

# National Regulatory Research Institute

## Memorandum

TO: Geri Santos-Rach  
FROM: Nancy Brockway  
RE: Alternatives to utility administration of EE  
DATE: June 9, 2008  
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In this memorandum, I provide an overview of the benefits and drawbacks of utility and non-utility administration of energy efficiency (EE) initiatives. I place this analysis in the context of the overarching work on effective regulatory incentives for utility actions in the public interest, now being conducted by NRRI for the Colorado PUC. I endorse the conclusion that for rebate and education programs, local conditions will best determine whether to use utility or non-utility administration. For other types of initiatives, the ideal assignment of administrative responsibility will vary to some degree with the specific function in question.

There is no compelling evidence that assigning ratepayer-funded EE administration to one entity or another works best in the case of rebate and education programs. For on-the-bill financing initiatives, by contrast, whatever the assignment of some administrative obligations, the utility always retains a key role: administering the collection of payments on the utility bill. Other aspects of such financing initiatives, such as providing the upfront funds or certifying measures as qualifying for program financing, can better be handled by non-utility entities, including vendors.

The key steps a regulator will want to follow in deciding questions of program administration start with the reasons for EE programs and the program design elements needed to address market barriers. The regulator will want to base administrative decisions on these factors:

- (a) The market barriers to customers choosing all cost-effective EE;
- (b) The effective ways to overcome the various market barriers;
- (c) The entities able to execute any given way to overcome identified market barriers, with excellent performance and at the least cost;
- (d) The incentives, if any, that each entity requires in order to provide such optimal performance of such administrative functions; and

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- (e) The best mix of least-cost and superior administrative results for various EE offerings.

In some cases, such as on-the-bill financing programs, the utility necessarily will perform at least some of the functions of the program.<sup>1</sup> Where more than one entity can perform a function (e.g. providing a point-of-sale rebate, selecting measures eligible under the program, etc.), the Commission need not assume that the utility is the only entity capable of performing the functions well. In the case of rebate and education programs, for example, it appears that utility and non-utility administrations have worked comparably well. No special incentive would be appropriate to induce a utility to perform the administration, because non-utility administration can handle the task just as adeptly.

To provide a basis for the EE administration analysis, I first briefly note recent statements by policy makers of their commitment to improving the efficiency of energy usage in Colorado. I then discuss what utility EE is intended to achieve that cannot be achieved by the market for efficiency as it now operates. What are the market barriers that require intervention? This question defines the “problem” that utility EE (as opposed to appliance standards, for example) is intended to solve. Proper definition of the “problem” in turn guides consideration of the possible responses, including whether utility administration is more likely than non-utility administration to achieve the public purposes of EE.

In Docket 07A-420E, the Commission has under consideration a number of issues related to the subject matter of this memorandum, at least with respect to Xcel’s EE programs. Some of the parties to that docket have discussed the question of utility vs. non-utility administration of EE. The purpose of this memorandum is not to suggest outcomes for this pending docket. The evidence has been filed, closing statements have been filed, and the docket is ready for Commission disposition. I do, however, present options for future consideration by the Commission with regard to setting and achieving EE goals.

The memorandum will be couched in terms of electric utility EE, but the concepts will apply to gas (and water) utility efficiency as well.

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<sup>1</sup> The report includes information on Pay As You Save® or PAYS®, a particular on-the-bill financing initiative. The author of this memorandum was the (unpaid) Chair of the Board of PAYS America, Inc. from 2004 until February 2008. For more information on PAYS®, see [www.paysamerica.org](http://www.paysamerica.org).

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## **I. Colorado is committed to energy efficiency.**

In a number of recent actions, Colorado has made clear its commitment to increasing the efficiency of energy use, including the use of natural gas and electricity.

In December 2004, the Commission approved a settlement between Xcel (Public Service of Colorado) and its stakeholders, establishing Xcel's integrated resource plan for the next ten years. As part of the settlement, Xcel committed to significant funding for energy efficiency over the 10-year plan period. See Decision No. CO05-0049 in Docket No. 04A-215E. Presently, the Commission has under consideration Xcel's proposal to enhance the EE initiatives it undertook in that settlement. See Docket No. 07A-420E.

On April 22, 2008, Governor Ritter issued three executive orders, setting out the state's policy to reduce greenhouse gas emissions. In Executive Order D. 004 08 22A, the governor announced goals for the reduction of greenhouse gas emissions in the state, and initiated a number of policy proposals towards that end. One of these policy proposals was a request that the Public Utilities Commission order electric utilities to submit "electric resource plans for meeting greenhouse gas reduction goals..." The Governor asked the PUC to seek from each jurisdictional electric utility a plan to reduce such emissions by 20% from 2005 levels by 2025. To accomplish this goal, the Governor recognized that utilities will have to weigh many approaches, including "significant expansion of ....energy efficiency..."

On April 29, 2008, in Decision No. C08-0448, the PUC formally opened the instant investigation into incentives for utilities to act consistently with the public interest. In the written order, the Commission explicitly noted the Governor's Executive Orders on greenhouse gas reductions, and noted that the Governor's assignment of responsibilities to the Department of Regulatory Agencies in pursuit of those goals would be "substantially assisted by our proposed investigation of utility incentives."

In Decision No. C08-0448, the Commission noted that it does not presently have rules specific to electric EE programs, "other than a rule including EE as a resource within our Electric Resource Planning Rules at Rule 4 *Code of Colorado Regulations* 723-3-3604." The Commission noted that "the framework for EE deliberations is found primarily in the statutes enacted in 2007 and codified at §§ 40-1-102, and 40-3.2-104, C.R.S."

On May 22, 2007, the Governor signed into law House Bill 07-1037, which among other things requires the Commission to ensure that investor-owned electric utilities in Colorado develop and implement EE programs that give all classes of customers an opportunity to participate in energy efficiency.

**II. The purpose of utility EE is to overcome market barriers to efficiency, and to transform the market for efficiency.**

**A. Why markets for efficiency, without regulatory intervention, are not sufficient to produce appropriate levels of energy efficiency investment.**

It is often noted that “if you don’t know where you are going, any road will take you there.” In order to understand the issues of utility vs. non-utility administration of EE initiatives, it is worthwhile to remind ourselves where we want to go, so as better to decide the road that will best take us there. We must therefore touch base with the underlying problems that utility EE is intended to solve, and assess how EE programs are designed and implemented to solve those problems.

It is widely agreed among students of utility EE that there is a very large amount of energy efficiency that it would be technically feasible to obtain, at an economic cost, while preserving the end-use amenities residential and business customers seek in the use of electricity (or natural gas or water). Similarly, there are vendors willing to sell the products and services that would allow customers to substitute efficiency for electricity use, and financing vehicles available to underwrite financing for customer purchases of these products and services where first costs are especially high.

Nonetheless, willing sellers and willing buyers have not tapped all the feasible, cost-effective energy efficiency by a long stretch. The huge gap between penetration of efficiency via the markets and feasible cost-effective potential exists because the market does not operate perfectly. There are market imperfections, and market barriers, that prevent customers from choosing and financing all the efficiency that would be feasible and cost-effective.

If no one intervened to remove these market barriers or correct the flaws in the markets, we would be unable to achieve the levels of efficiency that are technologically feasible, and cost-effective. Technical potential studies show that there is a great deal of efficiency that could be harvested if markets allocated risks and rewards in such a way that remaining market barriers were removed. Either as part of their obligation to obtain least cost resources to meet their customers’ needs, or as an obligation imposed on them as corporate citizens benefiting from their unique status, utilities in Colorado have been given the duty to pursue cost-effective efficiency. To meet these obligations, then, a utility will pursue EE that will overcome the market barriers.

**B. Particular market barriers are well-documented.**

There is widespread agreement about the market imperfections and barriers that must be overcome,<sup>2</sup> if all feasible cost-effective efficiency is to be tapped:

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<sup>2</sup> See, for example, the reports listed at the end of this report.

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1. End users typically require a high return on investment – they will not pay for energy efficiency measures unless the return is high. Put another way, they have a high hurdle rate for investments in efficiency.
2. Put still another way, end users require a very short payback period. Businesses of a variety of sizes require that end-use efficiency measures pay back within 18 months, for example.
3. End users lack the up-front cash (or the willingness or ability to borrow) to fund efficiency investments, whereas efficiency measures may have higher up-front costs than less efficient end-use equipment and applications.
4. End users mistrust vendors' sales pitches regarding the amenities and savings from efficiency measures.
5. End users may not be open to new or innovative end uses.
6. End users who would see the savings in their energy bills may not be the ones who make decisions regarding efficiency investments—the classic split incentive problem. For example, a renter will be reluctant to invest in a more efficiency HVAC system for rental premises that the renter may not stay in long enough to enjoy a net payback; meanwhile, the landlord will not have an incentive to improve the efficiency of the premises where the renter pays the energy bills.

### **C. Utility EE initiatives are designed to overcome these market barriers and to remedy market flaws.**

Beginning in the 1980s, utilities (and their regulators) have tried a number of different techniques for overcoming these market barriers.<sup>3</sup> Some of the tools for acquiring efficiency resources and for transforming markets include the following:

1. Providing education, training, technical assistance and financial incentives (e.g. rebates, from modest percentages up to and including direct installation of measures at 100% rebate – i.e. free) to end users - to increase awareness and knowledge of efficiency benefits, reduce transaction hassles from the choice of efficiency, and lower up-front costs.
2. Providing education, training, and financial incentives - to encourage retail and wholesale vendors, contractors, and builders to change their business models to promote energy efficiency.

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<sup>3</sup> During the period of the restructuring of the electric industry in the United States (roughly 1995 through 2002), the concept of “market transformation” was added to the goal of “resource acquisition” as a feature of public policy. More recently, the differences between these two approaches have blurred. For this memorandum, I will not attempt to discuss them separately.

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3. Timing education (such as awareness of EnergyStar® ratings) and training efforts to reach consumer and business decision makers at key decision points for obtaining long-lifetime products, and for construction designs and materials (e.g. replacing existing appliances or equipment and building or remodeling buildings) - to influence purchasing and construction decisions.
4. Providing customers with new market structures in which to obtain efficiency, designed to eliminate one or more of the barriers to choosing efficiency present in existing market structures (without necessarily providing cash incentives).

The chart on the following two pages lists the types of utility EE programs or initiatives, and describes for each the manner in which the initiative is intended to reduce or eliminate a market barrier.

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<b>EE Programs/Initiatives</b>	<b>Intended Effect on Market Barrier(s)</b>
On-the-bill financing of efficiency measures for any utility customer in good standing	Eliminate a customer's up-front investment and expand access to credit for efficiency purchases
Private loan placement services	Reduce borrowing hassles and improve access to financing
"Leasing" portable efficiency measures (such as CFLs), with the "lease fee" on the bill.	Eliminate up-front cost, and allow customers to try out the new efficiency measure before committing to paying full cost, thereby reassuring customers who mistrust vendors' sales pitches that their commitment to pay for the measure is not irrevocable if they discover their fears were well founded.
Energy-Efficient Mortgages	Expand access to credit for efficiency investments in homes, lower up-front cost of efficiency-treated homes, and make principal and interest payments on such homes lower than otherwise.
<p>Pay As You Save® - measures provide (and installed in case of non-portable measures) with:</p> <ul style="list-style-type: none"> <li>*no money down,</li> <li>*on-the-bill financing</li> <li>*measures selected such that customer enjoys net savings from the outset and pays off the cost before the end of the life of the measure,<sup>4</sup></li> <li>*no obligation to pay for non-portable measures (e.g. high-efficiency furnace, insulation) if (a) they do not function and save energy as promised (and can't be made</li> </ul>	<p>Eliminate first costs,</p> <p>Expand access to credit (both in amount of capital made available by financial players and in types of customers who can take advantage of the offer),</p> <p>Eliminate need to take on new long-term debt,</p> <p>Assure doubtful customers that savings will exceed payments,</p> <p>Allow utility customers to benefit from efficiency installed in premises they may not be able to stay in long enough to enjoy net savings [i.e., eliminate split incentives],</p> <p>Expand the pool of capital available on</p>

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<sup>4</sup> The typical approach is to select measures that save enough of the energy (and/or water) costs to the customer that the cost of the measure can be paid off by PAYS® payments equal to ¾ of the monthly savings enjoyed by the customer, over a period not longer than ¾ of the life of the measure. Rebates can also be combined with PAYS®, to expand the list of measures that meet the PAYS® payback requirements for robust savings opportunities to the participant. The customer only pays as she saves.

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<p>to work properly) or (b) customer is no longer in premises.</p> <p>Any remaining charges are not a debt to the departing customer, but an obligation attached to the meter, to be borne by the next customer.</p>	<p>reasonable terms for efficiency.</p>
<p>PAYS® for new construction – like PAYS® as described above, but payment is made to the builder/developer of new premises in exchange for installing energy efficiency measures (e.g. to produce premises rated Energy Star® or better), the cost of which measures is added to the utility bill and reimbursed through a PAYS® charge, as above, and the obligation to pay the PAYS® charge runs with the meter, as above</p>	<p>Eliminate split incentive in new construction, Assure that savings are enjoyed by occupant who pays for the efficiency.</p> <p>Reduce first cost of more efficient new construction, without raising mortgage, interest and utility bills relative to premises without such measures.</p> <p>Eliminate hassle for purchaser seeking more efficient new construction.</p> <p>Prevent lost opportunity to make most cost-effective efficiency investments, at a time when premises are under construction rather than having to go back and retrofit.</p>

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Comparing the above list of EE program approaches to the list of market barriers and rearranging the material presented, the Table below shows that a number of programs are designed to eliminate one or more of the market barriers. One can also see that some types of EE initiatives are listed opposite a number of barriers. As not all customers face the same set of barriers, a variety of initiatives is useful, to reach all customers and to tap all cost-effective efficiency resources.

<b>Market Barrier</b>	<b>EE Initiatives to Overcome Specific Market Barriers</b>
High upfront costs	Rebates Financial incentives to vendors Direct install @ 100% rebate On-the-bill financing PAYS®
High required return	Rebates Financial incentives to vendors Direct install @ 100% rebate On-the-bill financing PAYS®
Mistrust of sales pitch	Education Direct install @ 100% rebate PAYS®
Lack of access to credit	Loan programs On-the-bill financing PAYS®
Unwillingness to take on more debt	Direct install @ high rebate (up to 100%) PAYS®
Split incentives	Direct install @ high rebate (up to 100%) PAYS®

**III. EE administration should be tailored to Colorado's circumstances and goals for EE.**

**A. States have chosen a variety of EE administration approaches.**

Utility EE initiatives are administered in a wide variety of ways across the country. Administration has typically been assigned to one of the following types of entities: (a) utilities, (b) state agencies, and (c) independent (non-profit) organizations chosen for the purpose. The administrator oversees the program implementation, but may contract out various piece parts of the implementation and evaluation. For some programs, such as PAYS®, administrative tasks are allocated somewhat differently from traditional rebate programs, as will be discussed further below.

As of early 2007, according to the American Council for an Energy Efficient Economy (ACEEE), utilities administered ratepayer-funded DSM in 20 states, state agencies administered such programs in 7 states, and non-governmental/non-utility entities administered DSM programs in 3 states.<sup>5</sup>

**B. Breakout of functions of administering and delivering EE initiatives.<sup>6</sup>**

To understand the issues involved in determining which entities should administer EE programs, it is useful to break down the category of EE administration and delivery into more specific functions. The list below provides a good starting point for that exercise.

**Program Administration and Management**

- Facilitate development of public planning process
- Prepare general program descriptions and budgets for regulatory approval
- Prepare detailed program designs and propose changes based on experience-to-date

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<sup>5</sup> Marty Kushler, *National Overview of the Status of DSM, a presentation to the Colorado DSM Informational Workshop*, February 2007, available at: [http://webapp.psc.state.md.us/Intranet/CaseNum/NewIndex3\\_VOpenFile.cfm?filepath=%5C%5C Coldfusion%5CEWorkingGroups%5CDRDG%5C%5CStates%20Proceedings%5CCO%5CMarty Kushler\\_DSM02-08-07COPUC.ppt](http://webapp.psc.state.md.us/Intranet/CaseNum/NewIndex3_VOpenFile.cfm?filepath=%5C%5C Coldfusion%5CEWorkingGroups%5CDRDG%5C%5CStates%20Proceedings%5CCO%5CMarty Kushler_DSM02-08-07COPUC.ppt).

<sup>6</sup> Many items on the EE function list are taken directly from Carl Blumstein, Charles Goldman and Galen Barbose, *Who Should Administer Energy-Efficiency Programs? (Who Should Administer EE?)*, Table 1: Elements of Energy-Efficiency Program Administration and Delivery, Berkeley, CA: University of California Energy Institute, Center for the Study of Energy Markets. Year 2003 Paper CSEMWP115, available at <http://repositories.cdlib.org/upei/csem/CSEMWP-115>. Others are supplied by the author.

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- Oversee measurement and verification (M&V) compliance
- Collate and prepare reports for policy makers

### **Program Delivery and Implementation**

- Hire and manage staff and/or sub-contractors for program implementation
- Raise capital to pay upfront costs of measures
- Develop and implement quality assurance standards and tracking protocols
- Select measures approved for rebate and/or financing treatment (e.g. PAYS® certification)
- Review and approve invoices
- Promote and market programs
- Develop and/or implement program services (e.g., energy audits, contractor certification, information and education, etc.)
- Collect funds for rebates, PAYS® measure acquisition, and program management, etc.
- Pay staff, subcontractors, vendors, others for products and services.
- Develop energy-efficiency projects at specific sites
- Conduct M&V to determine performance-based administration fees, shareholder incentives, data collection

### **Program Assessment and Evaluation**

- Assess program impacts and implementation
- Evaluate effectiveness of program processes and administration
- Develop measurement and verification (M&V) procedures

This functional breakout gathers the various tasks under a number of more general categories (Administration and Management, Delivery and Implementation, Assessment and Evaluation). This grouping roughly follows the allocation of responsibilities in some EE programs. Note, however, that the subcategories need not be rigidly assigned to the general categories. Some groupings, and their associated assignments, make sense. For example, it is valuable to make sure that assessment and evaluation are separate from implementation and delivery, so as to maintain independence and obtain an unbiased evaluation. In many cases, however, the tasks could be assigned in a variety of ways.

In addition, within any of the three general categories, the functions can be divided up among a number of entities, and with respect to some of the functions, it can be efficient for more than one entity to carry out the same function. For example, in a rebate program, a utility could carry out general administrative functions, but rely exclusively on independent contractors for all service delivery. Similarly, in a PAYS®

initiative, an independent certification agent can select the measures that qualify, an investment bank and a pension fund can supply the up-front capital, numerous vendors and contractors can market and install the measures, the utility can collect the PAYS® charges and turn them over to the certification agent for reimbursement of vendors/contractors and capital providers, the certification agent can conduct measurement and verification, and pay vendors, and an independent contractor can conduct the evaluations. In such an initiative, more than one entity can provide equipment and install measures, and more than one entity can supply upfront capital, e.g. the utility, a pension fund, a venture capital firm, investment banks, state or municipal bond proceeds, vendor financing, and others.

The question then becomes whether there are allocations of EE roles that produce better results than other allocations. To address this question, we will start with the identification of principles for assessing the success of the allocation of administrative and other program functions.

**C. There is no magic formula for allocation of administrative functions in traditional EE programs.**

In 2003, two respected groups of EE experts reviewed the question of the ideal allocation of administrative costs for traditional EE offerings. While using slightly different criteria, the two papers came to very similar conclusions. Essentially, the experts wrote, for traditional EE programs, any of the three typical allocations of administrative responsibility can be successful.

At the University of California/Berkeley Center for the Study of Energy Markets, Blumstein *et al* reviewed the history of EE, and the administrative arrangements that emerged in the wake of electric restructuring.<sup>7</sup> At the Regulatory Assistance Project (RAP), Cheryl Harrington and Catherine Murray reviewed the varieties of administrative arrangements in place at the time.<sup>8</sup> Between them, the experts reviewed then-existing programs against six separate criteria for evaluating among EE administration options:

1. Compatibility with public policy goals
2. Effectiveness in the incentive structure
3. Ability to realize economies of scale and scope
4. Contribution to the development of an energy-efficiency infrastructure.
5. Accountability and public oversight
6. Smooth start-up and transition.

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<sup>7</sup> See note 6, above.

<sup>8</sup> Cheryl Harrington and Catherine Murray. *Who Should Deliver Ratepayer Funded Energy Efficiency? A Survey and Discussion Paper*. Gardiner, ME. The Regulatory Assistance Project. May 2003.

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The Berkeley team concluded that “no single administrative structure for energy efficiency programs has yet emerged in the U.S. that is clearly superior to all of the other alternatives.”<sup>9</sup> RAP concluded that it is less important that any given entity administer the programs, than that EE efforts enjoy the following three characteristics:

1. Clarity of stated purpose at every level (from overarching goals to individual program design and evaluation metrics).
2. Consistency of policy over time.
3. Consensus of key stakeholders, as to goals and structure, as well as program design, measurement metrics, performance based regulation.<sup>10</sup>

The Berkeley team and the RAP authors thus came to the conclusion that administrative structure was less important than other factors, while using similar criteria for determining the effectiveness of EE program administration.

For traditional programs (e.g. rebates and education), the Berkeley team concluded that no single preferred administrative approach was going to emerge soon. The Berkeley team did note that policy makers might want to insist on particular administrative arrangements for market transformation initiatives:

[A]dministrative arrangements that are best suited to support market transformation may be different from the arrangements that are best for resource acquisition.<sup>11</sup>

It is useful to note that there are a number of different aspects of what has been called “market transformation.” Different administrative approaches may be called for, then, depending on the specific market transformation goal. To the extent that the goal is merely to build up and maintain a private market of vendors and contractors who can fulfill program requirements, the constancy of program funding is probably the single most important tool. It is not possible for a community of vendors or contractors to flourish if their business is subject to expanding and collapsing with the vagaries of public policy. This is true whether the contractors work for a utility, or for performance contracting intermediary, for state agencies, or for a statewide “efficiency utility.”

To the extent the goal is to create market structures that reach consumers who cannot be reached by EE rebate and education programs, differences in the design of the EE initiatives may require or permit changes in the allocation of administrative responsibilities.

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<sup>9</sup> Blumstein, *et al*, at 16.

<sup>10</sup> Harrington and Murray, at 6.

<sup>11</sup> *Id.*

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In a Pay As You Save® initiative, for example, the goal is to create a market for efficiency that serves customers whose hurdle rates, mistrust of vendor's promises, lack of upfront cash, inability or unwillingness to take on debt, and (in some cases) split incentives mean that education and rebate programs<sup>12</sup> will not be useful. Paradoxically, many such customers have shown they are willing to pay all or most of the cost of the efficiency themselves, so long as the specific market barriers are overcome by sound market design. Further, if the PAYS® model is followed, private market actors will come forward and fulfill the roles they ordinarily do in the private efficiency market, because the market redesign gives them an opportunity to make sales they cannot without such a redesign. Indeed, while the PAYS® pilots in operation today rely on the utility to provide upfront capital, certify measures, and contract for major installations, a PAYS® market could be created in which the utility had no more role than billing and collecting the PAYS® repayment charges.

In such a model, various sources of capital (e.g. banks, pension funds, venture capital, etc.) would provide the upfront cash for installations, and an independent certification agent (such as a state Energy Office or a non-profit like the Vermont Energy Utility) could determine measure eligibility, provide commissioning in business applications, qualify contractors and vendors, and account for the funds paid over by the utility (including paying back the financing, and paying the contractor and vendor invoices). Marketing the products could be entirely left to vendors and contractors, whose self-interest in getting business in this untapped sector would support their efforts. Thus, roles that are often consolidated with the utility, or with the utility and contracted EE suppliers (and their contractors), are taken on by a variety of entities, each acting consistently with their own self-interest or self-definition (in the case of government or non-profit organizations serving as independent certification agent).

**D. Colorado PUC's decisions as to EE administration should follow from its decisions regarding the market barriers it wishes to see overcome, and the initiatives it determines should be offered to customers to overcome such barriers.**

In reviewing and approving EE programs and program administration, there is a logical sequential analysis a regulator should follow to obtain optimum results. The regulator should ask, and obtain answers, to the following questions:

- (a) What are the market barriers to customers choosing all cost-effective EE?
- (b) What are the effective ways to overcome the various market barriers?
- (c) Who are the entities able to execute any given way to overcome identified market barriers with excellent performance and at the least cost?

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<sup>12</sup> Note: not applicable if the rebates are close to 100%. It may be argued that if the strategy to reduce upfront market barriers is to provide substantial rebates, it might require lower total ratepayer funding to provide direct installation at 0 copay.

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(d) What incentives, if any, does each entity require in order to provide such optimal performance of such administrative functions?

(e) What is the best mix of least-cost and superior administrative results for various EE offerings?

As the discussion above suggests, more than one item will appear on the list of market barriers, and more than one item will appear on the list of effective means. Similarly, in most cases, there is likely to be more than one entity identified on the list of those best able to execute any given program designed to overcome the identified market barriers using the identified means.

When considering how to maximize cost-effective efficiency in the state, the most important questions concern the basics of EE: identifying remaining market barriers, determining how to transform markets to overcome those barriers, and providing consistent support for the policies implemented to overcome the persistent barriers. Choice of administrator(s) need not be the dominant issue when regulators try to create a set of initiatives that will optimize the EE installed in the state.

In some cases, the utility will have to be involved in at least some aspects of program administration. Any on-the-bill financing initiative (such as PAYS®, for example) naturally requires utility administration of the billing. In such cases, the utility must be involved at least to bill the participating customers and turn the funds over to those who put up the money for the measures and installations.<sup>13</sup> But the utility involvement could be limited to these two tasks, if that were the preference of the Commission, without harming the success of the initiative.<sup>14</sup>

Where more than one entity can perform a function (e.g. providing a point-of-sale rebate, selecting measures eligible under the program, etc.), the Commission need not assume that the utility is the only entity capable of performing the functions well. In the case of rebate and education programs, for example, it appears that utility and non-utility administrations have worked comparably well. No special incentive would be

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<sup>13</sup> In the case of PAYS®, this would typically be an intermediary, independent certification agency, who would distribute the utility receipts to the funders, who in turn would be a wide variety of entities (such as venture capitalists, pension funds, government bonding agencies, banks, vendors, and other capital providers).

<sup>14</sup> Indeed, in the case of on-the-bill financing offerings, it may be that non-utility entities would actually be better suited to raising the funds for the up-front financing of efficiency measures, and perhaps other tasks aside from the billing and collecting of the charges to reimburse the cost of the measure on the bill. Non-utility sources of financing would not face any conflict between promoting greater efficiency (and thus maximizing the budget for profitable efficiency financing) and profits from sales of utility service. Rather, the more EE for which the initiative provided up-front funding, the larger their returns; their incentive takes the form of the interest payments on the funds so advanced.

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appropriate to induce a utility to perform the administration, because non-utility administration can handle the task as well.<sup>15</sup>

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<sup>15</sup> If for separate reasons policy-makers wish to have the utility administer rebate and education initiatives, policy-makers may need to decouple sales from profits, and further give the utility incentives for performing this task well, to overcome the adverse impact of sales reductions on utility earnings. In such a case, care needs to be taken to construct the incentives in such a way that they reward actual cost-effective savings, rather than dollar activities or other metrics that may overstate the efficiency obtained.

### Some References on Market Barriers and Program Administration

- Paul A. Cillo & Harlan Lachman, [Pay-As-You-Save Energy Efficiency Products: Restructuring Energy Efficiency](#), A report by the Energy Efficiency Institute for the National Association of Regulatory Commissioners. December 1, 1999.
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