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Energy Program Evaluation: New York's New Approach

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Energy Efficiency Program Funding in New York

- New York utility spending on energy efficiency programs equaled about \$300 million in 1993.
- In 1998 New York changed policy by funding a diverse portfolio of energy efficiency programs through a system benefits charge. The model relied primarily on a statewide administrator (NYSERDA).
- In May 2007, New York engaged in one of the most ambitious energy efficiency efforts in the nation -- the Energy Efficiency Portfolio Standard Proceeding.

Energy Efficiency Portfolio Standard (EEPS)

- EEPS Order (07-M-0548) issued June 2008. Model includes both statewide and utility program administrators.
- Endorsed a goal to reduce statewide energy consumption by 24,927 GWh by 2015; roughly equal to the power consumed annually by 3.4 million New York households.
- Achieving this goal would bring electricity usage in 2015 to a level below 2006 consumption.

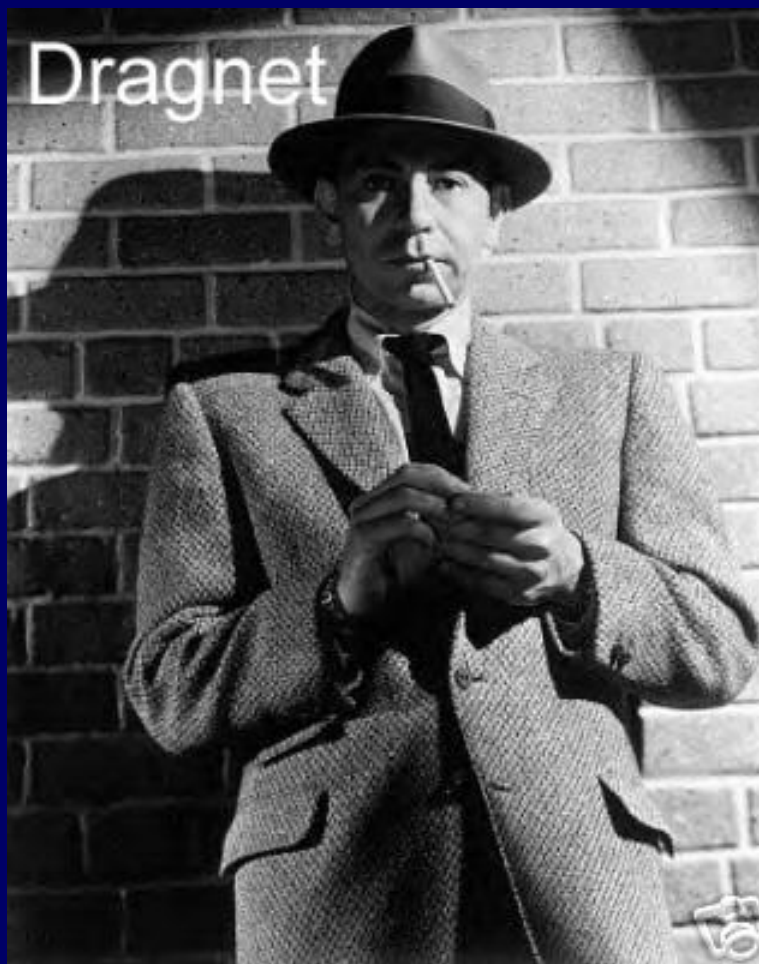
Energy Efficiency Portfolio Standard Order (07-M-0548)

- Also approved energy efficiency programs to save natural gas.
- Total spending is expected to exceed \$500 million annually.
- Required a strong commitment to rigorous, accurate, and transparent program evaluation.
- An evaluation plan must be part of every program plan

What is Evaluation?

- A way to document the “ true” savings.
- Rigorous evaluation looks at many things such as performance of energy measures under real world conditions, human behavior and the extent benefits resulted from the program (e.g., attribution).
- The program benefits must be verified!

"All we want are the facts."
-- Sgt. Joe Friday



This is not Evaluation!

- Tide Coldwater detergent can save up to \$63 a year in hot water costs. (It says so on the cap!)



Evaluation is Critical!

Why is “Getting it Right” Important to Regulators?

- Protect ratepayer/taxpayer interests;
- Use energy efficiency to defer transmission and distribution upgrades;
- Facilitate planning and forecasting;
- Quantify environmental benefits; and
- Track progress toward EEPS goals.

Increased evaluation budgets from two to five percent of the program budgets.

- Evaluation is an essential investment.
- Multi - disciplinary skills are needed (e.g., statistics, engineering, behavioral science, economics) to form a complete picture of program performance.
- Measurement and verification of energy measure performance is often labor intensive.
- Bottom line: quality evaluation research is not cheap!

Created an Evaluation Advisory Group (EAG)

- The EAG's mission is to advise the Commission and Staff on evaluation and reporting issues. Key goals include promoting transparency in the evaluation process, rigorous evaluation standards, and standardized evaluation requirements.
- The EAG includes EEPS program administrators, Commission Staff and other interested parties including representatives of environmental and industry organizations.
- Membership includes about 20 organizations.

Created an Evaluation Advisory Group (EAG)

- An independent evaluation consulting firm is engaged to assist Staff and the EAG on technical issues and provide “lessons learned” from other states.
- Specific EAG responsibilities include developing comprehensive evaluation and reporting guidelines, reviewing key evaluation documents (e.g., plans, reports) and recommending evaluation studies more effectively executed statewide.

Established detailed evaluation guidelines for program administrators.

The guidelines discuss the components of an evaluation plan including:

- Impact evaluation
- Process evaluation
- Minimum statistical standards
- Ethical and operational standards
- Frequency of evaluation
- Databases
- Reporting formats and frequency

Some Challenges

- What are the best methods for ensuring transparent and technically sound methods for evaluation of program energy savings (gross and net), demand savings, non-energy benefits (e.g., economic, environmental) and program performance?
- Evaluation is part science, part art --- many opinions!
- How do we balance evaluation costs and data reliability?
- How do we best communicate the results?

One More Thing...

*“A problem is a
chance for you to
do your best.”*

Duke Ellington

(1899-1974)

American genius



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