

## SESSION 9C

### ECONOMIZING ON EVALUATION: GOOD EVALUATION WITH LEANER BUDGETS

*Moderator: Edward Vine, California Institute of Energy and Environment*

#### PAPERS:

##### **Getting out of the Starting Blocks: Challenges with PY1 Portfolio Evaluations**

Katherine Johnson, Johnson Consulting Group  
Michael Spector, Central Hudson Gas & Electric  
Chris Griffin, CGV Gas of Virginia  
Paul Smith, SourceGas

##### **Doing More with Less: Getting What's Needed Most from Evaluations**

Barb Ryan, Global Energy Partners  
Patrice Ignelzi, Global Energy Partners

##### **One Solution to Capturing the Benefits of Early Replacement: When Approximately Correct Is Good Enough**

Richard Ridge, Ridge & Associates  
Pete Jacobs, Building Metrics  
Harvey Tress, New York State Department of Public Service  
Nick Hall, TecMarket Works  
Brian Evans, TecMarket Works

#### SESSION SUMMARY:

This session examines how evaluators conduct evaluations with limited budgets, whether for first-ever program portfolio evaluations, or for programs run by municipal utilities and smaller investor-owned utilities, or when evaluating early replacement for custom measures and other standard measures.

**Johnson et al.** describe three separate approaches used by different utility organizations to field their first-ever program portfolio evaluations. These utilities — Central Hudson Gas & Electric, Columbia Gas of Virginia, and the Partners in Energy Savings Program (the last is a consortium of four natural gas utilities in Colorado) — took different approaches in planning and coordinating their portfolio program evaluations. Although these utilities implemented remarkably similar programs targeting residential and small commercial customers, the results were strikingly different. The authors summarize and compare the key findings and recommendations from three first-year program operations. These utilities share many characteristics that made it easier to compare these results across programs. These utilities are all relatively small, with less than 100,000 customers, offer similar programs targeting the residential and small commercial and industrial markets, and are new to developing and deploying demand-side management programs. Johnson et al. provide both encouragement and guidance regarding the challenges associated with planning and implementing effective program evaluations. This paper will be especially helpful for staff new to the evaluation field because they emphasize the “best practices” used to facilitate cost-effective and meaningful process and impact evaluations.

In **Ryan and Igenelzi**, the authors first note that for evaluators used to performing the full spectrum of activities, from assessing program outreach, the program process, and customer satisfaction to estimating the energy savings and other market impacts, the challenge in conducting an evaluation on a limited budget often involves identifying which activities to cut. They argue that a better approach is to ask the question: What do we really need to know? Followed by, how can we learn it most efficiently? When asked to perform an evaluation of a municipal power provider's Compact Fluorescent Lighting program, they used a bottom-up approach to determine a limited set of activities that were needed to get the job done. They leveraged every resource working collaboratively with the program manager to identify exactly what she needed to learn, why she needed it, and how she planned to use it to come up with a focused evaluation plan that delivered results that she needed. They concluded that their approach and results have widespread and practical applications to small investor-owned utilities, municipal utilities, and any operators of small-scale programs. The success of the project and the approach taken provided results and recommendations on how one can indeed conduct meaningful and useful evaluations on even the tightest budget.

**Ridge et al.** provide a rather simple solution to a very complicated and vexing problem regarding total resource cost analysis of early replacements in individual projects for regulators and program administrators. The basic early replacement situation involves a customer who installs a program-qualifying measure before the end of the effective useful life (EUL) of the customer's existing measure. However, identifying the incremental cost and savings at the end of the remaining useful life (RUL) has always been challenging. The challenge of early replacement has been addressed by the New York State Department of Public Service using two approaches. One approach adjusts the lifecycle benefits calculated as the net present value of the full savings (energy use of the old equipment minus the energy use of the new efficient equipment) over the EUL. The other adjusts the EUL over which the full savings can be claimed. Since the full savings are adjusted, the full costs must also be adjusted. The adjusted results approximate the dual baseline results if one were able to obtain the incremental costs and savings. Such an approach relies on data in the Database for Energy Efficient Resources (DEER) to calculate ratios of incremental savings to full savings and incremental costs to full costs. These ratios are used to adjust the lifecycle benefits, the EUL, and the full costs. Such an approach has the added advantage of requiring no changes in the standard benefit cost models.