Session 2C

SMALL ENTITIES TACKLE BIG CHALLENGES

Moderator: Lark Lee, Director, Tetra Tech

PAPERS *(in order of appearance)*:

Demystifying EM&V: Best Practices and Lessons Learned from the First Year Evaluations of the 2011-2014 Portfolio

Phil Bosco, Ontario Power Authority

Evaluation Challenges for Generation and Transmission Companies and Electric Cooperatives

Luisa M. Freeman, DNV KEMA

Susan Weber, DNV KEMA

Designing for Effective Evaluation: Tools and Strategies to Support Energy Efficiency Programs Targeting Small, Low-Capacity Jurisdictions

Alicia LeDuc, Research Services, Washington State Department of Commerce

Jaime Rossman, Research Services, Washington State Department of Commerce

Graham Parrington, Research Services, Washington State Department of Commerce

SESSION SUMMARY:

This session will focus on successful strategies to deliver evaluation, monitoring and verification (EM&V) outside of traditional regulatory contexts. The presentations draw on specific results from a power authority, generation and distribution companies and state and local governments to discuss the appropriate level of EM&V rigor to fit the requirements and needs of various stakeholders. Key factors stressed in this session include understanding the context and needs for evaluation, communicating effectively for transparency and understanding of the EM&V process, providing meaningful results in a timely manner, prioritizing activities to maximize the value of information provided, and capturing program data and documentation to improve the reliability of energy impact estimates.

The first paper, **Demystifying EM&V: Best Practices and Lessons Learned from the First Year Evaluations of the 2011-2014 Portfolio**, discusses how Ontario Power Authority (OPA) established an EM&V framework for the 77 local distribution companies delivering programs to meet aggressive electricity conservation targets for the Province. The OPA funds province-wide electricity energy efficiency and demand response initiatives and has responsibility to undertake EM&V studies for these province-wide initiatives. This paper provides an overview of the lessons learned from performing the EM&V process for the evaluation of the first year of the Province-wide conservation framework. It discusses the success the OPA had in communicating the EM&V discipline to the partner community and thus, building EM&V capability into the marketplace.

The second paper, **Evaluation Challenges for Generation and Transmission Companies and Electric Cooperatives**, overviews Generation and Transmission companies' (G&Ts) role in working with electric cooperatives, municipal utilities and local power companies (collectively referred to as Distributors) to both deliver and evaluate energy efficiency and demand response programs. Three G&T case studies are highlighted: East Kentucky Power Cooperative, Old Dominion Electric Cooperative and the Tennessee Valley Authority. This paper discusses the challenges faced in evaluating energy efficiency and demand response programs in the complex environment of G&Ts and the Distributors that they serve and effective approaches to address the various challenges.

The third paper, **Designing for Effective Evaluation: Tools and Strategies to Support Energy Efficiency Programs Targeting Small, Low‐Capacity Jurisdictions**, provides specific information about the tools and techniques utilized by the small cities and counties participating in the Energy Efficiency Conservation Block Grant program administered by the Washington State Energy Office that were found to have produced the most adequate and highest quality data for use in evaluating the program. Small governments face unique constraints when attempting large-scale energy efficiency projects, but accurate reporting and evaluation of outcomes is often paramount in obtaining funding for future projects. The paper shares recommendations for improving program designs with the small government in mind such as highly encouraging energy service company (ESCO) collaboration for capital projects; providing energy savings metrics and calculators for each eligible program activity type; and providing adequate resources and staff support for small jurisdictions.

All three presentations will discuss the appropriate level of EM&V rigor to fit the reporting and budgetary requirements of various stakeholders in the unique policy environments in which the programs operate. Another theme addressed across the session is the need for good program tracking data and documentation. Issues discussed include: reporting tools, savings calculation methodologies and methods to obtain program data and documentation diversely housed across a range of smaller entities in different formats.

A common challenge identified across all three papers is empowering smaller entities to participate in the EM&V process. This is crucial since effective EM&V of these programs must rely on the smaller entities to provide timely and comprehensive program tracking data. The authors discuss how they educated and involved the smaller entities, whether distributors or local governments, in the EM&V process.