



# National Action Plan for Energy Efficiency

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## Guidebook on Model Energy Efficiency Program Evaluation

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FERC Workshop: Demand Response in Wholesale  
Markets

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# National Action Plan for Energy Efficiency

- Released on July 31, 2006 at the National Association of Regulatory Utility Commissioners meeting
- Goal: To create a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities, utility regulators, and partner organizations
- Over 50 member public-private Leadership Group developed five recommendations and commits to take action
- Additional commitments to energy efficiency – exceeds 90 organizations
- Facilitated by US DOE and EPA

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## National Action Plan for Energy Efficiency Recommendations

1. Recognize energy efficiency as a high-priority energy resource.
2. Make a strong, long-term commitment to implement cost-effective energy efficiency as a resource.
3. Broadly communicate the benefits of and opportunities for energy efficiency.
4. Provide sufficient, timely and stable program funding to deliver energy efficiency where cost-effective.
5. Modify policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments.



## Topics

- Objectives of the Guidebook
- Why it is needed
- Scope
- How it can be used
- Expected contents
- Process and schedule
- The participants



# Guidebook Objectives

The National Action Plan is developing a [Guidebook on Model Energy Efficiency Program Evaluation](#) that utilities, ISO's, states, cities, private companies, and others can use as a framework to define their own "institution-level" or "program-level" evaluation requirements.

- Foster best-practices for documenting the energy savings and peak demand impacts of energy efficiency programs
- Outline best-practice approaches for calculating energy savings and avoided emissions
- Pull together existing documentation and materials into a single concise document
- Be policy neutral
- Facilitate transparent evaluations and minimize transaction costs
- Work towards establishing:
  - Common evaluation definitions and terminology
  - Consensus on basic evaluation approaches and definitions in order to promote consistent evaluations across jurisdictions



## Why is the Guide Needed?

- Emerging state/regional policies and markets require consistent program evaluation
  - Markets for peak load reductions that allow bids from demand resources including energy efficiency
    - e.g., New England ISO Forward Capacity Market (FCM)
  - Increasing interest in Energy Efficiency Portfolio Standards
    - White tags can be used to demonstrate compliance
  - New state policies for reducing and measuring greenhouse gas (GHG) and other emissions
    - With federal policies likely to follow



## Why a *Program Guide*?

- *Programs* are different from *projects*
- There are widely recognized protocols for the measurement and verification (M&V) of energy savings from single *projects*
  - e.g., International Performance Measurement Verification Protocol (IPMVP)
- Similar widely accepted protocols or guidance documents for measuring energy savings from *programs* do not exist
  - M&V project protocols do not address issues unique to program evaluation
  - Utilities, program administrators, regulatory commissions, and policymakers need consistent guidance on best-practice evaluation approaches



# Scope: Programs Addressed and Evaluation Focus

- Program types addressed
  - Primary focus (i.e., will include detailed guidance):
    - Resource acquisition, downstream energy efficiency programs
  - Secondary focus (i.e., will be addressed, but not with detailed guidance):
    - Other demand-side programs: Market transformation, codes and standards, demand response, and upstream efficiency programs will be referenced
    - Supply-side programs: renewable energy and combined heat and power (CHP) program
- Evaluation focus
  - Primary focus:
    - Impact evaluation, including: kWh, kW, therm savings and avoided emissions
  - Secondary focus:
    - Process and market evaluations
    - Potential studies
    - Cost-effectiveness evaluation



## How the Guide Can Be Used

- Utilities, ISO's, states, companies, and other entities running programs can use the Model Program Evaluation Guide
- Help to:
  - Define jurisdiction-specific program evaluation requirements based on best-practice approaches
  - Inform key evaluation issues that reflect local requirements and constraints (e.g., budgets, uncertainty tolerance, net to gross issues, time period of evaluation, etc.)
  - Establish consistency in evaluating savings – very important for energy efficiency and emissions reduction programs that cross state or utility borders



# Expected Contents

1. Executive Summary
  2. Introduction to energy efficiency
  3. Scope and uses of this guide
  4. Introduction to evaluation
  5. Overview of evaluation approach and options
  6. Decision Tree for preparing a jurisdiction specific program guideline – “bringing it all together”
  7. Discussion of evaluation issues and cost-effectiveness
  9. Calculating gross and net energy savings/generation
  10. Calculating avoided emissions
  11. Confirming persistence of savings
  12. Reporting evaluation results
- Appendix A - Terminology
- Appendix B – Uncertainty
- Appendix C – Resources



## Process and Schedule

- The Model Program Guide will primarily rely upon and reference existing protocols and documents
- An “Advisory Group” will provide guidance on scope
- A “Technical Group” will review technical material
- Broad review by evaluation professionals and industry participants
- Final version available late Summer '07 at:  
[www.epa.gov/eeactionplan](http://www.epa.gov/eeactionplan)



# The Participants

## Co-Chairs

- Commissioner Dian Grueneich, California PUC
- Diane Munns, EEI

## Advisory Group

- Chris James, Connecticut DEP
- Rick Leuthauser, MidAmerican Energy Company
- Jan Schori, Sacramento Municipal Utility District
- Peter Smith, NYSERDA

## Technical Group

- Steve Schiller, Schiller Consulting (Principal Author)
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## For More Information



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