National Action Plan for Energy Efficiency

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Guide for Conducting Energy Efficiency Potential Studies

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National Action Plan for Energy Efficiency

- Aspirational Goal: To achieve all cost-effective energy efficiency by 2025.
- Currently over 120 organizations have made commitments to energy efficiency under the Action Plan
- 60 member public-private Leadership Group sets tone and overall direction
- Released five key policy recommendations on July 31, 2006
- Vision for 2025, released Nov. 2007, provides framework for implementing the recommendations
- Conducting a potential study supports:
  - Action Plan's 2nd recommendation
  - Vision's 1st Implementation Goal: "Establishing Cost-Effective Energy Efficiency as a High-Priority Resource"

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.

Background on Potential Studies (1)

- What is a potential study?
  - "A quantitative analysis of the amount of energy savings that either exists, is cost-effective, or could be realized through efficiency programs and policies"
  - May focus solely on electricity, natural gas, or another fuel or provide a comprehensive look at all energy consumption.
- Potential Studies as a Policy Tool
  - Setting attainable energy savings targets
  - Quantifying the energy efficiency resource for system planning
  - Determining a funding level for delivering energy efficiency programs
  - Designing programs to achieve the long-term potential
  - Reassessing energy efficiency opportunities as conditions change

Background on Potential Studies (2)

- Types of Efficiency Potential
  - Technical potential
  - Economic potential
  - Achievable potential
  - Program potential
- Results from Previous Potential Studies
  - Guide summarizes the technical, economic, and achievable potentials from 21 studies
  - Studies vary in their scope, objectives, methodology, time horizon, and definitions
  - Reaching the maximum achievable potential (i.e., between 20-30% of load) requires spending in excess of 5% of utility revenue

Steps for Completing a Potential Study

1. Identify the objective and the audience
2. Select the potential type(s) to analyze
3. Determine the appropriate level of detail
4. Select and define the methodology
5. Present the results

Three Possible Reasons for Conducting a Potential Study

- Build policy support and making the case for energy efficiency programs and funding
  - Cost: $20-75K, Time: 1-4 months
  - Examples: SWEEP “Mother Lode” and Texas “Power to Save”
- Evaluate efficiency as an alternative to a specific supply-side project
  - Cost: $75-300K, Time: 4-12 months
  - Examples: VELCO “Southern Loop” and ACEEE “Texas” Potential Studies
- Determine how much to spend on efficiency, and how that money can best be spent
  - Cost: $75-500K, Time: 4-12 months
  - Example: California Potential Study

Key Consideration When Planning a Study

- **Level of detail v. cost/time to complete**

Figure 2-1. Considerations for Conducting Potential Studies