

US EPA EM&V Planning Webinar

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NYSERDA

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Range of Programs Evaluated

- System Benefits Charge (SBC) Programs
 - New York Energy \$martSM
 - Energy Efficiency Portfolio Standard (EEPS)
- Renewable Portfolio Standard (RPS)
- Regional Greenhouse Gas Initiative (RGGI)
- Federal Economic Stimulus Funding (ARRA)
- Utility Demand Reduction and Natural Gas Efficiency
- Green Jobs/Green New York
- Other Statutory Programs (e.g., R&D)
- Special Programs by Executive Order

SBC Programs (Background and Context)

- Launched in 1998 and significantly increased in 2008 with the new Energy Efficiency Portfolio Standard
- NYSERDA SBC programs amount to ~\$966 Million 2008-2011
 - Commercial/Industrial, Residential, Low-Income energy efficiency and demand reduction
 - Resource acquisition and market transformation
 - Research & Development
- Was 2%, now 5% for evaluation (large portion for impact evaluation)
- Utility run energy efficiency programs introduced in 2008 (~\$505 Million 2008-2011)

SBC Program Mandate

- Contribute toward New York's "15 by 15" goal
- Public Policy Goals for the SBC Program
 - Improve New York's energy system reliability and security by reducing energy demand and increasing energy efficiency
 - Reduce the energy cost burden for New Yorkers, particularly low-income households
 - Mitigate the environmental and health impacts of energy use by increasing energy efficiency and renewables
 - Create economic opportunity and promote economic well being by supporting emerging technologies, fostering competition and stimulating growth of NY energy businesses

Evaluation Goals

- Provide Transparent, Credible, and Timely Information to Internal and External Stakeholders
 - Progress toward Portfolio and Program Goals
 - Progress toward State Energy Policy Goals
 - Progress toward Market Transformation
 - Program Efficiency and Effectiveness
- Real-time Feedback for Program Implementation and Improvement

Range of Evaluation Activities

- Impact Evaluation
 - Measurement & verification, attribution analysis, non-energy impacts, R&D impacts, macroeconomic impacts, Total Resource Cost (TRC) analysis
- Market Characterization & Assessment
 - Define and characterize target markets and track key indicators of market change over time
- Process Evaluation
 - Customer and market response to programs, customer satisfaction, effectiveness of program strategy and processes

Roles of NY Stakeholders in Evaluating SBC Programs

- Public Service Commission (PSC)
 - Issues Orders and regulations to implement energy public policy
 - Approves energy efficiency programs and expenditures for NYSERDA, utilities and other parties
- Department of Public Service (DPS)
 - Oversight and coordination of program administration and evaluation
 - Development of evaluation protocols
- Evaluation Advisory Group (EAG)
 - Representation by program administrators and other stakeholders
 - Assists DPS staff with evaluation oversight, coordination and protocols
- Program Administrators
 - Conduct evaluation, consistent with the protocols, using third party contractors

DPS Evaluation Guidelines

- Elements of an acceptable evaluation plan
- Standards to strengthen accountability, accuracy and usefulness of results
 - Acceptable minimum instead of one size fits all
 - Flexibility in terms of evaluation budget and level of effort depending on type of program
 - Reference to California protocols, International Performance Measurement & Verification Protocol (IPMVP), etc.
- Periodic revision and enhancement expected

Process for Developing Evaluation Plans

- Detailed, multi year plan for each major SBC program
- Transparent planning process involves
 - NYSERDA evaluation and program staff
 - NYSERDA third party evaluation contractors
 - DPS staff
- DPS provides approves final evaluation plan
- Third party evaluation contractors implement the plan

Balancing EM&V Expense and Value of Results

- “Burden of Proof” Requirements
 - 90/10 sampling precision, minimize bias, reduce uncertainty
- Risk assessment
 - Impact evaluation
- Multi stage evaluation approach
 - CFL Baseline Study
- Evaluation plan revisions as necessary

Questions?

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