

Opportunities & Challenges for Energy Efficiency in 111(d)

Energy Efficiency in EPA's Clean Power Plan:
Using Building Block #4 to Set and Meet Emissions Goals

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Overview

- Opportunities
- Challenges
- Addressing Evaluation, Measurement, and Verification (EM&V)

EE Savings Potential in 111(d)

- All states have potential for greater energy efficiency (EE) savings
- EE provides a cost-effective solution that can lower compliance costs
- 111(d) builds on states' existing EE programs
 - 47 states currently have utility demand-side EE programs
 - 27 states have EE standards or goals

Utilizing Different Types of EE Programs

- EPA only included ratepayer-funded EE programs in calculating states' emissions goals
- However, states can use all types of EE in implementation plans (e.g., state building codes, tax incentives, financing, ESCOs, etc.) resulting in greater actual EE savings
- Need clear path for inclusion, crediting, and administrative review and oversight of non-utility EE activities

Regulatory Challenges

- 111(d) and states have different rules for implementing energy efficiency programs and counting savings
- Need coordination among different agencies:
 - 111(d): Air Quality Regulators
 - Ratepayer-funded EE programs: State utility regulators
 - Codes and Standards: State and local agencies
- Cross-state credits (allow full EE credit in state where savings occurs, if both states use emissions rate approach)

Regulatory Challenges (cont'd)

- Avoiding federalization of EE enforcement (state adoption and inclusion in compliance plan should be sufficient)
- Allow states to modify EE policies and programs during implementation phase
- Allow range of programs beyond traditional widget-based EE (EM&V matters though)
- Uncertainly over early action credits

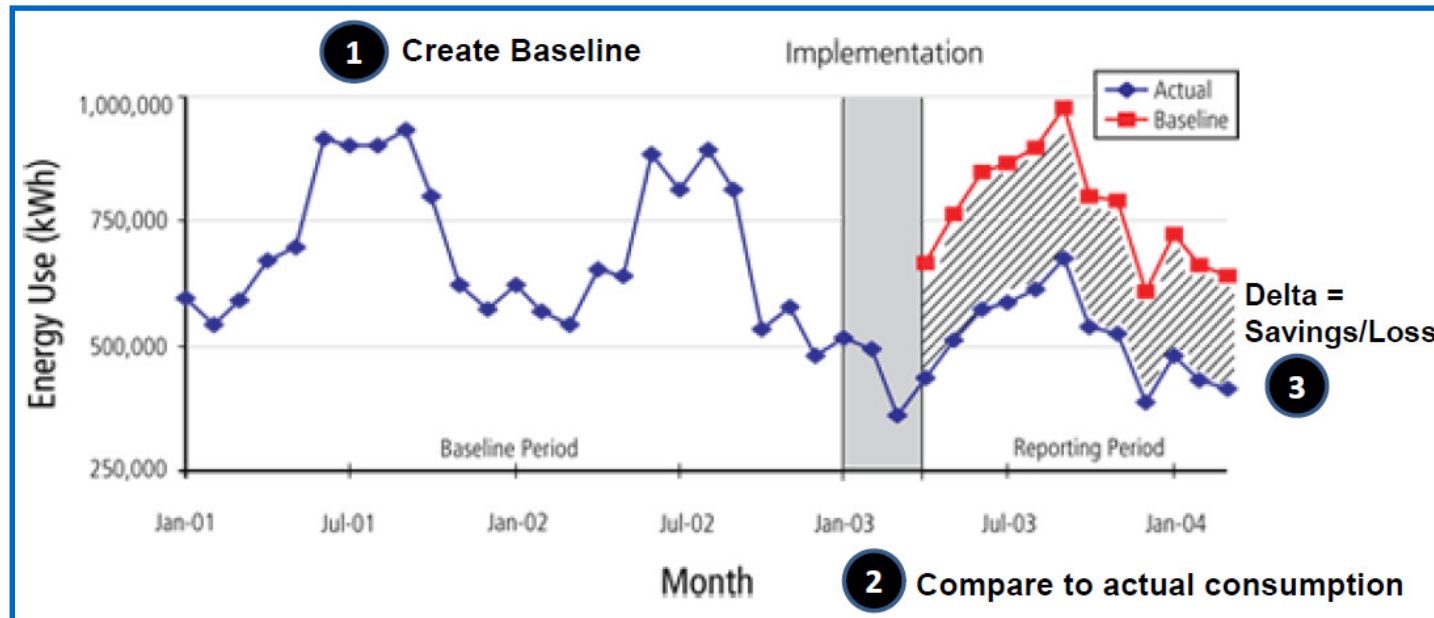
EM&V Challenges

- States use different methodologies for determining energy savings from efficiency programs – treatment of free riders, spillover, net vs. gross savings (EPA proposes net but many states use gross and NTG ratios not readily determined)
- Traditional EM&V focused on deemed savings for widgets
- Need new methodologies to address:
 - Behavioral savings
 - Operational savings
 - Whole buildings
 - Avoided emissions
- 111(d) presents opportunity for national approach on new areas
- What is the baseline?

EM&V Opportunities

- Northeast Energy Efficiency Partnerships' (NEEP) Regional EM&V Forum
 - Consists of nine jurisdictions
 - Develops and supports use of consistent savings assumptions and standardized, transparent guidelines and tools to evaluate, measure, verify, and report EE's energy and demand savings, costs, and avoided emission impacts
- Data and Analytics
 - Leverages states' deployment of interval meters
 - Provides opportunity for better *accuracy* and *persistence* for tracking savings

Example re Data and Analytics:



Questions?

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