

Who Should Deliver Ratepayer Funded Energy Efficiency? A 2010 Update

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November 2010

Table of Contents

PURPOSE OF THIS UPDATE	5
INTRODUCTION	6
COMPARATIVE DISCUSSION	7
BACKGROUND	8
ENERGY EFFICIENCY GOALS	9
COLLABORATIVE EFFORTS	11
ENERGY EFFICIENCY FUNDS AND ADMINISTRATIVE STRUCTURES	11
EVALUATING ADMINISTRATIVE STRUCTURES	12
INDEPENDENT ADMINISTRATIVE STRUCTURES	14
COMPATIBILITY WITH BROADER PUBLIC POLICY GOALS	15
ACCOUNTABILITY AND OVERSIGHT	17
ADMINISTRATIVE EFFECTIVENESS	19
TRANSITION ISSUES	20
UTILITY ADMINISTRATION	21
COMPATIBILITY WITH BROADER PUBLIC POLICY GOALS	21
ACCOUNTABILITY AND OVERSIGHT	24
ADMINISTRATIVE EFFECTIVENESS	25
TRANSITION ISSUES	26
GOVERNMENTAL ADMINISTRATION	26
COMPATIBILITY WITH BROADER PUBLIC POLICY GOALS	27
ACCOUNTABILITY AND OVERSIGHT	27
ADMINISTRATIVE EFFECTIVENESS	27
TRANSITION ISSUES	27
HYBRID ADMINISTRATION	28
COMPATIBILITY WITH BROADER PUBLIC POLICY GOALS	28
ACCOUNTABILITY AND OVERSIGHT	29
ADMINISTRATIVE EFFECTIVENESS	29
TRANSITION ISSUES	30
A NEW IDEA – PRIVATE SECTOR ADMINISTRATION	30
CONCLUSION	32
APPENDIX	33

Purpose of this Update

Over the seven years since the Regulatory Assistance Project published *Who Should Deliver Ratepayer Funded Energy Efficiency?*, the U.S. has realized a greater than three-fold energy efficiency deployment. The U.S. power sector has seen a sleepy natural gas price awoken with volatile shocks and then resettle. Older generators are seven years older, perhaps closer to retirement or critical reinvestment decisions for life-extension and/or pollution control. The costs of new generation are coming into focus and that picture appears a bit scary. Preparations for carbon regulation are underway despite the lack of a clear national direction.

There are also seven more years of experience with energy efficiency program delivery and administration in those states where energy efficiency was already underway in 2003, and several states with new experiences to share.

The Colorado Public Utilities Commission has asked RAP to prepare this update of our 2003 report to address pressing questions. Keith Hay provided insights about Colorado stakeholder attitudes based on interviews he conducted, which we appreciate. In addition to support from the commission, funding assistance is provided from American Recovery and Reinvestment Act funds through the National Association of Regulatory Utility Commissioners. RAP expects this update will provide insight to many responsible to assure that energy efficiency program administration is appropriate for the place and time.

This report will reassess the most important factors for states to consider and will review performance to learn what lessons experience offers.

The author appreciates the support from RAP's research office in preparing this report, notably Brenda Hausauer and the original work done for the 2003 report by Cheryl Harrington and Cathie Murray.

INTRODUCTION

This paper examines policy options and approaches for the administration and implementation of ratepayer funded electric utility energy efficiency programs.

The administrative structures used in the states we examined fall broadly into four categories:

- Independent, non-government statewide organization
- Utility administration (ownership by investors, cooperative, public)
- Government administration at both state and local level
- Hybrid – responsibility divided

RAP applied the results of its routine research on energy efficiency practices nationwide. This research is available on the RAP website, <http://www.raponline.org> under the heading “NAPEE Policy Grids through 2009.”

The 2003 Report assessed nine substantive areas:

- 1) Process and length of time to establish administrative body
- 2) Details of organizational structure (budget, staff, customer or geographic segmentation)
- 3) Funding means for administration and for programs
- 4) Degree of association with a long run resource plan
- 5) Guidelines for program effectiveness
- 6) Pre-implementation program evaluation guidance
- 7) Results of program evaluation
- 8) Significance of financial incentives, revenue decoupling or other performance based incentives
- 9) The degree of apparent success and sustainability of each administrative approach.

The primary assessment here is Query 9, above, the degree of apparent success and sustainability of each administrative approach. The update provides a comparative discussion of each of the four major approaches drawing upon state experience and relative success in achieving the stated goals of each.

The hybrid approach is new in this report update. It represents the fact that states, fulfilling their role as laboratories, are developing structures that work for them, and in distinct instances are not content with the obvious alternatives. Somewhat out of view of the regulated utility sector, municipalities and cooperatives are also exploring new ways to work together.

More states are directing natural gas utilities to do energy efficiency at present than seven years ago. In general, the pros and cons about the different administrative structures apply for natural gas in the same way as they apply for electricity. This means that state policymakers or decision-makers can consider energy efficiency administration for natural gas in the same manner as for electricity, and can arrive a conclusion to administer both in the same manner, or in different ways depending on local conditions and priorities.

Comparative Discussion

Successful deployment of cost effective energy efficiency requires three fundamental cornerstones, regardless of administrative structure:

Clarity of stated purpose at every level (from overarching goals to individual program design and evaluation metrics). Clarity begins with the policy reasons for pursuing energy efficiency found in underlying enabling legislation and PUC orders. The PUC needs to know when to step in forcefully and when to step aside. Once an administrative structure has been designed and put it place, it needs some time to prove its operative abilities.

Consistency of policy over time.¹ Energy efficiency programs take time to implement and savings are realized over time. Frequent changes in goals, program design or commitment to purpose does great harm to achieving efficiency results. Further, efficiency policy requires ongoing political support and regular supportive public pronouncements from policy makers.

Consensus of key stakeholders, as to goals and structure, as well as program design, measurement metrics, performance based regulation. At a minimum, key stakeholders include the utilities and the regulators. Ideally, it includes all major interveners, customer classes, environmental and low income stakeholders. The broader the consensus, the more successful programs and energy savings results will be.

Leadership and commitment from political authorities and public acceptance are important to maintaining this foundation.

¹ Consistency of policy does not necessarily mean consistency of administrative structure. Administration can and has changed in several successful programs. However, it is clear enough that major structural changes can be chaotic, causing delay, loss of infrastructure and weak program results. Only those jurisdictions which maintained the highest levels of clarity, consistency and consensus among key stakeholders while implementing major renovations in administration were able to achieve an on-going high level of program results without dropping the ball.

Background

Ratepayer funded energy efficiency programs evolved in the 1980's primarily as utility demand side resource investments. Efficiency investments were required when they lowered costs as compared to utility supply side resources (most often generation, but occasionally transmission and distribution as well). Because efficiency programs were seen as integral pieces of a utility's overall resource portfolio, it was universal regulatory practice to rely upon utility administration of demand side interventions. Utilities designed and implemented energy efficiency programs for their customers, with whom they had an exclusive relationship when it came to providing electricity services. Regulators set policy parameters for efficiency investments by designating how cost effectiveness will be measured, approving budgets, verifying results and in many jurisdictions, by providing regulatory incentives designed to align utility financial motives with ratepayer interest in achieving cost effective efficiency investment (thus avoiding more expensive supply side alternatives). Industry restructuring came along, throwing into question the premise that utilities needed to be or should be vertically integrated or that they should be further involved in energy efficiency markets.

The restructuring question gave states an opening to reconsider whether utilities lacked sufficient commitment to the success of energy efficiency to be entrusted with administration and to consider new models. On the other hand, the ubiquity of the utility remains a strong rationale to maintain utility administration

The restructuring debate and the uncertainty it engendered for utilities and for regulators cast a deep chill on demand side investments in many states. Nationally, investment in ratepayer funded energy efficiency, not including load management expenditures, declined precipitously from \$1.6 billion in 1993 to \$900 million in 1997. (Kushler 2003). Efficiency funding in some jurisdictions suffered, sometimes as a matter of free market philosophy, sometimes through ordinary neglect due to finite regulatory attention. In intervening years, efficiency funding has increased and is exceeding earlier nominal spending levels and leading states are matching proportionate spending for energy efficiency as a percentage of total revenue.

Some states maintained ratepayer funding for energy efficiency through the creation of a non-bypassable surcharge instead of embedding the cost in rates. Efficiency program development was no longer economically integrated into a comprehensive resource portfolio as such in many states.

Several states (many of which considered the retail competition model) looked for entities other than utilities to administer efficiency programs. Some assigned the duties within state government as part of industry restructuring. Other states decided to let the energy efficiency duties remain with the now unaffiliated distribution companies. Oregon created a non-profit entity to contract with for efficiency programs. Vermont decided to contract with a private entity as a regulated *energy efficiency utility*, dedicated exclusively to providing statewide energy efficiency services, believing it to be a superior model whether or not restructuring occurred.

Energy Efficiency Goals

States declare a variety of goals for the ratepayer funded energy efficiency resource. The two most common goals remain 1) energy resource acquisition (peak and energy reduction) and 2) market transformation.² These complementary goals tend to result in different kinds of efficiency program designs and different approaches to measurement of results. They also require slightly different mindsets of program administration. A priority on measured net savings will probably lead to programs slanted to resource acquisition, while an “all cost effective” standard leaves room for market transformation. Both goals can be accomplished with sufficient funds to support acquisition of all cost-effective energy efficiency. When budgets are limited, priorities and choices balancing public goals are necessary.

Energy Resource The goal of *energy resource* acquisition was the original goal of most ratepayer-funded programs. Using this goal signifies a philosophy that energy efficiency is a resource much like any other electrical energy supply side resource, only it happens to reside in the hands of the customers. It is a unique resource with cost savings benefits for the system as a whole but which can only be obtained by actions which reduce the demand of the customer. Efficiency programs designed to meet an energy resource goal are directed to finding and releasing the cost effective efficiency held by customers while holding the customers' amenity level (amount of light, heat, power drive, etc.) to the same or in some cases to even higher levels than existed before the implementation of the efficiency measure or process.

The resource planning horizon in which energy efficiency is evaluated matters. Considering ratepayer funded efficiency as an immediate energy resource places emphasis on approaches that can achieve the efficiency in a relatively short period of time and in which the savings can be measured with some precision over the life of the efficiency measure. Programs that fund the incremental costs of building a home or commercial building to efficiency standards that greatly exceed existing building codes, or that pay to change out light bulbs or to upgrade heating and air conditioning systems, are examples of common energy resource programs.

Using efficiency as a resource is often coupled with a secondary goal of equitable distribution of opportunity to participate in programs. Otherwise, the efficiency investment would be more narrowly targeted to only the most cost effective opportunities, which may be held in the hands of very few customers, such as efficient process changes for large industrial customers.

A long planning horizon allows the cumulative effects of energy efficiency to make a difference in capital asset investments (if system planning considers energy efficiency as a resource), and practices that target energy efficiency specifically to delay or to avoid capital spending can be a very economical strategy.

² New energy efficiency goals may emerge. For example, energy efficiency could be targeted to promote reliability by RTOs and control area operators in updated system planning practices. See FERC Transmission Planning and Cost Allocation NOPR Docket No. RM10-23-000]

Market Transformation The other common broad goal of ratepayer funded efficiency is *market transformation*. This goal is based upon the understanding that a great deal of cost effective efficiency does not occur because of certain well-known barriers in the markets for efficiency goods and services. These barriers, which have been well-described, include: 1) high customer discount rates, where the customer demands a very short payback for what is essentially a capital resource; 2) split incentives such as that between landlord and tenant where a tenant who pays the electric bill might see savings from an efficiency program but the landlord who would need to make the capital improvement would not realize any savings; 3) lack of awareness and information, including among engineers, architects, customers, the buyers of equipment and services, and distributors of all sorts of electrical equipment; and 4) high upfront costs that prevent customers who understand there are savings to be had over time but who nevertheless don't have the cash to retrofit a household with expensive LED lights or to purchase a \$1,000 front-loading efficient washing machine.

Market transformation programs seek to understand what the barrier is for a specific device, appliance, process or measure and to use funds to permanently alter or remove the barrier so that particular market will function on its own in the future with no further investment of ratepayer funds. An example might be a program designed to encourage distributors of water heaters to have highly efficient models on hand and to promote their sales when customers call (almost always in an emergency mode) for replacement. Another example would be working with the homebuilding community to educate all homebuilders on materials and techniques for building highly efficient homes with the goal of having the industry adopt and use the efficiency techniques as an ordinary commercial practice.

Market transformation programs seek to change behavior over an entire sector. It takes time and the energy savings results rarely occur quickly. In fact, it can be difficult to measure results with the precision of energy resource programs but when effective, the efficiency device/process becomes the market standard and savings are broadly realized on a permanent basis. For this reason, market transformation programs can become a low priority in the presence of energy efficiency savings targets of the type that apply to utility administrators that motivate the regulated entity to focus management attention and program skill on hitting the target.

Other Goals Other common ratepayer funded efficiency goals are *environmental improvement* and *economic development*. Environmental goals arise from the fact that not all environmental harm (societal costs) resulting from the production of electricity is captured in the price of electricity. Thus, efficiency expenditures are made to reduce the environmental harm, such as efficiency programs targeted to reduce use, thereby improving air quality. Increasingly, risks of environmental harm are monetized and can be included in avoided costs and in sensitivity analyses, either by the cost to mitigate the effects of existing and future regulation through pollution control equipment and other means, or through a pollution allowance markets for SO_x, NO_x, and CO₂. Economic development goals target funds to geographical areas or sectors of the economy which are in need of an economic stimulus. Targeting industrial manufacturing process

improvements to older manufacturing sites or building system improvements in brownfield developments might be examples of this kind of efficiency program. This sort of comprehensive process improvement program is usually highly customized to an individual business. Process improvements often capture not only the economic benefit of lowering the cost of doing business (perhaps saving jobs) but often brings environmental benefits as well by reducing air, water or other waste outputs. The labor intensive nature of energy efficiency also provides an economic stimulus. Generally, energy efficiency can be thought of as a strategic option to meeting environmental and economic goals.

Collaborative Efforts

The collaborative efforts of multiple parties in a number of states have been a significant factor in designing administrative structures as well as in designing effective efficiency programs.³ A formally organized collaborative, mandated by statute as in Massachusetts and Connecticut or by the commission's own initiative, can be a logical outgrowth from the general commitment to the idea of consensus. Having multiple parties, each with a stake in the success of efficiency programs, reaching agreement about how programs should be administered strengthens the effectiveness of the administering institution regardless of which administrative structure is used.

Multi-party collaboratives have included efficiency providers, distributors and contractors of efficiency products and services as well as ratepayers, environmentalists, utilities, low-income and large user representatives, state agencies and regulators. Collaboratives can be statewide or utility-specific. Reaching a unified vision can be tough work, but reaching consensus can add significant stability to the efficiency institution and to its programs.

For non-utility stakeholders, a statewide collaborative offers the opportunity to focus on a single venue, and to promote consistency among utilities. Utility administrators sometimes disfavor a statewide collaborative because it can divert focus to low priority topics of more interest to other utilities. Commissions are generally faced with the choice of what sort of collaborative process is most appropriate in a given state. States that decide on a statewide collaborative tend to value consistency, creating a forum where everyone learns from everyone, and that helps advocates (and the commission itself if it chooses to participate) manage their limited time efficiently. States that choose utility specific collaborative acknowledge the differences among utilities and the utility's interest in managing a process that is 100% about the priorities associated with their programs.

Energy Efficiency Funds and Administrative Structures

Many states use a separate charge, placed on per kWh sales to fund energy efficiency. This is instead of embedding the cost of efficiency in utility rates like most other costs

³California also had a successful experience with a multi-party energy efficiency collaborative in 1989-90. See, Raab, California Demand Side Management Collaborative, *The Power of Environmental Partnerships*, (The Dryden Press, 1995.)

of utility service. These charges were widely implemented during industry restructuring as a means of preserving a minimum level of funding for energy efficiency and other "public goods." The funds are generally placed in the custody of the efficiency program administrator – the utility, the independent administrator or, the government administrator. So if a non-utility is the administrator, some way to collect and convey funds from consumers through the utility is needed. In general, the separate charge has proven to be an effective device for accomplishing their declared purposes, but the charge can be an irritant to consumers, and these funds are vulnerable.

In the current era where almost all state governments are facing large budget deficits (this era seems to recur with some regularity), any dedicated fund, including the energy efficiency account, faces serious threat of being raided to fill gaps in the state budget. The reassignment of energy efficiency funds to general state budgetary purposes is most clearly a problem where the funds are held in a state account. For examples, a portion of efficiency funds in Maine and Wisconsin (when they used state agency energy efficiency administrators) were appropriated to government over the last decade.

One might think these "raids" are less likely to occur where dedicated energy efficiency funds are directly paid by the utility to its own program contractors or to a third party independent non-governmental administrator but two large raids occurred in Connecticut.

There are no raid-proof funds. Presumably, where efficiency costs are incurred as part of a utility's ordinary cost of doing business and not segregated into identifiable funds, as with traditional practice of integrated resource planning, there will be no state budget intrusion. Statutes can at least clarify this intent and minimize the chances of future raids, as in Vermont: "*... Balances in the fund shall be ratepayer funds, shall be used to support the activities authorized in this subdivision, and shall be carried forward and remain in the fund at the end of each fiscal year. These monies shall not be available to meet the general obligations of the state*" 30 VSA 209 (d)(3).

Evaluating Administrative Structures

A useful set of criteria for comparing administrative structures for ratepayer funded energy efficiency programs was suggested by Eto, et al 1998 and applied in the 2003 report:

- Compatibility with Broader Public Policy Goals
- Accountability and Oversight
- Administrative Effectiveness
- Transition Issues.⁴

⁴ Eto, J, C. Goldman and S. Nadel, 1998 *Ratepayer-funded Energy Efficiency Programs in a Restructured Electricity Industry: Issues and Options for Regulators and Legislators*: Lawrence Berkeley National Laboratory.

We use these four broad criteria to organize our comparative discussion of the administrative structures in the surveyed states, adding the following sub criteria, which we believe provides deeper context for thinking about good outcomes from efficiency program administration:

Compatibility with Policy Goals

- Harmony of financial interests
- Integrated resource portfolio
- Resource Acquisition
- Strategic Deployment
- Environmental improvement
- Economic development
- Energy Efficiency market transformation
- Sustainability of effort over time
 - Funding stability
 - Institutional stability

Accountability and Oversight

- How is budget set
- Who participates in program development (opportunity for public participation)
- Are measurement and evaluation metrics integral part of program design
 - Program evaluation
 - Process evaluation
- How are results verified?
- Frequency of reporting
- Protocols and capabilities for periodic program review
- Can the effort be successfully managed and overseen at large scale

Administrative Effectiveness

- Efficient, non-redundant administrative costs
- Budget competency
- Ability to acquire and retain high quality staff
- Flexibility to adapt programs to evolving market conditions/opportunities
- Ability to target funds geographically
- Local options for program design

Transition Issues

- Start up costs of new organization covered
- Smooth transfer of program responsibility

Independent Administrative Structures

The states discussed in this section have decided to use an independent, non-governmental structure to administer ratepayer funded energy efficiency programs. Oregon and Vermont are long standing examples of independent administration.⁵

Wisconsin transitioned its Focus on Energy initiative to a system of third party administration in 2007. Two entities divide the tasks, Wisconsin Energy Conservation Corporation and Energy Center of Wisconsin. They report to the commission. Maine and Hawaii have recently established independent administrators. Hawaii Energy was created by state regulators to administer energy efficiency programs there. SAIC/RW Beck won a competitive bid to operate Hawaii Energy beginning in 2009. Efficiency Maine Trust took over responsibility for utility consumer funded programs, known as Efficiency Maine, in July 2010, implementing a state law. The state PUC had been administering the program, an example of government administration that is now concluded. Its board of directors is designated by statute or appointed by the governor, so it may act more like NYSERDA than either the Vermont or Oregon organizations. The Michigan Public Service Commission requires utilities to deploy energy efficiency but also allows utilities to opt into a commission-selected third party administrator, called Efficiency United. The commission prescribed that Efficiency United would be a non-profit and would be competitively selected. The commission selected the Michigan Community Action Agency Association, which is also tasked with delivering all low income energy efficiency programs for investor-owned gas and electric utilities. Efficiency United is in its first year. Indiana is in the process of creating a third party administrator to administer a core set of programs under the Indiana Demand Side Management Coordination Committee. The decision to create this system was the commission's. This entity is not yet operating. A recent New Mexico law authorizes its commission to order third party administration, and no action has ensued.

Oregon and Vermont came into the restructuring era with unusually strong energy efficiency records. Both states had clear regulatory policies requiring the investment in energy efficiency and both had well-designed incentive regulation for energy efficiency (revenue decoupling in Oregon and lost revenue recovery in Vermont, in addition to program incentives). Eventually both states decided that despite consistent support from regulators, reasonable financial incentives to utilities, and a supportive public policy context, utility corporate culture and concerns about competition placed inescapable dampers on energy efficiency efforts. Both states decided to create an independent efficiency agency to administer the ratepayer funded programs whose sole business would be energy efficiency. Eliminating the utilities' mixed financial motives was important in each of these two states.

⁵ New York is also commonly thought of as using an independent administrator. New York State Energy Research and Development Authority (NYSERDA) is a quasi-government entity – a state chartered corporation with a Board of Directors appointed by the Governor. We grouped NYSERDA with government administration, though it shares features with independently administered programs. Here, NY is included in the hybrid administration section since utilities now also have significant program administration responsibilities.

Compatibility with Broader Public Policy Goals

The distinct strengths of the independent administration model are the ability to focus its mission statewide while eliminating conflicting business objectives that burden utility administration, therefore achieving a high degree of compatibility with broader public policy goals.

What is the conflict that burdens administration? Utility rates assume a level of sales and rates are set to collect revenue to cover approved fixed costs. Because unsold kilowatt-hours do not generate utility revenue, utilities suffer a loss of revenues when energy efficiency programs are successful and kilowatt-hours are not consumed. This relationship is called the throughput incentive and presents a dilemma requiring some effective regulatory means of restoring revenue to cover previously approved fixed costs. Further, investor owned utilities net income is proportionate to the size of its capital account, or rate base. If sales growth adds to earnings, and energy efficiency interferes with this relationship, it is easy to see a potential for conflict.

How to create the right regulatory incentives to get over the lost revenue hurdle is a well-briefed topic but achieving effective implementation of incentive regulation requires careful and ongoing attention. Parties can get lost in endless bickering over whether incentives are too generous or too sparse. Nor is it always a question of lost revenues and program incentives. Utilities may have management cultures that reward those who provide supply-side solutions not those who excel at energy efficiency implementation. Both the financial and the cultural conflicts can be markedly worse under a regime of retail competition.

Assigning energy efficiency obligations to an independent administrator avoids these vexatious conflicts. Interviews with policy makers in Vermont, Oregon and Hawaii confirm the avoidance of financial and cultural conflicts as a major reason for creating their respective independent administration approaches even though neither state has opted to create full retail competition.

Utility incentive schemes were phased out in both Oregon and Vermont following the creation of the independent administrator. Utility decoupling was introduced later, however, and is part of the third party administration concept in Hawaii. Because successful efficiency programs threaten utility revenues, regardless of what entity implements the programs, utilities may be expected to resist program expansion over time unless disincentives are removed. Most utilities of any size have an active life politic as part of their ordinary business existence. Utilities with their revenues at risk from efficiency programs may react by engaging in aggressive advertising programs encouraging greater consumption or may make forays into the regulatory and legislative processes to reduce or limit efficiency funding. Stated more positively, utilities are important in the community and have a permanent connection to their customers so they can be important supporters of energy efficiency delivered by a third party. Attention to utility incentives is more likely to produce desired results.

Vermont law enabled a franchise for a regulated energy efficiency utility (EEU), a model with strong conceptual parallels to the state franchise of public utilities in general. The Vermont Public Service Board, in turn, created a detailed scheme for competitively selecting the efficiency utility and for overseeing and evaluating its performance. It took Vermont less than three years to move from utility implementation of energy efficiency to full operation of the efficiency utility. With Efficiency Vermont firmly in place, by statute, the state's electric utilities remain responsible for energy efficiency. The regulator has ruled that the utilities' energy efficiency responsibility is satisfied by Efficiency Vermont, but this could be reversed at a future time. This technical reading of the statute is important when asking the utilities to support the efforts of Efficiency Vermont since through the utilities' support, they are still addressing a statutory requirement that applies to them.

After over a decade of favorable experience, Vermont is now committing more completely to the third party administrator. Regulators are supervising a transition to what might be termed a cable television franchise model, a long term (ten year) franchise which is reviewed at the end and which does not require a rebid.

Oregon law gave the Utilities Commission discretion to order independent administration. After study, the PUC decided to create and use an independent non-profit trust, Energy Trust of Oregon, Inc. (the Trust) for the purpose of delivering Oregon's energy efficiency programs. Oregon law initially provided the Trust with a ten year funding mechanism, through 2012, and this was reflected in its contract with the Oregon PUC. In 2007, this funding mechanism was extended to 2026.

Both states have created single entities with state-wide jurisdiction eliminating redundant administrative and program expense, though participation by smaller utilities in Oregon is voluntary. Both states use the societal test (Oregon also used the program administrator test) and evaluate both programs and the entire portfolio. Both states encourage multi-fuel savings, environmental protection and both conceive of efficiency as a resource and seek the transformation of efficiency markets. Vermont's system excludes natural gas, however, because the one gas company has effective programs and covers only two of the state's fourteen counties. Why fix what ain't broke? The Energy Trust of Oregon covers natural gas, but not unregulated fuels. In 2009, a change in statute allowed the large electric utilities to collect funds to do supplemental energy efficiency program. Recent developments in Vermont with carbon allowance revenues and revenues from selling energy efficiency capacity value into ISO_NE now enable Efficiency Vermont to support energy efficiency in end uses using fuel oil and other unregulated fuels – emphasis on payback to utility

Oregon Contract Guidelines

- Seek to encourage competitive markets for energy efficiency and renewables
- Competitively bid unless unwarranted
- Independently evaluate programs on individual basis
- Majority of conservation funds committed in year received
- All classes and geographic areas should benefit
- Complement, not compete with, existing programs

consumers is supplemented by a mission to address whole buildings and systems. Vermont’s program, however, does not address renewable energy investment opportunities, while Oregon’s does. Both states continue to require long run resource plans from their electric utilities. In Vermont, the state legislature has taken steps to assure that Efficiency Vermont participates in utility planning by directing the regulator to create the Vermont System Planning Committee. This committee includes all the utilities, Efficiency Vermont and other stakeholders and represents an iterative process to inform how efficiency can meet system planning needs and how system planning needs should guide energy efficiency deployment. Vermont regulators are also supervising efforts to “geo-target” energy efficiency to places in the state which can avoid capital investments if load growth is actively managed through demand side investments. These processes also feed utility IRPs. Both Efficiency Vermont and Energy Trust of Oregon have developed organizational stability through their good performance. Funding stability is also good, with appropriate process from consistent overseers in place to reassess funding levels from time to time.

Accountability and Oversight

The Vermont Public Service Board (VTPSB) paid careful attention to the details of oversight and accountability. It created the post of contract administrator (nongovernmental and put out to bid) that has the duty of closely monitoring the details of the efficiency utility's franchise

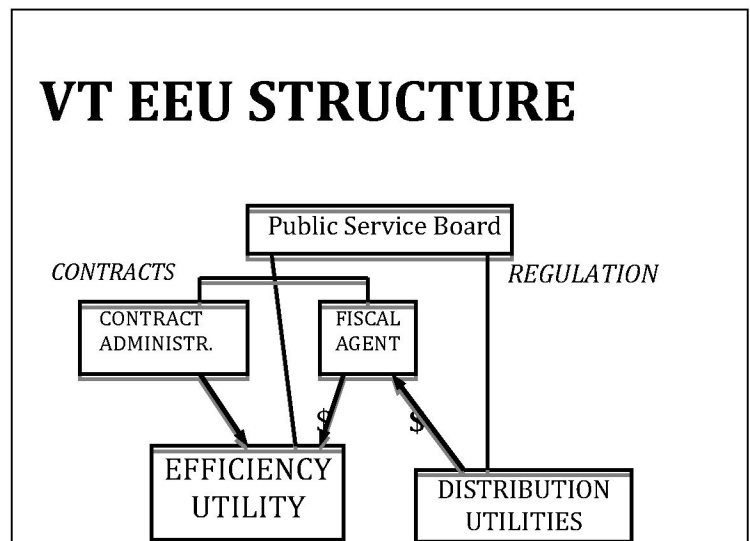
on behalf of, and reporting to the Public

Service Board. The contract administrator device has allowed close but responsive

oversight with less burdensome process than would occur if the VTPSB exercised oversight directly. This sort of responsive

oversight is particularly important when doing market transformation programs which often require frequent adjustment to match market changes. In addition, the contract with the efficiency utility set out very specific guidelines for program areas as well as frequent reporting intervals. The activities of the efficiency utility are well reported and easily assessable by interested stakeholders and the general public. Hawaii has adopted the independent contract manager in its structure.

VTPSB also established a fiscal agent (non-governmental totally separate from energy efficiency utility and engaged by competitive bid) who holds, disburses and accounts for the ratepayer money collected by distribution utilities and expended by the efficiency utility. Hawaii has adopted the fiscal agent also. The fiscal agency disburses funds upon approval by the contract administrator. The use of a fiscal agent is a unique and interesting device



borrowed from telecommunication regulatory practice. The use of a non-governmental fiscal agent has kept ratepayer efficiency dollars out of the hands of state government and thus protected from the budget raid experienced in several other states. Use of a fiscal agent under contract to the VTPSB assures that efficiency funding remains within the utility system under the supervision of the regulator, rather than being treated as "funds of the state" subject to state budgeting limitations, appropriations trade-offs, and state procurement requirements.

Contract disagreements with the EEU are brought to the Contract Administrator first. Appeals may be made to the VTPSB for decision and resolution with limited rights of appeal to the courts (abuse of discretion only.) This places primary oversight authority in the VTPSB. Hawaii has adopted this contracted Contract Administrator structure.

Part of accountability is performance evaluation. In the case of Efficiency Vermont and Hawaii Energy, incentive plans are in place to set clear goals and to provide financial performance incentives to meet those goals. The level of these incentives provides a useful comparison to the (tending to be higher) levels of incentives claimed to be necessary by utilities to administer energy efficiency.

The Vermont Department of Public Service (VTDPS), an agency which includes both consumer advocate and energy office functions, is responsible for measurement and verification of the efficiency programs implemented by the EEU. A portion of the efficiency funds is used to pay for this piece of administrative oversight. Hawaii has employed an independent M&V contractor for this purpose.

The Oregon model is different from that of Vermont. The Oregon PUC has a direct contract with the Trust with contract oversight exercised by PUC staff rather than an independent contract administrator. The contract allows either party to air grievances with the other. Presumably any unsolvable disagreement would be resolved by the Court system just as with any contract dispute, but no such major disagreements have yet occurred. Close communication and active collaboration exists between the Trust and the PUC (a PUC staffer sits as an ex officio member of the Trust's Board of Directors), which to date has prevented major disagreement from developing. The Trust's ten year contract allows a long period of stability for program implementation and the documentation of results. Hawaii has engaged an independent EM&V contractor reporting through the contract administrator to the commission.

All state third party administrators covered here have stakeholder advisory groups and deliver detailed annual reports to the regulators.

Based on experience to date, there is no upper size limit to a third party administrator.

Oregon PUC/Energy Trust Agreement

- Controls manner in which Trust receives and expends funds
- Establishes Operation Guideline
- PUC
 - Appoints non-voting, ex-officio boardmember
 - Adopts orders and rules to assure funds paid
- Trust
 - Provides action plans for review
 - Provides annual budget and report
 - Advances notice for long term contracts
 - Contracts for independent management review
- Either party can issue a “Notice of Concern”
- Either party may terminate for breach of contract

Administrative Effectiveness

The Oregon and Vermont state models provide lean, centralized administration reducing transaction costs. Transaction costs include not only the design and oversight of programs but the costs of processing cost recovery requests at the regulatory commission. Both states' programs have attracted very high caliber personnel. The Vermont model uses fewer contractors to provide services. The Vermont efficiency utility relies on its own staff to do a large majority of program planning design and implementation (short of the actual installation of measures). The Oregon Trust has a smaller staff and relies more on outside contractors. Staff at all four entities includes recognized national leaders in energy efficiency. The Vermont model raises the question of what effect the efficiency utility might be having on the competitive provision of efficiency as the consolidation of activity could result in fewer competing entities doing market based efficiency. Experience indicates, however, that energy service companies (ESCOs) are working in Vermont, using Efficiency Vermont programs as a point of departure to provide additional services to customers.

While administrative costs appear higher in Vermont than in other states and administrators, they fund powerful information and relationship management systems that return benefit in the form of more responsive and customized service as part of their programs. Problems benchmarking administrative costs are discussed in the utility administration section.

There is public participation in the shaping of efficiency delivery in Vermont through the VTPSB-appointed Advisory Committee and through periodic VTPSB hearings to review program accomplishments and to set budgets. The volunteer, self-perpetuating Board of

Directors of the Energy Trust, originally appointed by the PUC (a PUC commissioner is an ex-officio member) is ultimately responsible for program decisions. In addition the Trust has open advisory council meetings and its policies are published on its website and subject to periodic mandatory review. Opportunity for public input into program design can occur through open solicitations by the administrator in both states.

All third party systems have some obligation for savings to reflect the sources of funds in their states. Oregon measures equity by utility system over a multi-year horizon. Vermont also considers a multi-year horizon and primarily measures against county size. Vermont has done the most to overlay strategic deployment of energy efficiency on a foundation of long term geographic equity.

Transition Issues

Vermont, Oregon, Wisconsin and Maine had clear agreement among key stakeholders, including the legislature, to consolidate political as well as policy support essential to establishing a new independent entity. In Hawaii, Hawaii Energy is part of an established statewide strategy, the Hawaii Clean Energy Initiative. All involve the commission in a significant way.

There are start up costs for establishing a new entity. The Oregon Energy Trust needed to arrange outside financing prior to the transfer of utility collected revenue, and needed to build itself from scratch. Regulators need to support temporary start-up costs, generally via the energy efficiency charge. Vermont's early incentive plan for Efficiency Vermont was laden with process milestones to assure attention to organizational development – these metrics fell away as the organization matured. Vermont, Hawaii and Wisconsin benefitted from selecting through RFP organizations which were ready to house and run the third party administrator. Maine's transition from government administration was not too complicated because its very small size owing to its emphasis to date on contract management. While the success of Efficiency Vermont has led to efforts to make its relationship with Vermont Energy Investment Corporation more durable, its design allows for the entire operation to transfer to a new administrator (not unlike the management contract that controls administration of the National Renewable Energy Laboratory).

The utilities in Oregon had continuing jurisdiction for a period of time over the existing or "legacy" programs, while the transition from utility programs to Hawaii Energy programs took just six months. The transfer of programs and duties may not always go smoothly as utilities may want to hang on to programs or dollars. Thus, policy makers must establish clear protocols on the details of transfer and enforce them when foot dragging occurs. Speaking of utilities, attention to their incentives to support energy efficiency is an important and easily overlooked part of the transition. Oregon and Vermont regulators took some time before coming to address the utility throughput incentive, while Hawaii regulators are considering it right away.

Scale is an issue. The Efficiency Vermont programs at the start were smaller than Vermont

utility programs had been at their peak. Since its first year in 2000, Efficiency Vermont spending has increased by a factor of nearly 5. This ramp up allowed a steady increase in staffing and program capabilities while applying lessons to a smaller scale operation.

The role of the regulator is also a transition issue. Striking the right balance while transitioning from litigating energy efficiency issues as part of rate cases to more of a contract management relationship is not trivial, especially when there remains the same need at the end of the day to be comfortable about savings totals and incentive payments

Key to the transition is an expectation of stability at the end. Vermont and Oregon have clearly achieved that, as they have broad public recognition, utility support and good performance to buoy them. Another key is recognizing that continuously improving not just the organization but the mission of the organization is essential to realizing full potential. In other words, the transition shows no sign of really ending. As this report is being written, Efficiency Vermont is part of a statewide project with the state's utilities to implement smart grid systems to benefit all customers while at the same time improving energy efficiency services from their existing successful level of achievement.

Utility Administration

Most states use utilities to administer energy efficiency programs. Even in Oregon and Hawaii, non-investor-owned utilities choose to retain their energy efficiency authority and Burlington Electric in Vermont continues to deliver some energy efficiency services in cooperation with Efficiency Vermont. Utilities come in many forms and sizes, yet there is much in common among utilities whether they operate as vertically integrated, distribution only in restructured states, municipals or cooperatives. All have the fundamental task of operating the distribution system connecting customers to the grid. All touch all customers everyday. In this respect, they are monopolies, and represent an obvious choice to administer energy efficiency services as part of their scope. As discussed in the introduction to the previous section, the utility financial motivation is an important consideration among many in assessing this choice.

In Michigan, utilities are obliged to deliver energy efficiency, but have the opportunity to opt out of administering programs in favor of a third party, as discussed in the independent administration section. Several smaller utilities have opted out.

Compatibility with Broader Public Policy Goals

The single strongest feature favoring utility implementation of energy efficiency is that the utility has the relationship with the customer (usually a relationship of trust and perhaps familiarity) and is knowledgeable about customer's individual energy use.

The greatest incompatibility, as discussed in the previous section, is that utilities make their

profits by selling electricity. Other public policy goals such as environmental improvement and market transformation for efficiency products or processes are not inherently mainstream business interests for a utility. It takes a major corporate conceptual change of mission to make them so. This change of corporate mission requires consistent policy on the part of state government and regulatory incentives that align the policy goals with utility financial goals. However, while lodged at the utility, even a utility with the right financial incentives, efficiency programs can be the odd duck out within the corporation, vulnerable to internal competing sales objective and general budget pressures unless specific priorities are established, either by government, or internally by utility management.

A second beneficial feature of utility program administration is the compatibility with integrated long run resource acquisition and capital investment planning. Many states continue to require integrated resource plans from their utilities and the efficiency investments are economically linked to those plans. The choice of tests to screen in economic programs is pivotal. A longer term test that evaluates the resource value of efficiency compared with alternatives, such as the total resource cost test (TRC), the societal cost test (SCT), and the utility cost tests (UCT) more successfully values energy efficiency than a test that measure effects to those who only pay for and do not participate in the programs. Most states use one or more of the TRC, SCT or UCT. Capital investment planning has a growth management aspect, so if energy efficiency can slow or curtail growth in specific parts of the system, a utility can save the cost of more expensive sub-station and conductor investments. Con Edison is one utility that has made this a priority. While internalizing the synergies of energy efficiency, capital planning and resource acquisition is a sound idea, many utilities do not fulfill this potential, and Vermont's System Planning Committee and other cooperative efforts are showing how this function can be accomplished with independent administration. Where states no longer have integrated utilities, consumers still rely on effective use of the cost tests to screen in energy efficiency programs that will provide a system benefit.

A third beneficial feature of continued utility administration is retention of the existing infrastructure, knowledgeable staff and relationships within the energy services professional community as well as relationships with distributors. Once a utility has developed a staff and infrastructure to develop and deliver cost-effective efficiency programs there is reason to be cautious about taking steps to dismantle that infrastructure by assigning the duties elsewhere.

History demonstrates that implementation of energy by utilities can be successful. Among investor-owned, vertically integrated utilities in Utah, utility energy efficiency programs have grown over the last several years into among the national leaders. Iowa, Minnesota and Washington programs have been successful for years and are entering a process to achieve higher levels of savings. California utilities have had successful programs supported by affirmative resolution of the throughput incentive through decoupling, and a principal of maximizing cost-effective energy efficiency by making it the priority resource and creating an performance incentive system to reinforce that policy. Distribution only, investor-owned utilities in restructured states have also been successful, perhaps led by

utilities in Massachusetts, Connecticut and Rhode Island. These efforts are poised to grow based on statutory and regulatory actions within the last four years. Energy efficiency managers in states such as California and Massachusetts where significant attention to utility financial motives have been explicitly addressed report that energy efficiency is higher priority to top executives and others in the company when program success and financial success are linked and sufficient. Conversely, where these issues are unaddressed, such as Missouri and Arkansas, this condition is seen by the utility administrator as a deficiency. On the other hand, focus on the performance reward system can become intense. California, which had a system of shared benefits in place for the utility programs in place from 2006-2008, saw significant unrealized utility expectations for performance reward when the independent EM&V process produced lower savings numbers than they expected.

Making a priority out of energy efficiency has mixed results across the range of U.S. municipal and cooperative utilities. Successful performance of places like the Sacramento CA, Austin TX, Long Island Power Authority and New Hampshire Electric Coop indicate that non-IOUTs are fine administrators with similar positive and negative attributes as their IOU brethren. Non-IOUTs have to contend with the throughput incentive, either by raising rates as needed to cover fixed costs, delaying raising rates and using reserves in hopes that other circumstances will mitigate rate increases, or dialing back energy efficiency to mitigate the lost revenue. Utilities with successful energy efficiency programs generally have a population (this does not mean every single customer is) willing to pay for energy efficiency in anticipation of lower future costs. While in most states they have the ability to adjust rates at will, a rate increase due to lost sales may encounter popular resistance, discouraging managers and trustees. Managers can be motivated to avoid this dilemma by diminishing commitment to energy efficiency, just as IOUs may.

Levels of spending on energy efficiency remain largely below those of a substantial number of utilities prior to the chaos introduced by restructuring. Many companies made investments of an average of 4.5% of overall revenues in cost effective energy efficiency (Hirst 1994).⁶

The utilities that achieved high levels of investment in the early 1990's had three things in common: regulatory policy was clear and sustained, proper incentives were in place including internal rewards for corporate achievement in efficiency and stakeholders supported the programs. States and utilities with successful programs today will still need these.

As more states and utilities get involved with energy efficiency and the energy efficiency savings targets get larger, there is more discussion about paying attention to the business

⁶ Efficiency efforts are commonly reported both as spending as a percentage of total utility revenues, or as achieved savings as a percent of sales. Either is a good way of judging the relative level of effort among utilities that may be of vastly dissimilar size or climate conditions. The expended revenues are costs that have been allowed to be recovered in rates. Savings as a percent of sales may be a better gauge when developing energy efficiency as a resource since it measure results, but it may not work as well for market transformation programs, which often take time before the yield savings, that those savings may be very hard to accurately measure. See ACEEE Scorecard 2009 for current spending and savings data.

incentives faced by utilities. Perhaps the most extreme example of this emerged from a proposal from Duke Energy to link energy efficiency cost recovery and incentive payments to a fraction of the avoided cost of a power generator, rather than the typical “cost plus” method of compensation. An important aspect of this discussion is benchmarking what an independent administrator might cost to do the same job, and their comparative strengths and weaknesses applied in a particular state.

In a related concern, the increased use of energy efficiency resource standards for utility administrators has increased the emphasis on resource savings, potentially to the point of diminishing market transformation. Utility administrators are prone to this concern

The following passage from a 2009 order from the Oregon PUC summarizes the views of many about the influence of utilities on energy efficiency:

“... PGE (Portland General Electric) does have the ability to influence individual customers through direct contacts and referrals to the ETO. PGE is also able to affect usage in other ways, including how aggressively it pursues distributed generation and on-site solar installations; whether it supports improvements to building codes; or whether it provides timely, useful information to customers on energy efficiency programs. We expect energy efficiency and on-site power generation will have an increasing role in meeting energy needs, underscoring the need for appropriate incentives for PGE.”

Accountability and Oversight

Utilities administering energy efficiency programs are under the supervision of their state commissions or governing boards as they are for all their other functions. Some state statutes require annual reports on energy efficiency activities. Budgets are set by rule or statute, and programs are designed to meet the budget. Increasingly, savings targets are set by rule or statute, or they emerge from an IRP, then programs and budgets are designed to meet these targets.

As discussed earlier, on-going collaborative process provide a forum to discuss changes in energy efficiency markets and effectiveness of program strategies in real time, creating a community obligation to improve programs with agility, rather than rely solely on *ex poste* reviews with inevitable opportunities for second guessing and exposure to disallowances. The Connecticut Energy Conservation Management Board and the Massachusetts Energy Efficiency Advisory Council are perhaps the clearest statewide examples of these since they are founded by statute.

It is also evident that there is tension between accountability to use consumer dollars wisely and the flexibility that energy efficiency program administrators need to respond to changing markets, technologies and best practices. This is a challenge that is less often and less intensively encountered with independent administrators, where performance is more clearly the objective and the choices made along the way are not as intensely analyzed as they seem to be with utilities. An exception is in Washington, however, where the utilities set their own goals and have considerable flexibility in meeting them. It appears

that the WUTC is not closely involved in program design. Washington utilities participate in the NWEA market transformation programs but may also run transformation programs of their own. In either case, market changes can be met without first obtaining regulatory sign off. Many states have determined that, as for independent administrators, utility administrators should be subject to independent evaluation measurement and verification organized by the regulator, rather than relying on the utility to self assess.

Based on RAP interviews with regulators and utilities, it is evident that energy efficiency is the most scrutinized of the routine things utilities do. Why does this appear to be so? One likely answer traces back to the persistent concern that utilities' interests in the success of energy efficiency are chronically compromised by their attraction to growth, leading to more capital assets, more sales and more net income. A significant aspect of regulatory oversight of utility administered programs, then, is to resolve this concern successfully. Absent a resolution of inherent incentives that promote growth, oversight of energy efficiency administered by utility is likely to be characterized by excessive conflict as expectations of regulators and the utility fail to match up. Defining success may take many forms, from achieving all cost effective energy efficiency with flexibility and innovation, to minimizing complaints, to making clear demands for performance under threat of penalties for non-compliance.

Administrative Effectiveness

Utilities have developed and largely retained capable staff. Most, however, significantly supplement their staff from a fleet of contractors organized to support them. As spending levels rise and programs become more ambitious, there is reason for concern industry wide (independent of administrative model) about shortages of experienced program managers.

Regulators are properly motivated to maximize dollars collected for energy efficiency for buildings and systems as opposed to overhead. However, skilled program administration is an investment; simply minimizing administrative costs may be costly in such outcomes as uncoordinated programs and poor customer relationships. Attempts to benchmark administrative costs are inherently frustrated by inconsistent methods and justifiable differences in program deployment strategies. Utilities do make significant use of contractors in order to moderate additions of fixed costs and get access to specialized talent. Regulators can assure that contractor management follows sound practices and may tend to scrutinize these relationships more than they do for independent administrators. As discussed earlier, management flexibility needed to address changing markets and technologies may conflict with regulators' desire to manage utility decisions to modify programs and strategies in mid-course. With sufficient flexibility, utilities can use operations and other data to target resources to their best uses and apply lessons quickly to improve programs.

Many states have encouraged the use of common programs statewide to reduce costs and also avoid confusion among consumers. New Hampshire has established a set of CORE programs that all utilities implement. Organizations like the Midwest Energy Efficiency Alliance, the Northwest Energy Efficiency Alliance, the Northeast Energy Efficiency Partnerships, the Southeast Energy Efficiency Alliance, and the Southwest Energy Efficiency

Project provide support to states to bring this consistency regionwide, while also supporting market transformation efforts.

In a similar vein of scale efficiencies, municipal joint action agencies like the Minnesota Municipal Utilities Association as well as generation and transmission cooperatives like Associated Electric Cooperative (serving in Missouri, Oklahoma and Iowa) provide support to member companies that want simple ways to deliver energy efficiency service to their retail customer/members. Bonneville Power Administration also provides energy efficiency program support for its municipal and public utility district customers. Performance of self-governed municipals and cooperatives on energy efficiency ranges from very high to non-existent.

Transition Issues

For the most part, transition issues have not been relevant for utility administration. One counter example stands out: New Jersey. Here, a series of decisions over the course of several years has shifted energy efficiency program responsibility among the utilities, the Board of Public Utilities, and an independent administrator. From the perspective of the utilities, the programs were assigned away, and some years later, they were assigned back to them, and then away again. Regulators have announced in 2010 that another shift may occur. This experience has shown that it is very challenging for the utility to reassign its energy efficiency staff – many leave their companies. However, this sort of dislocation happens in business regularly. Perhaps more challenging was a short ramp up period to resuming administering the programs with all the accountability typical of utility regulation. Returning to an early point in this report, New Jersey appears to have lacked consistency and consensus over how to administer energy efficiency programs, while it maintained clarity that having a commitment to this resource is important.

Looking forward, a new transition issue is emerging. State energy efficiency resource standards adopted in statute or by regulators indicate that many utilities around the U.S. will be increasing energy efficiency spending and savings quickly over the next several years. Commissions will need to pay close attention to needs of the community of interests, including the utility administrators, to assure that these achievable goals are successfully met.

Governmental Administration

Generally, government administration of consumer-funded energy efficiency programs has not gone as well as administration by other means. Maine, Wisconsin and New Jersey have abandoned state government administration, owing to obstacles peculiar to state government. As the next section on hybrid models will demonstrate, it may be that targeting the mission of a government program may improve its prospects for success.

NYSERDA is the stand-out success among government administrated programs. Its status as a quasi-government corporation, as reported earlier, holds an important reason for its success. NYSERDA, as a state authority with a long history of managing energy projects across a diverse state, was perhaps uniquely situated to take on the challenge of running the state's energy efficiency programs in 1998. Yet even here, New York will appear in the hybrid section owing the fact that regulators have determined that utilities and NYSERDA will share responsibility to meet a growing savings target. Maine recently joined Wisconsin in giving up state agency administration of a significant energy efficiency portfolio.

Compatibility with Broader Public Policy Goals

State government is likely to be attuned to statutory goals, but may not be nimble enough or have sufficient influence with utilities to address them effectively.

Accountability and Oversight

When the state is administrator of energy efficiency programs, the role of the regulator can diminish or disappear. Instead, legislative committee overseers, which lack detailed expertise in energy efficiency, may focus on macro issues, diminishing the pressure on the administrator to improve service. Appropriators may see the energy efficiency program as an emergency source of revenue.

Administrative Effectiveness

Concerns here include:

- State in the market as a competitor to generators and ESCOs
- State becomes concerned about supporting a staff infrastructure first before worrying about quality service
- State may not be able to attract the best staff, at least not for long, and staff may be diverted to other government matters. Hiring rules can also be limiting. As a result, significant use of contractors becomes less of a choice and more of an inevitability.
- Fiscal rules and procurement rules may limit management and financial flexibility.

Transition Issues

Transition to program administration by a state agency is likely to encounter most of the same issues described above regarding transition to independent entities. Attention to the process limitations of government hiring and fiscal management tends to take more

time that is usually anticipated and accounts for obstacles that emerged in New Jersey.

The Sustainable Energy Utilities of Delaware and District of Columbia

The state legislature of Delaware and the city council of the District of Columbia have each created a new structure for energy efficiency administration. This structure is called a Sustainable Energy Utility. The SEU operates throughout each jurisdiction. It operates out of a state agency, and in Delaware is funded primarily by a bond issued to support energy efficiency, as well as revenues from sources like carbon allowances and wholesale capacity markets. Consumers provide revenue also. Programs try to maximize participants paying for their services, so they would emphasize information and financing. These administrators would not be under the supervision of the utility regulator, and the extent to which they will coordinate with utilities is unclear.

Hybrid Administration

Several states in recent years have chosen to divide administration responsibilities. Each choice represents important local concerns for such priorities as market transformation, service to low income customers and service to state and local government. For these states, which include Maryland, Illinois, New York, Michigan and California, they deploy two or more administrators, generally from the categories covered here. The added challenge is how they interact to serve the whole.

Compatibility with Broader Public Policy Goals

The act of dividing the responsibilities generally makes clear the specific goals and reasons for the split. In Maryland and Illinois, attention to low income customers and government buildings is the key mission carved out for the state energy offices in these states. The Illinois Energy Office receives a quarter of collected funds, the rest go to the utility administrators. For their specific market segments, these state agencies are program administrators and have a strong focus to get the savings that are there to be had. Market transformation will also be a mission for the states. Program plans for each are approved by the commissions. These approved program plans detail savings targets for each entity.

Experience is inadequate to discern whether system planning and resource acquisition objectives will be melded in these two states, or if the staffing at the energy office will be adequate and stable.

In New York, the utilities are now tasked by the commission to focus on savings-oriented programs, while NYSERDA focuses more intently on market transformation and finance opportunities. Again, experience is too thin to evaluate the success of this division. Utilities do have to staff up, and the commission is evidently considering all the issues characteristic of utility administration.

Michigan is in this section because its optional third party administrator, Efficiency United, has been directed to deliver all low income programs for the investor-owned electric and natural gas utilities which are delivering an otherwise full portfolio of programs. This choice folds the consumer-funded low income program mission together with the state Weatherization program, creating significant efficiencies and customer clarity.

In California, the division is driven by an apparent political desire to enable communities to drive their own energy efficiency programs. Regulators there have directed that utilities will make up to 20% of energy efficiency funds available to sound proposals from communities to do energy efficiency. Some might say that this is not shared administration, that the utility is the administrator of this community program. However, the utility has no say in what the community does – it can reject an application, but it is accountable to state regulators if they do. And the utility has significant bargaining power in the contract negotiation with the community. But in the aggregate of all the community programs that go on in California means that there is little if any real coordination between what the utility is doing and what the community is doing.

Accountability and Oversight

For each side of the split, except in California, there is significant accountability and oversight. In California, communities do have to report results, but are not accountable for performance in the same way the utility or the state agency is. Funding streams for the government side of the programs are secured by statute in Maryland and Illinois.

Administrative Effectiveness

For the Maryland, Illinois, Michigan and New York systems, more time is needed to assess administrative effectiveness. Each entity of its type has the pros and cons discussed earlier in this report. In none of these does it appear that utility system issues are sorted out, though the collaborative process underway in Illinois is well-positioned to pick up this issue.

For California, the community allocation creates significant legal friction as hundreds of agreements are worked out periodically. The question which this report is not trying to assess is whether the creativity from these locally-developed programs is adding new learning to how to get more from energy efficiency investments, or if the effort is more of a “feel good” exercise that adds little and may detract from the overall effort of the utility.

Transition Issues

For Maryland and Illinois, the issue is communication. This seems trivial, but both sides of the hybrid system are incredibly busy with their own start-up concerns. As a result, a structural means for communication, like the collaborative in Illinois, is important to knit these efforts together.

For New York, the issues are more around the regulator clarifying the program roles of the utilities vis a vis NYSERDA as well as circumstances when these two might be competitive. For Michigan's Efficiency United, transition appears to be smooth since existing organizations' activities are being augmented.

In California, the community program has been in place for some time, but based on information RAP has gathered, it is still settling.

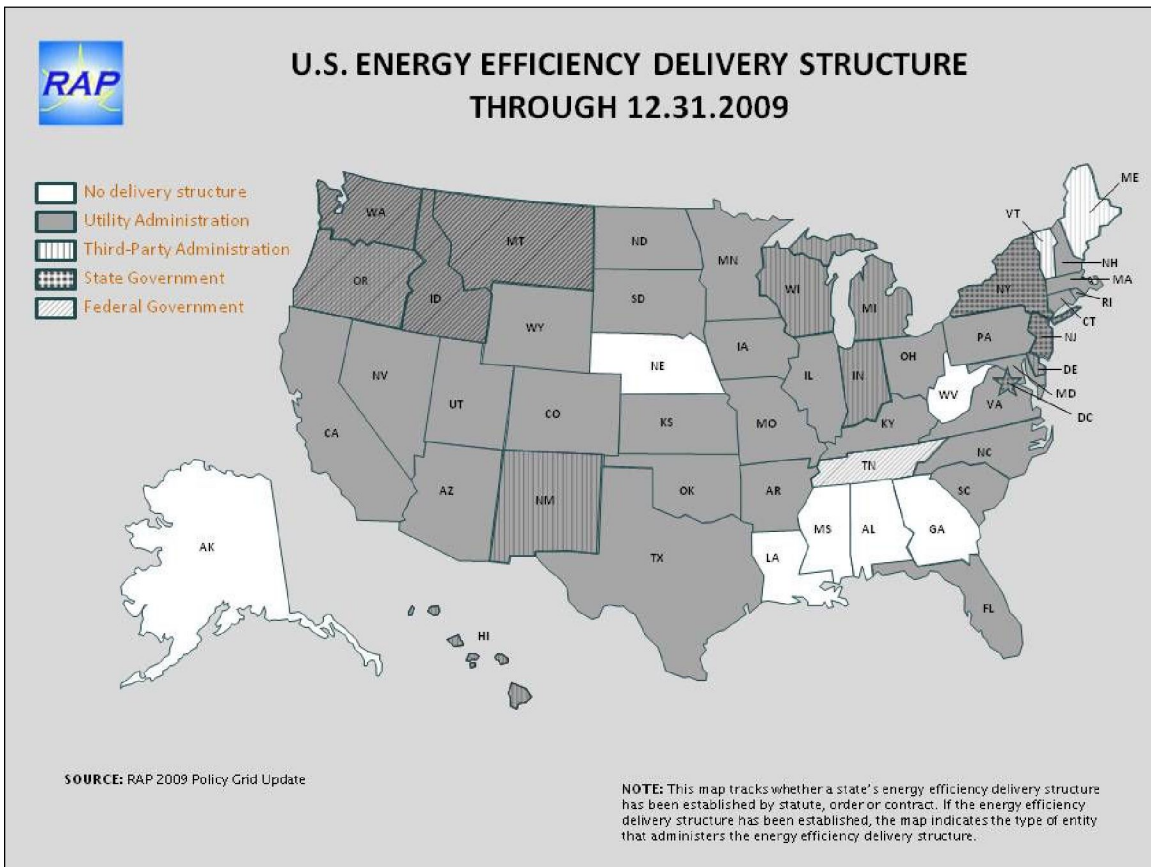
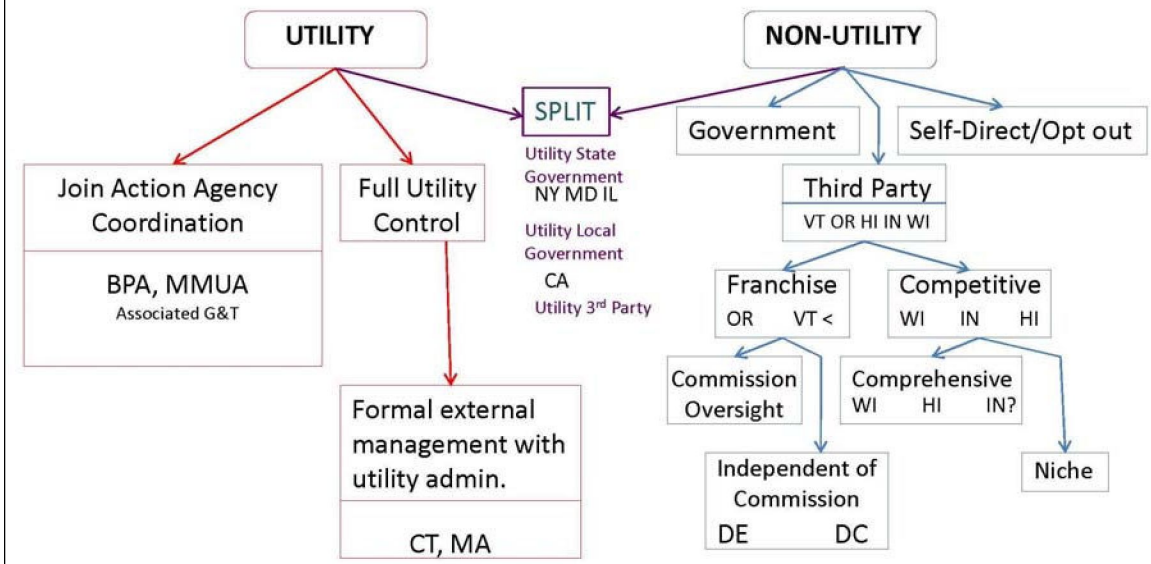
A new idea – Private Sector Administration

A new form of energy efficiency administration has been offered. Funds would be collected from utility consumers in the usual manner. Objective priorities for energy efficiency programs would have to be established, as occurs in many states but perhaps with more explicit rigor. Essential elements of what programs do would have to be decided centrally, probably by regulators. This work would be distilled in competitive RFPs. A central authority would issue these RFPs, probably the regulator, but it could be the utility. Bidders would compete for the right to deliver these program services while meeting state objectives and priorities.

Such an approach would allow anyone with a good idea about how to turn consumer energy efficiency investments in energy efficiency savings to get support. Likely bidders would be retailers or large building contractors, and they would use these funds to sweeten deals with consumers to get them to make the energy efficiency decision. In an effort to reduce the cost of energy efficiency in utility rates, this system would rely on new avenues of financing energy efficiency so participants would pay more of the costs. RFPs to serve vulnerable market segments would presumably assure that these customers have energy efficiency opportunities available.

It remains to be seen if any state will try this method or some variant of it, whether this method will support or conflict with existing ESCO markets, or how this method will succeed at meeting the tests outlined in this report.

Consumer Funded Energy Efficiency Program Administration



Conclusion

As in 2003, we find that the more robust ratepayer funded efficiency programs are less the result of administrative structure *per se*, than the clear and consistent commitment of policy makers. The figure on the top of the previous page shows how decision-makers have adapted administration structures in place in 2003 to their own needs, creating hybrids and variations. The map on the bottom of the page shows a range of different conclusion.

It is our view that either utility administration or administration by a third party non-governmental can work well. Important, however, is setting the systems up for success. A micro-managed third party administrator might be an utter failure, and in any case, explicit attention to utility motivations to support or avoid energy efficiency is crucial. Equally crucial is commitment to a decision; frequent transitions are a bad sign.

There has not been an academic quality study to evaluate the causal relationships that would declare a clear winner between these two systems and it seems likely that local priorities and concerns will be so important as to dominate. Relevant factors to consider when comparing utility to independent administration are: responsiveness to PUC direction, regulatory performance incentives that are properly constructed and implemented, staff competency, sustainability of the institution and its budget sources, and link to system planning and investment decisions.

State agency administration (with the exception of the unique quasi-independent character of NYSERDA) is a weaker third choice. State agencies are less likely to be able to maintain the required flexibility to be effective efficiency entrepreneurs, especially for market transformation programs. State agents are also vulnerable to governmental and political events that are external to the energy efficiency efforts themselves. Finally, as mentioned earlier, one should be cautious about placing the state in what is viewed by other market participants as a competitive business.

Finally, we urge commissions to consider carefully the value of stakeholder consensus and, if possible, the use of collaborative program design and oversight regardless of the administrative structure.

Appendix

forthcoming