

HIGHER STAKES AND MORE COMPLEX PROGRAMS: ENHANCING THE EVALUATION PROCESS

Moderator: Carla Frisch, US DOE

PAPERS:

How Much Evaluation is Enough?

Marc Collins, Itron, Inc.

To Do or Not to Do Redux: Triggering an Impact Evaluation?

Erik Mellen, Northeast Utilities

Susan Haselhorst, ERS

Administering, Managing and Overseeing Large Scale Portfolio Evaluations – Formulas for Success

Nick Hall, Evaluation Management and Oversight Services

What's in Your EM&V Genome? Improving Transparency and Understanding of EM&V Practices through Standardized Reporting

Julie Michals, Northeast Energy Efficiency Partnerships

Arlis Reynolds, Cadmus

David Jacobson, Jacobson Energy Research

Hossein Haeri, Cadmus

SESSION SUMMARY:

Investment in energy efficiency programs is increasing rapidly in the United States, and along with that investment comes new expectations and scrutiny. Evaluators are increasingly charged with conducting evaluations that support broad policy goals – like greenhouse gas emission reductions - while continuing to find innovative ways to stretch ratepayer dollars further and to increase the accuracy of savings estimates. This session explores a variety of efforts to enhance the process of evaluation in pursuit of these goals.

The Environmental Protection Agency's (EPA) Clean Power Plan is expected to generate growth in the utilization of energy efficiency (EE) programs, particularly in jurisdictions where there is less history of these programs being deployed. Guidance is needed to determine the recommended or required EM&V practices and standards that states should use to evaluate energy program savings so that the estimates can be compared from one state to the next and so that an acceptable level of confidence can be ascribed to the air emissions calculations. In this paper, Collins introduces the concept of a systematic, stakeholder-based, and transparent uncertainty assessment process that provides reasoned analysis inputs necessary to answer the question of how much evaluation is sufficient for the intended audience(s) of the results.

Two years ago at IEPEC 2013, Haselhorst et al. presented a novel approach ("Desk Review Assessment" or DRA) for developing objective criteria that would aid in deciding whether to proceed with a full-scale C&I impact evaluation. In the DRA method, a sample of project files is selected for desk reviews using a structured rubric which produces a score of program performance in seven categories, or criteria. The performance of the test year can be compared to the score of previous years to measure program change. The incremental cost to complete an M&V impact assessment is about \$10,000 per site, while a desk review of the same site is about an order of magnitude less expensive. This paper presents the second half of the DRA experiment by comparing the desk review projections of change to realization

rate (RR) stability for two different program years (Round One and Round Two) for a combination of four program administrators. The paper also discusses the California PPA, which is a recent initiative that has characteristics in common with the DRA.

Nick Hall: As more evaluation contracts are structured to include evaluating multiple programs within a portfolio of energy efficiency programs there is a need to better understand the conditions that can be expected to impact those studies. The portfolio evaluation manager is subjected to a different level of pressures and conditions that influence that process compared to an evaluation of a single program within a portfolio. This paper highlights a number of issues of which the evaluation professional must be aware, and be ready to manage the associated evaluation efforts in a way that keeps the evaluations focused, objective, reliable and on-time.

Michals et al. introduce a set of standard forms that were developed through a stakeholder process and designed to build the credibility of energy-efficiency as a resource by improving transparency and understanding of EM&V practices. The forms aim to (1) summarize EM&V methods in a standard format and (2) characterize the level of rigor associated with the evaluation findings. This paper presents the project objectives from multiple stakeholder perspectives and discusses the evolution of the forms using a stakeholder process. The authors will present key features in each form—focusing on the characterization of EM&V methods and rigor—and will discuss challenges for both the user (inputting data into the forms) and the reader (interpreting the data in the form). The paper will also include feedback from the forms' pilots and early adopters, present steps for further development, and discuss various uses of the forms, including to support Clean Air Act (CAA) state air quality compliance plans (State Implementation Plans, or SIPs for ozone attainment) as well as EPA's CAA 111(d) energy efficiency and supporting EM&V reporting requirements.