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STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK

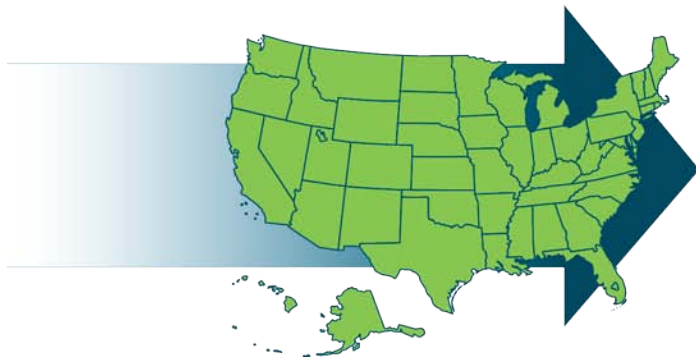
Utility Motivation and Energy Efficiency Working Group

Executive Summary Blueprint

Jennifer Easler, Cheryl Roberto

Executive Group Meeting

July 15, 2011



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STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK

The Utility Motivation and Energy Efficiency Working Group of the State and Local Energy Efficiency Action Network is committed to taking action to increase investment in cost-effective energy efficiency. This Blueprint was developed under the guidance of and with input from the working group. The document does not necessarily represent an endorsement by the individuals or organizations of Utility Motivation and Energy Efficiency Working Group members. However, the working group members do urge consideration of these materials as they believe that the information contained within will promote the deployment of cost-effective energy efficiency.

The Utility Motivation and Energy Efficiency Working Group Blueprint is a product of the State and Local Energy Efficiency Action Network and does not reflect the views, policies, or otherwise of the federal government.

If this document is referenced, it should be cited as: State and Local Energy Efficiency Action Network (2011). Utility Motivation and Energy Efficiency Working Group Blueprint. www.seeaction.energy.gov

Working Group Purpose

- Provide assistance and tools to key stakeholders with roles in the relevant oversight forums to identify and implement a range of potential solutions to the challenges of creating utility motivations that will lead to a significant increase in energy efficiency.
 - Key stakeholders include regulators and policymakers.
- Consider the suite of utility motivational approaches, including regulatory rules and structures, performance-based ratemaking, cost-recovery mechanisms, efficiency goals/targets, the throughput incentive, financial or other performance incentives, and use of a third-party program administrator to supplement or replace utility delivery of energy efficiency.
- Consider the relative advantages and disadvantages of the suite of utility motivational approaches.



Utility Motivation and Energy Efficiency Working Group Members

- Two co-chairs
- 25 Members
 - Policymakers
 - Consumers
 - Practitioners / Utilities
 - Non-government Organizations
 - Observing Coordinating Organizations

Co-Chairs	
Jennifer Easler	Iowa Office of Consumer Advocate
Cheryl Roberto	Ohio Public Utilities Commission
Policymakers	
Matt Baker	Colorado Public Utilities Commission
Robert Clayton	Missouri Public Service Commission
Brian Rounds	South Dakota Public Utilities Commission
Marsha Smith	Idaho Public Utilities Commission
Calvin Timmerman	Maryland Public Service Commission
Consumers	
Bob Nelson	Montana Consumer Counsel
Janine Migden-Ostrander	Ohio Consumers' Counsel
Practitioners/Utilities	
Janet Besser	Formerly of National Grid
Rebecca Craft	Con Edison
Dena DeLucca	New Hampshire Electric Cooperative
Jared Lawrence	Duke Energy
Anne-Marie Peracchio	New Jersey Natural Gas
Diane Munns	MidAmerican Energy
Sheldon Switzer	Baltimore Gas and Electric
Non-government Organizations	
Kit Kennedy	Natural Resources Defense Council
Derek Murrow	Environment Northeast
Steve Nadel	American Council for an Energy-Efficient Economy
John Sibley	Formerly of Southeast Energy Efficiency Alliance
Lisa Wood	Institute for Electric Efficiency
Observing Coordination Organizations	
Jeff Genzer	National Association of State Energy Officials
Don Gilligan	National Association of Energy Service Companies
John Holt	National Rural Electric Cooperative Association
Miles Keogh	National Association of Regulatory Utility Commissioners
Cynthia Marple	American Gas Association
Rick Tempchin	Edison Electric Institute



Barriers

Barriers to utility motivation and energy efficiency are well documented:*

- McKinsey & Co, *“Unlocking Energy Efficiency in the US Economy”*
- National Action Plan for Energy Efficiency, *“Report”, “Aligning Utility Incentives with Investment in Energy Efficiency”, “Vision to 2020”*
- Regulatory Assistance Project, *“Energy Efficiency Policy Toolkit”*
- NERA Economic Consulting, *“Making a Business of Energy Efficiency: Sustainable Business Models for Utilities. Prepared for Edison Electric Institute”*
- US EPA, Clean Energy Resource Database, <http://cfpub.epa.gov/ceird/>

*Not comprehensive



Working Group Scope

- Included in scope:
 - Electric and gas power sectors
 - All utility types (co-op, public power, IOU, bundled, unbundled)
- Not in scope:
 - Incentive issues unique to distributed generation
 - Smart grid
 - Incentives to motivate customers to adopt energy efficiency measures, including information to customers, codes and standards (however, this does not exclude consideration of the manner in which codes and standards should be present and coordinated with utility motivational approaches), etc.
- Potential topics to include in expanded scope
 - Transmission and distribution efficiency
 - Capital market implications
 - Flexibility, predictability, and consistency in utility regulation



Working Group Priority Topics

- Utility financial incentives
 - Energy efficiency cost recovery
 - Mitigating or eliminating the throughput incentive
 - Aligning customer and utility interests
- Regulatory support
 - IRP, planning, portfolio management
 - Building Codes and appliance standards
 - Targets / goals
- Bill and rate impacts
- Method of energy efficiency program delivery
- Customer service and satisfaction



Working Group Goals

- First 12 months: Five additional states implementing policies that motivate utilities to support energy efficiency initiatives that target all cost-effective energy efficiency.
- Intermediate goal: intermediate goal to be determined within 12 months.
- Long term: All states implementing policies that motivate utilities to support energy efficiency initiatives that target all cost-effective energy efficiency.
- Foundational assumptions:
 - Utilities are ubiquitous
 - Utilities are available delivery agents for energy efficiency, though other workable administrative structures are also successfully in use
 - Utilities can help, be neutral, or be disruptive to efforts to administer energy efficiency
 - Energy efficiency can impact utility financial results as compared to results absent energy efficiency.



Priority Solutions & Actions to Achieve Goals

Goals

First 12 months: Five additional states implementing policies that motivate utilities to support energy efficiency initiatives that target all cost-effective energy efficiency.

Intermediate goal: intermediate goal to be determined within 12 months.

Long Term: All states implementing policies that motivate utilities to support energy efficiency initiatives that target all cost-effective energy efficiency.

Sub-Goals

**Establish Foundation:
Develop Materials**

- Dialogue discussions to assess priority topics & gaps to fill
- Materials on priority topics, including principles / considerations for regulators & others addressing issues

**Build Capacity: Provide
Technical Assistance**

Priority Solution Areas

- Outreach to target audiences
- Peer to peer exchange: Working Group members serve as “assistance team”
- Ramp up DOE/EPA technical assistance

**Explore Additional
Issues and Solutions**

- Additional Dialogue discussions on:
- Next generation policies
 - Policies to support highest levels of energy efficiency achievement

2010-2011 Priority Working Group Activities

2010: Series of Dialogue* meetings

- Convened working group (members have roles in the relevant oversight forums) for a sustained in-person Dialogue to solve or identify a range of potential solutions to the challenges of creating utility motivations that are consistent with a significant increase in energy efficiency.
- Three Dialogue meetings took place:
 - Sept 14 – Washington, DC
 - Oct 21 – Columbus, OH
 - Nov 17/18 – Atlanta, GA (*in conjunction with NARUC meeting*)
- Result: Priority topics identified, subcommittees organized, priority activities begun

2011: Development of resources and outreach plan

- Development of resources (white papers or interactive tools) to address priority topics to assist regulators and policymakers in identifying and implementing a range of potential solutions to the challenges of creating utility motivations that will lead to a significant increase in energy efficiency.
- Development of outreach methods to offer technical assistance to regulators and policymakers on priority topics.
 - Working group convened June 2, 2011, to finalize resources and recommendations for regulators and policymakers on priority topics, and to continue discussion on outreach methods.

* These meetings are formally titled “Exchange of Perspectives In Support of Energy Efficiency” but are referred to as Dialogue meetings for shorthand.



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7 Working Group Sub-Committees Organized Around Priority Topics

Sub-Committee	Lead
Utility Financial Incentives	Cheryl Roberto, Ohio PUC
Bill and Rate Impacts	Matt Baker, Colorado PUC
Method of Energy Efficiency Program Delivery	Anne-Marie Peracchio, NJ Natural Gas and Jennifer Easler, Iowa Office of Consumer Advocate
Building Codes and Appliance Standards	Lisa Wood, Institute for Electric Efficiency
Customer Service and Satisfaction	Diane Munns, MidAmerican Energy Co.
IRP, Planning, and Portfolio Management	Kit Kennedy, Natural Resources Defense Council
Targets and Goals	Steve Nadel, American Council for an Energy Efficient Economy

Utility Financial Incentives Sub-Committee

Regulatory Policy Navigation Guide

Purpose	This guide will assist regulators in navigating the wealth of existing information regarding available regulatory options to address utilities' financial barriers to adopting energy efficiency programs.
Key Messages	<p><u>Background</u></p> <ul style="list-style-type: none"> • To motivate utilities to seek all cost-effective energy efficiency, regulators will need to address utilities' financial needs in three areas: cost recovery for program costs, eliminating or mitigating the throughput incentive, and aligning shareholder and customer interests. • A myriad of regulatory options exist, each with its own pros and cons, to address utilities' financial concerns. • The wealth of information available on these options can be overwhelming to new regulators or regulators new to energy efficiency. • Regulators need to be empowered with access to this information to design their own solutions. There is no one right answer. <p><u>Recommendations</u></p> <ul style="list-style-type: none"> • Build a guide that will allow the decision maker to see the complex, nuanced impacts of his/her decisions as they might play out with stakeholders in a rate case or other proceeding. • Use an interactive, simulated real-world decision-making process involving stakeholders and their interests such that the regulator can explore regulatory choices within the consequence-free environment of an exercise. • Include links to recommended resources (papers, docketed materials) to enable users to go as deeply into the subject matter as their interest takes them. • Formats for the tool could include: A written case for independent study or group discussion, an online interactive simulation group, or an in-person role-play exercise
Resource	Regulatory Policy Navigation Guide



Bill and Rate Impacts Subcommittee

Analyzing and Managing Bill Impacts of Energy Efficiency Programs

Purpose	To provide regulators with a comprehensive approach to analyze impacts of energy efficiency programs on rates and bills, when concerns about rate impacts pose a barrier to energy efficiency programs either for utilities or regulators.
Key Messages	<p>Background</p> <ul style="list-style-type: none"> • Utilities and regulators frequently limit energy efficiency budgets out of concerns for undue rate impacts • A more comprehensive approach to analyzing rates, bills and participants can address many of these concerns <p>Recommendations</p> <p>When concerns about rate impacts pose a barrier to energy efficiency programs, regulators should:</p> <ul style="list-style-type: none"> • Recognize the Ratepayer Impact Measure (RIM) test as an insufficient indicator of rate impacts • Properly analyze rate and bill impacts and pursue appropriate options to manage/mitigate them • Fully account for the long-term benefits associated with reduced bills • Fully account for the various benefits that energy efficiency offers to all customers • Balance rate impacts of energy efficiency programs with related benefits (e.g., reduced energy costs) • Consider ways of increasing program participation instead of reducing efficiency budgets in order to mitigate rate impacts • Design energy efficiency programs to increase participation by targeting all cost-effective end-uses and all customer types, keeping program administration costs as low as possible, and provide consistent and comprehensive program delivery over time
Resource	“Analyzing and Managing Bill Impacts of Energy Efficiency Programs: Principles and Recommendations”



Method of Energy Efficiency Program Delivery Subcommittee

Evaluating Choice of Model for Administration and Implementation of Ratepayer Funded Energy Efficiency Programs

Purpose	Given that energy efficiency runs counter to the traditional/core business model for utilities, identify and advance the understanding of factors that should be considered in evaluating choice of model for administering and implementing ratepayer funded energy efficiency programs.
Key Messages	<p><u>Background</u></p> <p>The resource evaluates four administrative structures for the delivery of ratepayer funded energy efficiency. 1)Independent, non-government statewide organization (3rd Party), 2)Utilities, investor or public owned, 3) State agency, and 4) Hybrid/division of administrative responsibilities, under the following criteria: compatibility with broader public policy goals, features of accountability and oversight, administrative effectiveness, and transition/start-up issues.</p> <p><u>Recommendations</u></p> <ul style="list-style-type: none">• A clear and consistent commitment to energy efficiency from policymakers is more important than the type of administrative structure adopted as there is no “right answer” for all states. Consideration of the overall goals for the energy efficiency programs, the size of energy efficiency targets, the number of utilities and varying demographics within a state, and other factors may lead states to different conclusions about which approach is best for them.• Stakeholder consensus and the use of collaborative program design and oversight are also valuable in supporting and advancing energy efficiency objectives regardless of administrative structure.• The utility approach is by far the predominant structure in use today. Utilities have been a natural choice for energy efficiency delivery because of their relationship with end users, ability to integrate energy efficiency into operations, and interest in enhancing customer satisfaction.



Method of Energy Efficiency Program Delivery Subcommittee (cont'd)

Evaluating Choice of Model for Administration and Implementation of Ratepayer Funded Energy Efficiency Programs

Key Messages	<u>Recommendations (cont'd)</u> <ul style="list-style-type: none">• 3rd party administration allows focus on a single mission and effective delivery of statewide or regional programs without competing business objectives. Due to its singular focus on energy efficiency, the 3rd party model may reduce some of the controversies that typically arise with the utility model. However, to achieve the full value of the benefits of energy efficiency, proper planning, cooperation, and follow-through with host utilities are still critical. Therefore, this approach does not necessarily eliminate the need for regulatory approaches to align utility interests with energy efficiency policy.
Resource	"Who Should Deliver Ratepayer Funded Energy Efficiency? A 2010 Update." Richard Sedano, Regulatory Assistance Project



Building Codes and Appliance Standards Subcommittee

The Interaction of Building Energy Codes and Appliance Efficiency Standards with Utility Energy Efficiency Programs

Purpose	Provides forecast showing how building energy codes and appliance efficiency standards (C&S) are likely to capture significant energy efficiency savings over the next 15 years. This has implications for existing utility energy efficiency program design and utility involvement in codes and standards.
Key Messages	<p><u>Background</u></p> <ul style="list-style-type: none">• C&S are likely to become more aggressive over the next decade and the resulting magnitude of savings can completely offset or reverse anticipated growth in electricity demand by 2025 (IEE 2011 study, www.edisonfoundation.net/IEE).<ul style="list-style-type: none">• Moderate scenario: electricity savings of 9% (i.e., 351 TWh) by 2025 based on EIA AEO 2011 baseline forecast• Aggressive scenario: electricity savings of 14% (i.e., 556 TWh) by 2025 based on EIA AEO 2011 baseline forecast• In some states, utilities already incorporate C&S into their energy efficiency program portfolios (e.g., California and the Northwest). The subject of a companion paper shows how utilities can engage in the codes and standards process and integrate C&S into their energy efficiency program portfolios based on these frameworks.• Utility support of new codes and standards can greatly enhance the new code and standards development, adoption, and implementation process. <p><u>Recommendations</u></p> <ul style="list-style-type: none">• Utilities are encouraged to work with manufacturers, code officials, construction industry personnel, and other stakeholders to engage in the codes and standards process.• For their proven efforts, utilities should receive commensurate savings “credit” toward their energy efficiency targets and goals.
Resource	“Assessment of Electricity Savings in the U.S. Achievable through New Appliance/ Equipment Efficiency Standards and Building Efficiency Codes (2010 – 2025)” (IEE, 2011)



Customer Service and Satisfaction Subcommittee

Impacts of Energy Efficiency Programs on Customer Satisfaction

Purpose	To highlight the customer satisfaction benefits of utility sponsored energy efficiency programs; and to encourage policymakers and other stakeholders to recognize and consider these benefits during their review of proposals.
Key Messages	<p><u>Background</u></p> <ul style="list-style-type: none">• This paper discusses survey data from the marketing firm J.D. Power and Associates and case studies of MidAmerican Energy and DTE Energy customers and finds that the desire to improve customer satisfaction can be a significant motivating factor for utilities• Customer satisfaction improves with awareness of a utility’s efficiency programs, even among customers who don’t actually participate in the programs• Utilities that operate in a performance-based regulatory environment may be especially motivated to expand and promote their efficiency programs• Energy efficiency program elements not executed properly or adequately funded are likely to negatively impact customer satisfaction <p><u>Recommendations</u></p> <ul style="list-style-type: none">• Utilities should increase customer awareness of existing energy efficiency programs and program results• Utilities may want to expand their energy efficiency programs and services, particularly if they are having significant problems with customer satisfaction• Consumer advocates should add “customer satisfaction” to the list of reasons why well-designed energy efficiency programs are an appropriate use of ratepayer dollars
Resource	“Impacts of Energy Efficiency Programs on Customer Satisfaction”



IRP, Planning and Portfolio Management Subcommittee

The Role of Integrated Resource Planning (IRP) and Similar Planning Processes in Promoting Demand Side Resources

Purpose	To promote best practice utility planning processes that allow demand side resources to compete as a cost-effective alternative to supply side resources, including generation, transmission, and distribution infrastructure investments.
Key Messages	<p><u>Background</u></p> <ul style="list-style-type: none"> • IRP can be useful for promoting all cost-effective energy efficiency in states with vertically integrated utilities. Similar planning processes can be used by distribution utilities in states with competitive electricity markets. • IRP processes may work differently but still have value in states that adopt energy efficiency resource standards, and in states where energy efficiency programs are not administered by utilities, but rather by a third party. <p><u>Recommendations</u></p> <ul style="list-style-type: none"> • In states with vertically integrated utilities, policymakers and regulators should consider adopting best practice IRP planning requirements for electric utilities, if they have not already done so. • In states with competitive electricity markets, policymakers and regulators should require energy efficiency program administrators to identify and implement demand side resources through planning practices that evaluate them on a comparable basis with supply side resources. • 13 states currently require natural gas utilities to engage in least-cost planning processes which have assisted in achieving natural gas efficiency goals. Regulators in other states should carefully consider whether the adoption of such least-cost planning processes would further SEE Action’s goal of capturing all cost-effective energy efficiency.
Resource	“Using Integrated Resource Planning to Encourage Investment in Cost-Effective Energy Efficiency Measures”



Targets and Goals Subcommittee

Motivating Utilities with Policies Focused on Results

Purpose	Understand how electric and natural gas utilities can be motivated by the establishment of numeric energy savings targets and goals for energy efficiency program results.
Key Messages	<p><u>Background</u></p> <ul style="list-style-type: none">• 26 states have established targets and goals through an EERS or EEPS. Experience to date indicates that most states are on track to meet the targets, and that establishing such targets is driving significant and cost-effective energy-efficiency savings.• For most utilities, achieving “all cost-effective energy efficiency” will mean significantly higher savings targets over extended periods. <p><u>Recommendations</u></p> <ul style="list-style-type: none">• Targets need to be developed with care and many issues should be considered in setting targets including:<ul style="list-style-type: none">• Legal authority for setting targets• Who the targets apply to (utilities, a state agency, or some other organization)• State-wide versus utility-specific targets• Target levels including what savings are included, how savings are to be evaluated, and specific metrics and baselines to use• How much flexibility to allow and whether to include cost caps• Establish initial targets and use experience during ramp-up period to set future targets• Allow utilities to recover approved program costs from ratepayers• Provide utilities with financial incentives for meeting or exceeding targets
Resource	“Motivating Utilities with Policies Focused on Results”



Measuring Progress

- DOE/EPA to track progress toward meeting working group goals – setting a baseline is required to move forward with tracking progress.
- DOE/EPA have been tracking progress across the range of National Action Plan for Energy Efficiency identified policy steps under the "Vision for 2025" including those that relate to this working group.*
- DOE/EPA, in conjunction with SEE Action Executive Group, will review this currently collected data, and other available data through non-federal sources, to develop a methodology to measure progress toward the goals
- Methodology to be finalized by Fall 2011

* www.epa.gov/cleanenergy



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Near Term Milestones

- **August 2011:** Publish four white papers and two fact sheets (“resources”) on priority topics:
 - Bill and Rate Impacts (white paper)
 - Customer Service and Satisfaction (white paper)
 - IRP, Planning, and Portfolio Management (white paper)
 - Targets and Goals (white paper)
 - Method of Energy Efficiency Program Delivery (fact sheet)
 - Building Codes and Appliance Standards (fact sheet)
- **Fall 2011:** Evaluate gaps for new work by working group, including consideration of scope.
- **Winter 2011/2012:** Finalize resources and begin outreach:
 - Release interactive tool (resource) on priority topic: Utility Financial Incentives
 - Once resources are finalized, begin outreach and technical assistance on priority topics to key stakeholders (regulators and policymakers)



Funding and Related Federal Programs

Resource or Activity	Completion Date	Funding	Related Federal Programs
1) Report on Building Codes and Appliance Standards	May 2011	IEE funded (complete)	<ul style="list-style-type: none"> • DOE OE State and Regional Policy Assistance • DOE EERE Technical Assistance • National Action Plan for Energy Efficiency • EPA's State and Local Climate and Energy Program
2) Report on Bill and Rate Impacts	August 2011	DOE funded (in process)	
3) Report on Customer Service and Satisfaction	August 2011	DOE funded (in process)	
4) Report on Targets and Goals	August 2011	DOE funded (in process)	
5) Report on IRP, Planning, and Portfolio Management	August 2011	DOE funded (in process)	
6) Report on Method of EE Program Delivery	August 2011	RAP funded (in process)	
7) Regulatory Policy Navigation Guide on Financial Incentives	Winter 2011/2012	May need DOE funding	
8) Outreach on all projects	Start Fall 2011	May need DOE funding	

Resources

Bill and Rate Impacts Subcommittee

“Analyzing and Managing Bill Impacts of Energy Efficiency Programs: Principles and Recommendations”

SEE Action Utility Motivation and Energy Efficiency Working Group

[anticipated publication in August 2011]

Customer Service and Satisfaction Subcommittee

“Impacts of Energy Efficiency Programs on Customer Satisfaction”

SEE Action Utility Motivation and Energy Efficiency Working Group

[anticipated publication in August 2011]

Building Codes and Appliance Standards Subcommittee

“Assessment of Electricity Savings in the U.S. Achievable through New Appliance/Equipment Efficiency Standards and Building Efficiency Codes (2010 – 2025)”

Institute for Electric Efficiency, May 2011

http://www.edisonfoundation.net/iee/reports/IEE_CodesandStandardsAssessment_2010-2025_UPDATE.pdf

Targets and Goals Subcommittee

“Motivating Utilities with Policies Focused on Results”

SEE Action Utility Motivation and Energy Efficiency Working Group

[anticipated publication in August 2011]



Resources (cont'd)

IRP, Planning, and Portfolio Management Subcommittee

“Using Integrated Resource Planning to Encourage Investment in Cost-Effective Energy Efficiency Measures”

SEE Action Utility Motivation and Energy Efficiency Working Group
[anticipated publication in August 2011]

Method of Energy Efficiency Program Delivery Subcommittee

“Who Should Deliver Ratepayer Funded Energy Efficiency? A 2010 Update”

Richard Sedano, Regulatory Assistance Project
[anticipated publication in August 2011]

Utility Financial Incentives Sub-Committee

Regulatory Policy Navigation Guide

SEE Action Utility Motivation and Energy Efficiency Working Group
[anticipated release Winter 2011/2012]

