

## Third Party Verification for Public Benefit Energy Efficiency Programs

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# Statewide Energy Policy Drivers

- New York Energy \$mart<sup>SM</sup> System Benefits Charge Program Goals
  - Increase energy efficiency and renewable energy
  - Improve system reliability
  - Facilitate competition
  - Reduce environmental impacts





### George E. Pataki, Governe Purpose of M&V Evaluation

- Third party verification of electric savings
- Realized savings used for cost-effectiveness analysis
- Estimate emissions reductions and other non-energy benefits
- Program design and delivery decisions





### M&V Activity Drivers

- Program history and longevity
- Program budget
- Program spending and spend rate
- Claimed program savings
- Program's relationship to energy policy goals
- Program type, i.e., resource acquisition, market transforamtion



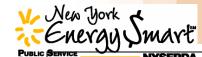


## Cost of M&V

- \$2.5 million over 4 years
- One NYSERDA FTE
- General Assistance Contractor oversight

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- Intangibles
  - Program staff time
  - Support staff time



#### George E. Pataki, Governor Implementing M&V Approach

- Challenges
  - Cost
  - Staffing
- Benefits of 3<sup>rd</sup> Party M&V
  - Does not rely on self-reporting by end-users
  - Conducted by contractors external to program implementors
  - On-site inspections
  - Contractor reports to independent oversight committee

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#### Lessons Learned

- Program records and data should be set up for evaluation as well as implementation
- Difficulty in obtaining appropriate sample sizes
- Multi-step process for obtaining permission for on-site visits
- Program staff buy-in time may be prolonged





#### NYE\$ Context

- More than 40 programs
  - B&I, Residential, R&D, Low-Income, Environmental
- 6 evaluation modalities (*M&V* is one among *many*)
  - Macroeconomic analysis, Theory and Logic, M&V, Market Characterization, Assessment, and Causality, Process Evaluation
- Report to independent oversight committee





- Calculated using factors applied to avoided fossil energy generation  $-SO_2$ ,  $NO_x$ ,  $CO_2$
- Not monetized nor used in cost effectiveness analysis
- Reported to show progress toward goal of reducing the environmental impact of energy production
- Accepted by stakeholders as reasonable approach