Term ARRA Stimulus Funding Achieve Long Term Market Transformation?
Jane Colby, Cadmus Group
Scott Davis, Cadmus Group

SESSION SUMMARY:

This session will provide an overview of the incentive program landscape in various states offering mature energy efficiency programs. The overview is followed by discussion of two separate studies that use of robust data sets to examine effectiveness of particular incentive program designs in Wisconsin and New York.

Sabo and her co-authors describe the methodology and results of a scoping study on energy efficiency program rebate and incentive levels. The data were collected to support program planning in Massachusetts. Through secondary research and interviews with program administrators, the research team gathered rebate and incentive data on mature programs similar to those energy efficiency programs currently planned and offered in the State of Massachusetts. The research emphasized programs and end-uses expected to yield the greatest energy savings in the State.

Study results were useful to program administrators in determining whether the rebates or incentive levels for their programs were comparable to other similar programs. The research found that some incentive levels varied widely across states while others were relatively consistent. The research also highlighted that some incentive comparisons across jurisdictions are more difficult than others, and a number of factors such as measure variation, efficiency level options and the basis for incentive setting come into play.

Sabo and her co-authors highlight a number of valuable lessons learned in conducting the scoping study. There was considerable interest from program administrators in obtaining information on rebate and incentive trends, and program planners and developers have a desire to more fully understand what is typical in the industry. Despite the barriers to this type of research, incentive level comparisons could be made more readily if additional information were gathered to put them on a common basis, such as incentive or rebate dollar per kWh or KW or therm saved.

There is little research on exactly how increasing or decreasing incentive levels affect program participation or success, especially given other intervening factors that impact program uptake. The next two papers in the session utilize rich data sets with longitudinal, cross sectional and quasi-experimental

analysis in an attempt to isolate the effects of incentive changes in the markets for residential heating equipment, home performance measures and ENERGY STAR® appliances.

Schauer and her co-authors describe an evaluation of two pilot programs aimed at achieving greater energy savings in homes. Integrated into the statewide Focus on Energy initiative in Wisconsin, these pilots modified existing Home Performance and heating equipment program offerings (by significantly increasing the incentive levels) to attempt to promote faster, higher penetration, and/or deeper energy savings. One pilot program exceeded expectations while the other fell short.

The evaluation used quasi-experimental (longitudinal and cross-sectional) evaluation techniques and customer survey data to examine factors that drove the programs' performance. Often, it is hypothesized that money is the primary impediment to the implementation of energy-efficiency measures. These evaluations tested this theory, but also identified other influential factors.

Schauer and her co-authors conclude that external influences are perhaps more important than incentive levels in the adoption of energy efficiency measures. The study identified the important role of the trade ally market in influencing customer decisions. The influx of federal funding over the past few years within the residential market is also thought to play a role, although that change limited the evaluators' ability to completely isolate the effects of the increased incentives offered through the pilots. Schauer and her co-authors conclude that simply infusing more money into a program is not the answer. Setting the right incentives for the market, understanding the impact of other monetary and non-monetary influences on program performance and establishing a sound methodology to assess all of these elements, is far more important than simply infusing a program with more funds.

Colby and her co-author present preliminary results of research supporting an evaluation of the New York State Energy Research Development Authority's (NYSERDA) Appliance Rebate Program funded by the America Recovery and Reinvestment Act (ARRA). Trend analyses using sales data reported by program retail partners historically and through the duration of the ARRA rebate program illustrate the effects of supplementary ARRA stimulus funds on ENERGY STAR appliance market shares. ENERGY STAR market share changes for rebated appliances are compared to non-rebated appliances promoted through NYSERDA's long-standing **New York Energy $mart℠** Products Program and the ENERGY STAR share is predicted by extrapolating the historical trend. The results show an apparent large jump in the percentage of ENERGY STAR sales of most rebated appliances compared to non-rebated appliances. The paper discusses why some appliances seemed to increase more than others and concludes, on the basis of this preliminary analysis, that the ARRA program did significantly impact ENERGY STAR sales for most of the rebated appliances. The sales data analysis is also supported by retailer interview results that are described by the authors.

While the results indicate that the higher ENERGY STAR market shares are sustainable, more time is needed to conclude whether a short-term stimulus can foster long-term transformation. Colby and her co-authors also comment on the rich data set that permitted this robust analysis. The decade of ENERGY STAR and total appliance sales data collected from NYSERDA's partner retailers was critical to the analysis, but is not typically available to evaluators when they examine similar programs. Broader work to develop such data sets would benefit evaluation and provide greater information to determine the influence of program changes.