



# **ANNUAL REPORT | 2010**

**FEBRUARY 2012**



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## **1.1 Introduction**

### 1.1.1 Overview

Efficiency Vermont savings results rebounded significantly in 2010 from performance in 2009. This was a reflection of an improving economic climate, and a positive response to Efficiency Vermont strategies that identified new savings opportunities and new approaches for working in a difficult economy. **Table 1** presents Efficiency Vermont’s performance in 2010 compared to that of 2009.

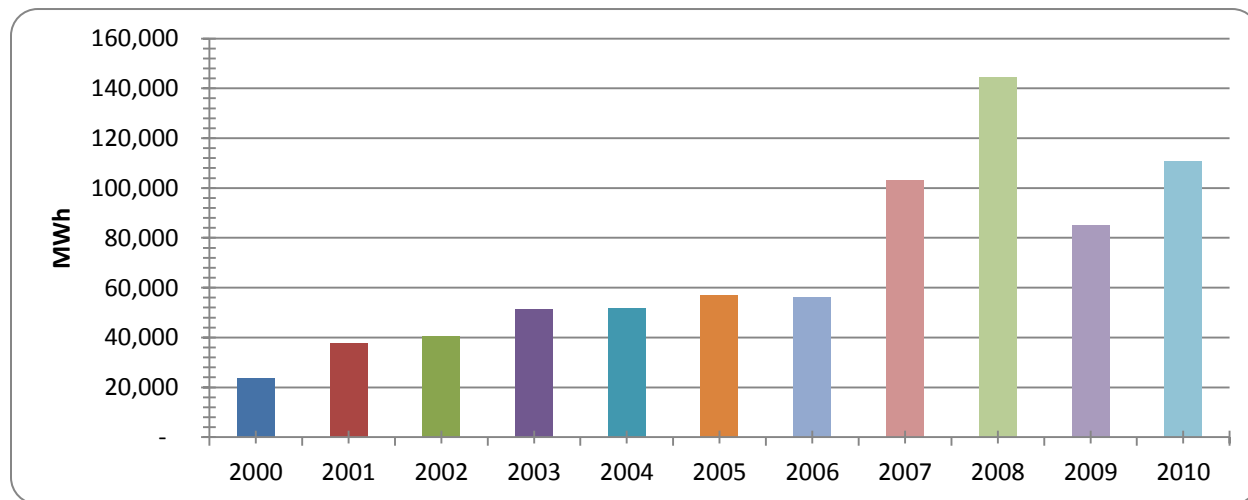
**Table 1. Key Results for Efficiency Vermont, 2009 and 2010**

	2009	2010	Change
Energy savings	85,000 MWh	111,000 MWh	+30%
Total Resource Benefits <sup>1</sup>	\$101.4 million	\$112 million	+10%
CO <sub>2</sub> emissions avoided through efficiency	540,000 tons	805,000 tons	+50%

Important strategies that contributed to these results were aggressive incentives and a corresponding marketing campaign for retail efficient products, full implementation of the Account Management service to large commercial and industrial customers, and significant new lighting initiatives.

In the context of Efficiency Vermont’s 11-year history, performance in 2010 is second only to its performance in 2008. **Figure 1** presents a comparison of annualized MWh savings across the 11 years of Efficiency Vermont’s existence.

**Figure 1. Annualized MWh Savings, 2000–2010**



Efficiency Vermont was also involved in significant regulatory activity in 2010. It participated in proceedings for developing 20-year energy efficiency forecasts,

<sup>1</sup> 2009 dollars.

closely coordinating its work with the state’s transmission organization, the Vermont Electric Power Company (VELCO), and with the state’s distribution utilities and other stakeholders. The year also marked the conclusion of a multiyear proceeding that paved the way for Efficiency Vermont to transition from a contract model to the franchise-like Order of Appointment structure approved by the Vermont Public Service Board.

## 1.1.2 Economic Value for Vermont

As an indicator of its cost-effectiveness, Efficiency Vermont continues to provide significant economic value for Vermont ratepayers. In 2010, the benefit-to-cost ratio of Efficiency Vermont services was 2.3 to 1. The details supporting this ratio are presented in **Table 2**.

**Table 2. Net Lifetime Economic Value of Energy Efficiency Investments, 2010**

<b>Benefits</b>	<b>\$131,600,000</b>	<b>Lifetime economic value of efficiency investments<sup>2</sup></b>
<b>Minus costs</b>	<b>\$35,400,000</b>	<b>Efficiency Vermont costs</b>
	<b>\$21,700,000</b>	<b>Costs paid for by participants and third-party investments</b>
	<b>\$57,100,000</b>	<b>Total costs</b>
<b>Equals net benefits</b>	<b>\$74,500,000</b>	<b>Net lifetime economic value to Vermont</b>

In addition to the net lifetime economic value of the investment in efficiency to Vermont ratepayers, Total Resource Benefits—the value of avoided costs for electricity, fossil fuel net savings, and water savings that accrue from electric energy efficiency—have also seen a substantial increase in 2010 from 2009. These results represent a significant increase in economic benefits delivered to Vermont ratepayers in comparison to the prior year, across all major markets, as shown in **Table 3**.

**Table 3. Economic Benefits of Efficiency Vermont Services, 2009 and 2010**

<b>Total Resource Benefits by Market</b>	<b>2009</b>	<b>2010</b>	<b>Change</b>
<b>Business New Construction</b>	<b>\$15,000,000</b>	<b>\$16,300,000</b>	<b>+9%</b>
<b>Business Existing Facilities</b>	<b>\$39,400,000</b>	<b>\$46,500,000</b>	<b>+18%</b>
<b>Residential New Construction</b>	<b>\$8,200,000</b>	<b>\$8,900,000</b>	<b>+9%</b>
<b>Existing Homes</b>	<b>\$4,100,000</b>	<b>\$7,800,000</b>	<b>+93%</b>
<b>Retail Efficient Products</b>	<b>\$27,600,000</b>	<b>\$32,100,000</b>	<b>+16%</b>
<b>Average Rate of Return on Investment</b>			
<b>Business</b>	<b>49%</b>		
<b>Residential</b> (includes Retail Efficient Products)	<b>105%</b>		

Efficiency continued to be an excellent value compared to the costs of other sources of energy. In 2010, Efficiency Vermont delivered energy efficiency at 4.0 cents per

<sup>2</sup> The figure represents Total Resource Benefits plus savings from reduced operations and maintenance costs.



kWh. Taking into account participating customers' additional costs and savings, the levelized net resource cost of saved electric energy in 2010 was 1.9 cents per kWh. Comparable electric supply in 2010 cost 10.8 cents per kWh. On a statewide basis, this differential adds up to significant savings for Vermont homes and businesses. Vermont utilities would have had to pay an estimated \$125.1 million over the lifetime of the measures to generate or purchase electricity if these 2010 efficiency investments had not been made.

Investments in energy efficiency continue to bring economic benefits not just to Vermont ratepayers, but also to the private-sector partners that deliver services on behalf of Efficiency Vermont. For instance, Efficiency Vermont's Home Performance with ENERGY STAR® contractor partners completed nearly 600 jobs worth \$3.5 million in 2010.<sup>3</sup> That network now totals 88 contractors around the state—more than double the number in 2008.

Efficiency Vermont also supports a growing network of retailers and distributors throughout the supply chain. On the retail side alone, Efficiency Vermont now works with more than 310 outlets, helping them promote and sell efficient products. This effort, in turn, contributes to the stores' bottom lines. In 2010, sales of efficient appliances, lighting, and consumer electronics promoted by Efficiency Vermont totaled approximately \$19.1 million.

### 1.1.3 Energy Savings

In the context of its goals for the current performance period, 2009–2011, Efficiency Vermont enters the final year of this period having achieved 53% of its total goal for MWh savings and 57% of its total goal for Total Resource Benefits.

Efficiency Vermont reports greater savings from reducing peak demand in 2010 than in 2009, as shown in **Table 4**.

**Table 4. Comparison of Efficiency Vermont Peak Demand Reductions, 2009 and 2010**

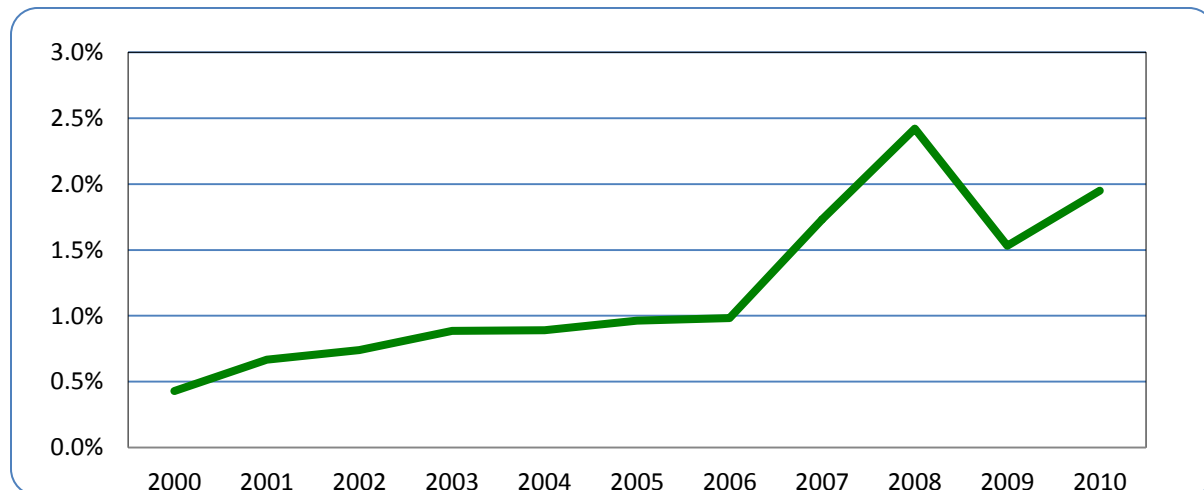
Type of demand reduction	2009	2010	Change
Summer peak	12.9 MW	16.3 MW	+27%
Winter peak	14.9 MW	20.2 MW	+36%
Summer Geographic Targeting peak	5.0 MW	5.6 MW	+13%
Winter Geographic Targeting peak	5.1 MW	6.7 MW	+31%

<sup>3</sup> For context on the economic impact of this program, these figures also include work completed with support from Green Mountain Power's Energy Efficiency Fund. For more information about the fund, see [http://www.encyvermont.com/about\\_us/energy\\_initiatives/green.mountain\\_power\\_eef.aspx](http://www.encyvermont.com/about_us/energy_initiatives/green.mountain_power_eef.aspx).

Energy savings that resulted from efficiency measures installed in 2010 provided an estimated 1.95% of Vermont’s overall electric energy requirements for the year.<sup>4</sup> Cumulatively, efficiency measures installed since 2000 provided 11%<sup>5</sup> of the state’s electric energy requirements in 2010.

**Figure 2** presents a year-by-year comparison of electricity savings as a percentage of statewide electric resource retail sales.

**Figure 2. Savings from Efficiency as a Percentage of Statewide Electric Resource Requirements Since 2000**



Efficiency Vermont’s mandate includes not only electric efficiency, but heating and process fuels efficiency as well, allowing for a more comprehensive approach to energy savings. Efficiency Vermont’s first full year of delivering comprehensive thermal efficiency and electric efficiency services occurred in 2010. Efficiency Vermont savings for heating and process fuels efficiency, primarily associated with the Home Performance with ENERGY STAR service, totaled 32,000 MMBtu in 2010. These services are funded through a combination of revenues from the State’s participation in the Regional Greenhouse Gas Initiative (RGGI) and revenues obtained through the Vermont Energy Investment Corporation’s participation, on behalf of Vermont ratepayers, in the regional grid’s Forward Capacity Market.

### 1.1.4 Environmental Benefits

In addition to higher levels of energy savings and economic benefits, Efficiency Vermont performance in 2010 also resulted in higher levels of environmental benefits. These benefits resulted from avoided emissions associated with certain types of electricity generation, as shown in **Table 5**.

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<sup>4</sup> To reflect the relationship between energy efficiency programs and the state’s overall electricity requirements, this figure includes savings from efficiency measures installed by the Burlington Electric Department and via the Green Mountain Power Energy Efficiency Fund.

<sup>5</sup> This number accounts for decay of expired measures.

**Table 1. Environmental Benefits of Efficiency Vermont Services, 2009 and 2010<sup>1</sup>**

Pollutant	Reduction		
	2009	2010	Change
Carbon dioxide	540,000 tons	805,000 tons	+49%
Nitrogen oxides	250 tons	330 tons	+32%
Sulfur oxides	800 tons	1,100 tons	+32%

The reductions in carbon dioxide emissions are equivalent to removing 143,000 cars from the road for a year.

### 1.1.5 Efficiency Vermont Performance and Goals

Efficiency Vermont operates on a performance-based model, with goals tied to a formula for receiving at-risk compensation. Under this model, there is a significant focus on meeting aggressive “stretch goals” to encourage high levels of performance and innovation. As noted elsewhere, Efficiency Vermont’s performance improved significantly in 2010 compared to the prior year, as reflected in **Table 6**.

**Table 2. Efficiency Vermont 2010 Achieved Performance Compared to Projections in the Annual Plan**

	2009-2011 Annual Plan 3- Year Projection	2009-2010 Cumulative Results	Progress Toward 3- Year Goal
<b>Performance Objectives</b>			
Annual MWh savings	360,000	191,124	53%
Total Resource Benefits (TRB)	\$342,400,000	196,824,269	57%
Summer peak kW savings	51,200	29,153	57%
Winter peak kW savings	54,000	35,073	65%
Summer peak kW savings in Geographic Targeting areas	8,100	9,085	112%
Winter peak kW savings in Geographic Targeting areas	2,400	1,999	83%
<b>Minimum Performance Requirements</b>			
Ratio of gross electric benefits to spending	1.2 : 1	2.38 : 1	N/A
2009-2011 spending for residential customers	\$19,700,000	18,679,486	95%
2009-2011 spending for low-income customers	\$6,307,000	3,482,181	55%
Number of small business customers served	700	2,104	301%
Total Resource Benefits per county	Specific minimums for each county	See Table 2.1.17	N/A

<sup>1</sup> Carbon dioxide reduction reflects benefits from both electric and non-electric initiatives. Nitrogen oxides and sulfur oxides reductions reflect benefits from electric initiatives only.

## 1.1.6 Support for Vermont Businesses and Institutions

Savings in the Business New Construction and Existing Business markets for 2010 totaled 8,900 MWh and 47,000 MWh, respectively, delivering Total Resource Benefits of \$63 million. Savings through efficiency continue to provide an important financial benefit for Vermont businesses, particularly as the economy continues its recovery. The average return on investment for efficiency improvements made by business customers in 2010 was 49%.

Efficiency Vermont fully implemented its Account Management service initiative for large commercial and industrial customers in 2010. The Account Management service dedicates staff to build and manage long-term relationships with customers. The Account Management service now manages energy efficiency technical assistance and incentives for 250 business customers, and in 2010 it supported customers in achieving 29,000 MWh of project savings. Account Management enables Efficiency Vermont to align its long-term initiatives with customers' long-term objectives. The longer timeframe afforded by the Order of Appointment structure will allow Account Management activity to grow naturally, in response to relationship building, rather than according to initiatives' time constraints. As a result, Account Management can deliver efficiency services to the state's largest users not only now, but also well into the future.

Efficiency Vermont continued to serve large and small commercial customers in 2010 with market initiatives targeted at institutional sectors such as hospitals and schools. Each initiative is supported by Efficiency Vermont staff who combine specialized market knowledge with technical expertise. This combination allows them to understand and manage to the unique conditions under which particular sectors operate. In 2010, Efficiency Vermont added market initiatives in the commercial sector for the restaurant and lodging industries.

Technology-specific incentives were also a focus of outreach for business and commercial customers. Two new services for efficient lighting, newLIGHT and RELIGHT, leverage the expertise of lighting design professionals, contractors, and distributors, who work in collaboration and partnership with Efficiency Vermont. Beyond lighting, Efficiency Vermont also offered installation training sessions in such specialized topics as compressed air, working in cooperation with the U.S. Department of Energy (DOE).

In heating and process fuels, Efficiency Vermont launched a 2010 service called Building Performance, an extension of Home Performance with ENERGY STAR. It provides incentives for comprehensive insulation and air-sealing of multifamily, small business, and mixed-use buildings, delivered through a network of private-sector contractors. Efficiency Vermont also began a new boiler and heating system incentive targeted primarily at small businesses.

Other highlights for 2010 Efficiency Vermont services to business and institutional customers:

- 56,000 MWh savings, \$63 million in Total Resource Benefits, 8.1 MW reduction in winter peak demand, and 10 MW reduction in summer peak demand
- Participants: 3,000
- Average return on investment for participants: 49%
- Ratio of Total Resource Benefits to Efficiency Vermont costs: 2.9 to 1

### 1.1.7 Retail Efficient Products

Savings from Retail Efficient Products increased substantially in 2010, particularly in the final quarter of the year. Compared with the prior year, savings were higher by 43%.

A significant portion of those savings came from an end-of-year promotion of specialty compact fluorescent lightbulb (CFL) products—primarily three-way and dimmable bulbs. Increasing the market share of these products in comparison to standard spiral CFLs is a major strategy identified in the Annual Plan. In 2010, sales of these specialty products totaled 300,000 units, resulting in 25,000 MWh in savings. Specialty CFLs made up 39% of total CFL sales for 2010, compared with 18% in 2009. Standard spiral CFLs, although not part of this promotion, also saw increased sales in late 2010.

Looking ahead to the next generation of efficient lighting, Efficiency Vermont significantly expanded its incentive offerings for light-emitting diode (LED) products in 2010. Efficiency Vermont now offers incentives for 14 different LED products, including recessed canister and track lighting. Because of the comparatively high cost of LEDs, Efficiency Vermont's focus for promotion of these products in 2010 was on commercial applications with substantial hours of usage. This focus will eventually shift as costs come down and the technology becomes cost-effective for residential uses.

A second-refrigerator and freezer turn-in and recycling service was launched statewide in 2010, after a pilot was completed in Geographic Targeting areas in 2009. This service provided removal and safe recycling of inefficient refrigerators and freezers being used in such places as garages and basements. In 2010, approximately 2,700 units were collected, with associated savings of 2,600 MWh.

Efficiency Vermont continued its efforts to expand its base of retail partners in 2010, with a new partnership initiative for consumer electronics. The initiative encourages consumers to consider energy efficiency when purchasing consumer electronics. Participating retailers included the dominant market actors for these products, Sears and Best Buy.

Efficiency Vermont also continued its program to provide CFLs to the Vermont Foodbank for distribution to low-income Vermonters, distributing 50,000 CFLs in 2010 through this channel.

Other highlights for 2010 Efficiency Vermont services in Retail Efficient Products:

- 50,000 MWh savings, \$32.1 million in Total Resource Benefits, 11.1 MW reduction in winter peak demand, and 5.8 MW reduction in summer peak demand
- Participants: 34,000
- Average return on investment for participants: 161%
- Ratio of Total Resource Benefits to Efficiency Vermont costs: 5.6 to 1

### **1.1.8 Comprehensive Energy Efficiency Services for Residential Customers**

Since 2008, Efficiency Vermont has been authorized to provide comprehensive “all fuels” energy efficiency services to its customers. Residential customers received these services primarily via their participation in the Home Performance with ENERGY STAR service. This service, delivered through a network of private contractors, was aggressively promoted with a marketing campaign of open houses, advertising, direct mail, and radio advertising. The campaign also included follow-up mailings to homeowners for whom energy audits had been conducted but who had not yet proceeded with a project. In 2010, it provided incentives of up to \$2,500 for comprehensive energy efficiency retrofit improvements.

Home Performance with ENERGY STAR saw strong growth in 2010, with a 20% increase in projects from the prior year. Overall savings attributable to heating and process fuels efficiency services totaled 18,500 MMBtu, up 370% from 2009. Total Efficiency Vermont savings for residential customers, not including savings from Retail Efficient Products, were 4,600 MWh in 2010, an increase of 10% from the prior year.

In Residential New Construction, Efficiency Vermont continued to see strong participation in the Vermont ENERGY STAR Homes service, despite slow activity in the real estate market. In 2010, 330 homes were completed with this service. Savings associated with these projects totaled 650 MWh, a 7% increase over 2009 results. Efficiency Vermont substantially revised its Residential New Construction service in 2010, in anticipation of the new ENERGY STAR Homes specification, and with the objective of supporting the State’s goals for energy code compliance. Implementation of these changes will take place in 2011. In recognition of its leadership in this and other areas, Efficiency Vermont received a *Partner of the Year* award in 2010 from the U.S. Environmental Protection Agency.

In 2010, Efficiency Vermont offered the second round of the Vermont Community Energy Mobilization initiative, training volunteers to go door-to-door, educating their friends and neighbors about energy efficiency, and installing basic efficiency measures where appropriate. In 2010, 280 volunteers in 18 communities visited approximately 550 homes, with installed measures producing 230 MWh in savings.

Efficiency Vermont continued its collaboration with Weatherization Assistance Program (WAP) agencies in 2010, serving Vermont's low-income community. The successful partnership in single-family homes was expanded to include low-income multifamily housing in 2010. Weatherization agencies are now directly installing electrical efficiency measures such as CFLs and energy-efficient refrigerators in these housing units.

Other highlights for 2010 Efficiency Vermont services to residential customers:<sup>7</sup>

- 4,600 MWh savings, \$16.8 million in Total Resource Benefits, 1,040 kW reduction in winter peak demand, and 500 kW reduction in summer peak demand
- Participants: 6,600
- Average return on investment for participants: 42%
- Ratio of Total Resource Benefits to Efficiency Vermont costs: 2.7 to 1
- Delivery of services to low-income Vermonters, resulting in savings of 1,700 MWh for multifamily housing and 900 MWh in single-family homes.

### 1.1.9 Geographic Targeting

As directed by the Vermont Public Service Board, Efficiency Vermont continues to target additional investment in specific geographic areas where significant electricity transmission and / or distribution constraints exist. The objective of Geographic Targeting is to defer or eliminate the need for investment in costly transmission or distribution infrastructure by making additional investments in localized energy efficiency.

Geographic Targeting areas in 2010 were St. Albans, South Burlington, Rutland, and a group of areas in southern Vermont known as the Southern Loop. For each region other than the Southern Loop, the objective is to reduce peak demand during the summer months.

In 2010, Efficiency Vermont savings as measured by Geographic Targeting performance indicators were strong, with summer peak and winter peak demand reductions in those areas of 4.9 MW and 1.1 MW, respectively. This performance

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<sup>7</sup> These results do not include Retail Efficient Products, which are described on page 15.

represents savings increases of 15% and 18%, respectively, over 2009 results. Through the first two years of the 2009–2011 performance period, Geographic Targeting has achieved 112% of the summer peak targets and 83% of the winter peak targets.

In the business sector, Efficiency Vermont sought even greater savings in Geographic Targeting areas by expanding Account Management services to medium-sized customers beyond those who would otherwise be eligible. Efficiency Vermont also offered enhanced incentives for Geographic Targeting customers, typically 10–15% higher than the statewide average. Eligibility for the Lighting Plus direct installation service, described in more detail on page 26, was expanded to a broader group of small business customers in 2010.

For residential customers, Efficiency Vermont used strategies such as:

- “Key influencer” advertising, which called upon community leaders in Geographic Targeting communities to promote the sale of efficient products
- The Open Homes campaign, which promoted Home Performance with ENERGY STAR in the Geographic Targeting communities of East Dummerston, Proctor, and South Burlington
- On-site employee events for efficient product sales at major employer locations in Geographic Targeting communities
- Community-based campaigns in Rutland and South Burlington to promote the use of efficient products in collaboration with local community organizations

Efficiency Vermont’s community-based strategies, in Geographic Targeting areas and elsewhere, are described in more detail on page 24.

### **1.1.10 Other Activities**

Throughout 2010, Efficiency Vermont also engaged in activities beyond direct resource acquisition. Under the Order of Appointment structure, many of these activities will be budgeted and reported under “Non-Resource Acquisition.”

Highlights for 2010:

- Participation in the ISO New England Forward Capacity Market, in which energy efficiency savings are bid in as a resource for the regional grid. Delivery of savings under the first FCM delivery period began in June 2010, when Efficiency Vermont activity met Vermont Energy Investment Corporation’s (VEIC) (VEIC is the Efficiency Vermont contractor) commitment to deliver 39 MW of capacity. That commitment will increase to 49 MW in June 2011, 55 MW in June 2012, and 72 MW in



June 2013. This market participation resulted in \$2.8 million in net revenues. Efficiency Vermont reinvests FCM revenues in unregulated fuels efficiency services for Vermont homes and businesses.

- Assignment of \$200,000 in Efficiency Vermont funds to augment a larger federal project examining ways for low-income Vermont ratepayers to obtain greater electricity savings through smart grid technology and customer service.
- Participation in the statewide smart grid collaboration. Supported by carryover funds from the 2008 Energy Efficiency Utility (EEU) budget, Efficiency Vermont participated in planning processes addressing customer communications, rates, and the overall steering committee leadership. Efficiency Vermont was also an integral participant in a multi-utility procurement process for a smart grid-enabled online tool.
- The 12th annual Better Buildings by Design conference, which brought together contractors, design professionals, and others with whom Efficiency Vermont has collaborative relationships for training and continuing education offered by world-renowned energy efficiency experts. As in recent years, the conference sold out, attracting more than 1,000 attendees.
- Support for the process of revising both the residential and commercial building energy codes, in collaboration with the Vermont Department of Public Service and other relevant stakeholders.
- Implementation of the Energy Savings Account (ESA) self-management option for qualifying business customers. In 2010, one customer enrolled as an ESA participant. Efficiency Vermont continues to look for opportunities to make eligible customers aware of this new option, and for program improvements where needed.
- Completion of the restructuring process for the EEU, from a three-year contract model to a 12-year Order of Appointment. The new structure will enhance Efficiency Vermont's ability to meet long-term energy planning objectives for its customers and for the State, while recasting Efficiency Vermont as a regulated utility, comparable in treatment, oversight, and transparency to other regulated utilities.
- Commencement of the Demand Resources Plan Proceeding, the process for setting future budgets, goals, and other considerations for Efficiency Vermont under its new structure. This is a complex and multifaceted proceeding that encompasses forecasting (previously carried out separately through the Forecast 20 process), budgeting, program planning, and compensation.

The remainder of this Annual Report provides more detailed information on Efficiency Vermont's major strategies for achieving savings and serving customers; highlights from targeted market initiatives for specific customers and technologies; and a review of other Efficiency Vermont services and activities.

## **1.2 Major Strategies Review**

## 1.2.1 Overview

The *Efficiency Vermont Annual Plan 2009–2011* identified five major strategies that would support achievement of a significant share of Efficiency Vermont's savings goals:

1. **Account Management:** Customizing solutions for the specific business needs of large and medium-sized businesses
2. **High-performance Partners:** Influencing the availability of energy efficiency services and equipment by deepening relationships with wholesale suppliers, vendors, and other professionals operating upstream from end-use customers
3. **Community Energy Initiatives:** Expanding relationships with community and local business leaders, civic and religious organizations, and schools, to turn public awareness of energy efficiency into action
4. **Transition to specialty CFLs and LED products:** Working to expand retail sale of specialty CFLs, as well as LED products, as these products and technologies continue to evolve
5. **Direct installation of efficiency measures in Geographic Targeting areas:** Providing cost-effective energy efficiency measures at significantly reduced cost to qualified customers in defined areas

Highlights from 2010 for each of these strategies are provided below.

## 1.2.2 Account Management

Efficiency Vermont instituted the Account Management service in 2006 as a strategy for acquiring greater savings by proactively offering customized solutions for the specific needs of large and medium-sized businesses, and by establishing long-term relationships with these customers. This service was an expansion of Efficiency Vermont's existing Enhanced Customer Service initiative for large customers.

The Account Management approach provides business customers with a designated Efficiency Vermont staff person who knows the customer's business well and can serve as a single point of contact. Over time, as this approach has proved successful in meeting both customer needs and Efficiency Vermont savings goals, it has been expanded to encompass additional customers, particularly large customers in Geographic Targeting areas.

In 2010, Efficiency Vermont significantly strengthened its Account Management services by creating a dedicated Account Management division. This change was driven in part by the 2009 Voice of the Customer survey, which indicated an interest among these customers in increased levels of value and service available from Efficiency Vermont. The new division comprises eight account managers

specially trained to work effectively with Vermont's largest energy users. Each account manager has a plan with specific energy savings goals for the customers he or she works with. Many of these account managers work so closely with their customers that they have been issued identification badges allowing them free access to secure areas. The account managers work with a team of Efficiency Vermont engineers and technical staff to deliver a combination of financial incentives and technical assistance for these large energy users.

The Account Management service has instituted several new services in its first year. A quarterly e-mail newsletter is targeted at the specific needs and interests of large energy users. In an effort to share "best practices" stories and information, Efficiency Vermont held the first in a planned series of networking events in late 2010 at the National Life Group building in Montpelier, bringing together facilities managers and engineers from 35 companies around the state.

As of the close of 2010, Efficiency Vermont's Account Management service managed energy efficiency technical assistance and incentives for 250 customers, yielding 29,000 MWh in savings. This represents 25% of Efficiency Vermont savings for the year.

This is a notable increase in savings from 2009, when general economic conditions significantly constrained capital spending and investment among Efficiency Vermont's Account Management customers. The 2010 reductions in winter peak demand (3.8 MW) and summer peak demand (4.3 MW) were also considerably greater than 2009 results. In Geographic Targeting areas, these peak demand reductions help mitigate capacity strains on the transmission and distribution system, and can help delay or eliminate costly infrastructure upgrades.

Although overall economic conditions improved in 2010, considerable uncertainty remained. Efficiency Vermont account managers worked closely with their customers to identify significant savings opportunities that would reduce their operating costs and improve their financial situation. Efficiency Vermont was able to help these customers obtain significant economic value from investments in energy efficiency; Total Resource Benefits for projects undertaken by these customers in 2010 totaled \$37.3 million, with an average rate of return of 40%.

### **1.2.3 High-performance Partners**

The High-performance Partners strategy recognizes that market actors that operate upstream from Efficiency Vermont customers—actors such as suppliers, distributors, design professionals, builders, and contractors—can exert considerable influence on the efficiency-related choices these customers make in many markets. Establishing mutually beneficial business-to-business partnerships and collaborations with these entities can leverage the influence and customer access

they have in various markets and enable Efficiency Vermont to achieve higher levels of savings at lower cost to Vermont ratepayers.

High-performance Partners act as a multiplier for Efficiency Vermont's marketing and business development efforts, helping reach more customers than Efficiency Vermont can reach on its own. These relationships also contribute toward the goal of "market transformation"—making energy efficiency standard practice in existing market structures. This is a long-term strategy for which savings are expected to increase over time as business relationships develop and mature.

Building and working through these relationships advance another important objective of Efficiency Vermont: leveraging resources to support the development of an expanded, vibrant, private-sector infrastructure for delivering energy efficiency products and services in Vermont. Efficiency Vermont uses the Home Performance with ENERGY STAR service to support the development of a statewide network of private home energy improvement contractors; similarly, the High-performance Partners strategy seeks to expand and support a network of Vermont providers to ensure that efficient products and services are readily available for the full range of efficiency opportunities throughout the state.

Efficiency Vermont builds these relationships through methods such as product buy-down incentives, cooperative marketing, incentives offered to suppliers that stock energy-efficient products, direct vendor and installer sales incentives, design incentives, participation in trade shows and sponsorship of the Better Buildings by Design Conference, and customized training for upstream partners on technical information and the value of efficiency for their customers.

High-performance Partners initiatives continued to be strengthened in 2010. In particular, supply chain partnerships with vendors and contractors were expanded to promote greater market penetration and depth of savings in the commercial lighting and Heating, Ventilation, Air-Conditioning (HVAC) arenas. These efforts to work together with supply chain partners were deemed sufficiently successful and significant that peer-reviewed papers on both topics were accepted for presentation at the American Council for an Energy-Efficient Economy (ACEEE) biennial Summer Study conference.

In the field of lighting, three new upstream efforts were designed and implemented in 2010:

- **newLIGHT.** In this initiative, customers had to work with a contractor, distributor, or other lighting professional to be eligible for enhanced rebates. It motivated market partners to reach out to customers on behalf of Efficiency Vermont's programs, and to increase project participation through their own business development activities.

- **iLED.** Sales incentives offered to suppliers of screw-based (integral ballasted) light-emitting diode (iLED) bulbs had a similar impact. Product vendors actively promoted the technology to their existing customers and reached out to new customers as well. In this way, a win-win-win scenario was achieved: Customers achieved energy and dollar savings, supply chain partners achieved greater sales, and Efficiency Vermont (and Vermont's ratepayers) achieved greater levels of energy and demand savings.
- **RELIGHT.** This service provides design incentives as a way to encourage customers to enlist the support of lighting design professionals on lighting retrofit projects. In many cases, using a lighting designer in a retrofit project can significantly reduce capital costs and ongoing energy costs by reducing the number of total lighting fixtures needed, instead of replacing existing fixtures one-for-one. Energy savings over standard retrofit practice can often be greater than 40%. This benefit further helps customers see the link between the value of quality design and long-term energy savings.

Efficiency Vermont also made improvements to the ways in which it works with upstream HVAC partners in 2010. In particular, a new online system simplified submission of upstream rebate requests for HVAC distributors, and encouraged wider and more consistent participation by partners. Efficiency Vermont also launched cost sharing for cooperative advertising by HVAC partners in 2010, effectively helping them to get the word out about new technologies and offerings. These technologies included new commercial heating equipment, with rebates funded by FCM and Regional Greenhouse Gas Initiative (RGGI) revenues designated for heating and process fuels. An upstream incentive for suppliers of heating equipment was also added to Efficiency Vermont's HVAC standard rebates, further supporting wider promotion of rebates for efficient boilers and furnaces.

#### 1.2.4 Community Energy Initiatives

Several years ago, the Community Energy Initiative (CEI) strategy was developed to harness existing community interest in increasing energy efficiency, curbing global warming, and achieving energy independence, in support of Efficiency Vermont's contract goals. The initiatives that make up this strategy are informed by Efficiency Vermont's years of experience in community energy activity.

In 2010, Efficiency Vermont implemented social marketing strategies to increase participation in the Home Performance with ENERGY STAR service. These strategies included leveraging word of mouth by capturing testimonials from satisfied customers and sponsoring open homes to allow neighbors to tour completed projects. Efficiency Vermont also incorporated messaging informed by behavioral science into the Home Performance with ENERGY STAR marketing campaign, including memorable language, loss aversion, and comparisons to peers.

The Vermont Community Energy Mobilization initiative continued as a key feature of Efficiency Vermont's Community Energy Initiative work (see p. 17).

Vermont Business Energy Ambassadors, a similar initiative for small business customers, was launched in late 2010. It was designed to increase small business investment in energy-efficient products and to increase participation in Efficiency Vermont financial incentive programs. Efficiency Vermont collaborated with seven regional Chambers of Commerce to organize volunteers to conduct on-site "business energy visits." Each volunteer was trained to identify basic energy-saving opportunities while focusing primarily on lighting. The volunteers discussed newLIGHT financial incentives and other incentive opportunities with business owners.

Another new business-focused community initiative in 2010, the Employee Energy Efficiency Challenge (E3 Challenge), explored ways in which Vermont employers could help their employees improve energy efficiency at home. The pilot program took place from July through October 2010, and involved several large employers. Efficiency Vermont presented a menu of programs that employers could offer to their employees to help them achieve energy savings. For undertaking energy-saving actions, participating employees earned points that made them eligible for prize drawings.

As in prior years, Efficiency Vermont took part in numerous public and community events in 2010, such as trade shows and school presentations. Efficiency Vermont participates in these events to increase public awareness of energy efficiency opportunities and Efficiency Vermont services. In addition to directly participating in public events, Efficiency Vermont provides supporting services and materials for Home Performance with ENERGY STAR contractors, who take part in community events as a strategy for building market demand for their services.

There was an additional focus on community initiatives in Geographic Targeting areas. In 2010, Efficiency Vermont ran "key influencer" advertisements in community newspapers such as the *Rutland Herald*, *Manchester Journal*, *Brattleboro Reformer*, and *St. Albans Messenger*. Efficiency Vermont helped organize community events in these areas, in cooperation with local organizations. These events included an employee appreciation day at the Rutland Regional Medical Center celebrating the completion of efficiency projects, and staffing tables at events such as the Manchester Merriment holiday celebration, the Essex Home & Garden show, and the St. Albans Home Show.

Efficiency Vermont also helped the South Burlington Energy Committee on its 2010 "Switch" campaign to swap 30,000 incandescent bulbs for CFLs. Efficiency Vermont supported the campaign with cooperative advertising, an energy efficiency open house, and staffing a table at community events.



### **1.2.5 Transition to Specialty CFLs and LEDs**

In 2010, Efficiency Vermont continued its active promotion of dimmable, three-way, and candelabra CFL products. The results of that work are bearing fruit; savings from these products within the Retail Efficient Products sector alone totaled 25,000 MWh for the year. These CFLs accounted for 40% of total CFL sales in 2010, double the market share in 2009. Demonstrating the growth in market share of specialty CFLs over the course of the year, 24% of the CFL sales reported in the first quarter were specialty CFLs, and that percentage grew to 48% in the fourth quarter. Helping to drive these results was the launch of a specialty CFL media campaign, which educated consumers about these products through web, television, radio, and print-based advertising. In addition, the mix of products provided to the Vermont Foodbank for distribution to food shelves and pantries around the state now includes all specialty CFL products.

Further, Efficiency Vermont significantly expanded its incentive offerings for commercial LED products in 2010, to 14 different products, including streetlights and recessed canister downlights. In 2010, approximately 50,000 LED units were installed, compared to 3,200 in 2009; associated savings for this technology grew from 780 MWh to 8,800 MWh during that period.

Because of the comparatively high cost of LEDs, Efficiency Vermont's promotion of these products focused on commercial applications with substantial hours of usage. This focus will eventually shift as costs come down and this technology becomes cost-effective for residential uses.

### **1.2.6 Direct Installation of Measures in Geographic Targeting Areas**

Efficiency Vermont continued to provide its Lighting Plus service in 2010, offering direct installation of lighting measures for medium-sized businesses. The service primarily focused on the Rutland area, the newest Geographic Targeting location, and continued to be offered through a partnership with RISE Engineering as a turnkey solution for qualifying businesses.

One significant change to Lighting Plus in 2010 was that eligibility guidelines were modified to allow more small businesses to access the service. In 2010, 630 projects were completed in 460 facilities. These projects achieved more than 5,300 MWh in energy savings, and resulted in 1.1 MW reduction in winter peak demand and 1.6 MW reduction in summer peak demand. Program participation was promoted through telemarketing, the Vermont Business Energy Ambassadors program, newsletters, and lighting partners.

### **1.2.7 Selected Market Initiatives**

To best meet the unique needs of specific markets, Efficiency Vermont supports targeted market initiatives that develop custom strategies and plans for achieving savings based on the characteristics of that market. This section provides some

highlights of Efficiency Vermont's market initiative work in 2010 (Note: Not every market initiative is described here).

## **Business Customers**

### **Business New Construction**

The key objectives for the Business New Construction market initiative for 2010 were to achieve 9,000 MWh savings in 2010, to increase the market penetration of businesses participating with Efficiency Vermont to 210 projects in 2010, and to increase the participation of design and construction firms.

With the continued promotion of the Core Performance track for achieving high-performance new construction, Business New Construction saw an increase in savings to 8,900 MWh and an increase of 30% in the number of projects completed. Prescriptive projects enrolled and completed increased by more than 10% from 2009, to a total of 130. The 322 completed projects reflect a much higher participation rate overall for custom and prescriptive projects in the Business New Construction market.

Outreach to design and construction professionals was increased in 2010, and resulted in successful engagement on new construction opportunities. Efficiency Vermont hired a subcontractor to support and expand the outreach effort, informing plans for 2011.

Efficiency Vermont continued to promote Core Performance as a project process to achieve deeper, more comprehensive savings in a simple, predictable method for participants. Efficiency Vermont increased its recognition program for completed Core Performance projects, by packaging plaques, certificates, public relations support, and case studies and delivering them to successfully completed projects. One of the recognition objectives is to gain market awareness and encourage future businesses' participation and pursuit of high-performance buildings.

### **Small Business**

The new Small Business initiative represents Efficiency Vermont's first targeted outreach effort to the 17,500 Vermont small business owners (including 2,500 contractors) to increase awareness of Efficiency Vermont's services. This outreach contributed to an 80% increase in small business MWh savings between 2009 and 2010. The achievement in MWh savings was largely driven by an increase in basic commercial prescriptive projects. This outreach also resulted in a significant increase in commercial call volume to Efficiency Vermont, from 13% of total calls in 2009 to 35% of calls in 2010.

Efficiency Vermont reached out to small business customers with a mailing and related website content to increase awareness of Efficiency Vermont prescriptive incentives for lighting, HVAC, and compressed air. Building Performance, a pilot

program for building envelope measures, was highlighted through the Efficiency Vermont website and customer recommendations. Efficiency Vermont also promoted this initiative through its network of high-performance supplier and distributor partners, helping advance market transformation in this sector.

Efficiency Vermont has eclipsed its 2009–2011 performance goal for providing service to at least 700 small business customers. As of the end of 2010, Efficiency Vermont had successfully worked with 2,100 of those customers.

### **Dairy Farms and Agriculture**

The key objectives in 2010 for Efficiency Vermont’s Agriculture market initiative were to maintain services and offerings during the first part of the year, and to increase participation and savings in the second part of the year. Efficiency Vermont’s promotion of barn fan projects and increased lighting rebates resulted in the completion of a record number of projects and energy savings for this initiative.

Those objectives were significantly exceeded in 2010, with savings of 2,500 MWh representing a threefold increase over 2009 performance. In addition, 555 MMBtu were saved as a result of heat recovery unit projects. More than twice as many projects were completed. For the state’s agricultural community, a sector of Vermont’s economy that has significant ongoing challenges, this rapid increase in savings and project completions is an important achievement.

More than half of the 2010 participants had never previously completed a project with Efficiency Vermont. The market initiative equipment suppliers and manufacturers were active partners in helping promote Efficiency Vermont offerings for this market, in some cases hiring additional staff specifically to do so.

As with many other Efficiency Vermont initiatives, lighting and barn fan measures also provided important non-energy benefits—not the least of which was that these measures helped to promote improved dairy production.

### **Retail Chains and Stores**

For Efficiency Vermont’s Retail Market initiative in 2010, the primary objectives were to develop relationships with third-party energy management companies to help engage national retail chains accounts, and to cultivate relationships with the Vermont Retail Association to engage medium-sized and independent retailers. Efficiency Vermont developed an aggressive contractor incentive structure for third-party organizations to help promote Efficiency Vermont services with national retail chains.

The iLED and newLIGHT lighting retrofit services fueled the retail market for both chain and non-chain stores in 2010. These services resulted in the completion of 345 projects in 2010. Total MWh savings for 2010 were 8,750, and include the chain and non-chain retail market.

Contractors and distributors played key roles in targeting retail customers for participation in newLIGHT and iLED, as did Efficiency Vermont's efforts to engage energy management companies and the Vermont Retail Association. This activity allowed for the opening of new communication channels to educate and inform customers about the benefits of energy efficiency.

### **Grocery Stores**

In 2010, there were three key objectives for the Efficiency Vermont Grocery Store market initiative. The first was the launch of the Green Grocer marketing campaign, in which Efficiency Vermont targeted marketing materials to the 500 locations that make up the medium-sized and independent segments. The second key objective was to continue outreach to these grocers encouraging them to install energy efficiency measures and educating them about the benefits of energy efficiency. Finally, Efficiency Vermont used Account Management principles to maintain strong relationships with the three large supermarket chains.

As part of the Green Grocer strategy, Efficiency Vermont designed a new booth specifically for the Vermont Food Industry Convention & Expo, held in September 2010. The event featured 140 exhibit booths and attracted 800 food and beverage retailers. Efficiency Vermont's strategy also featured trade publication advertising, articles, and direct support from customer service and field staff.

As a result of this initiative, energy savings for medium-sized and independent grocery stores are up 60%, and the number of projects in 2010 was nearly double those completed in 2009. Closer relationships with suppliers and contractors also helped to drive these improved results.

Efficiency Vermont has continued to build relationships with the state's largest grocery stores through its Account Management approach for the three large chains (Hannaford, Shaw's, and Price Chopper) and the Vermont Grocers' Association. Education and outreach about the value of energy efficiency investments has strengthened the relationships with these stakeholders, and has influenced the segment's customers to go deeper in their energy efficiency efforts. An example of "deeper" is the installation of high-performing "zero energy" doors on refrigerator and freezer cases.

A new area of development for this market initiative will be country stores; Efficiency Vermont will work in partnership with the Vermont Alliance of Independent Country Stores and the Vermont Specialty Food Association.

### **Convenience Stores**

The main objectives for the Convenience Store market initiative for 2010 were to engage more participants, to increase the number of participants taking a comprehensive approach to installation of energy efficiency equipment, and to

educate store owners about the value that Efficiency Vermont technical and financial assistance can add. The initiative includes 10 targeted convenience store chains.

Current prescriptive incentive levels for refrigeration and lighting are driving more projects across multiple stores in chains. The Lighting Plus direct installation service continued to play a significant role in producing savings in this market, as did the NewLIGHT and iLED services. The 57 completed projects and savings of 800 MWh in 2010 represented approximately a twofold increase in participation and an increase of approximately 66% in savings over those achieved in 2009.

The Convenience Store initiative continues to expand and develop strong relationships with market actors—particularly contractors in lighting and HVAC and refrigeration. The installation of LEDs in refrigerated cases and gas station canopies continues to grow this market, thanks to these relationships and robust prescriptive rebates.

### **Ski Areas**

The primary goal for the Ski Area initiative in 2010 was to reenergize the program, readying it to attain significant savings as the economy becomes more positive. The year saw a significant increase in both the number of projects and the level of savings: 50 projects were completed, resulting in 2,900 MWh in savings.

This market initiative focuses heavily on repeat customers, since the number of ski areas in Vermont is relatively small. The launch in 2010 of the Lodging Market initiative allowed Efficiency Vermont to take a total resort approach for the Ski Area initiative. The addition of the account managers assigned to key resorts and the continued support of the industry through the Vermont Ski Areas Association sponsorship helped to both engage this market and strengthen relationships.

### **State, Municipal, and Educational Facilities**

#### *Water and Wastewater Facilities*

The key objectives for the Water and Wastewater Facilities initiative in 2010 were to continue providing education, technical, and financial support to plant operators, design professionals, regulators, municipal decision makers, and other stakeholders. The desired outcomes of these objectives are to promote new efficiency opportunities and enable project implementation.

Early in 2010, Efficiency Vermont completed and verified wastewater facility energy intensity data for benchmarking the State's wastewater plants. These data helped to inform Efficiency Vermont staff on kWh per million gallons of wastewater treated, as a point of comparison for other facilities with similar treatment processes. In 2010, Efficiency Vermont continued to promote new process technologies with substantial potential for energy savings across the market. For instance, Efficiency Vermont staff presented information on turbo blowers at the

annual conference of the New England Water Environment Association. This information has helped to expand awareness of an aeration technology at least 12% more efficient than most other technologies.

Additional outreach to market actors occurred through ongoing collaborations with two primary member organizations, the Vermont Rural Water Association (VRWA) and Green Mountain Water Environment Association. Efficiency Vermont participated in their annual meetings, trade shows, and joint training efforts, and contributed to articles in association newsletters.

Efficiency Vermont contracted for a VRWA staff person to perform site visits, identify efficiency opportunities, and help develop projects with Vermont's wastewater facilities—all occurring in the fourth quarter of 2010. Water and wastewater facilities completed projects with more than 2,400 MWh of savings, representing more than a fivefold increase over performance achieved in 2009.

### *State Buildings*

Efficiency Vermont had three key objectives in 2010 in its work with the State of Vermont. The first was to establish a single point of contact for technical support and project assistance for the Vermont Department of Buildings and General Services (BGS) staff. The second objective was to elevate the value of efficiency as an investment with decision makers. The third was to strengthen the value of Efficiency Vermont as a key collaborative organization with the State.

A vital innovation in 2010 was Efficiency Vermont's collaboration with Burlington Electric Department and BGS. Together, the three entities created quarterly and annual feedback reports on the State's energy efficiency projects. Efficiency Vermont also highlighted multiple state projects such as the Middlesex Archives building and the Calvin Coolidge Visitor Center in Plymouth. The State achieved Core Performance recognition for the Archives and the new State Forensics building in Waterbury. Other energy efficiency efforts included participation in iLED and new exterior LED lighting upgrades.

The State of Vermont completed the final pieces of a major performance contract for the 133 State Street (Montpelier) and Waterbury complexes. Together, these projects were expected to yield 130 MWh in annual savings.<sup>8</sup>

The State achieved approximately 900 MWh of first-year annualized savings through 53 projects completed with Efficiency Vermont in 2010. This total project number represents an increase of 40% over 2009's performance.

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<sup>8</sup> It is important to note that this activity was completed prior to Tropical Storm Irene and its effects on the Waterbury state office complex.

Through the Account Management approach, Efficiency Vermont obtained high-level state agency leadership support for efficiency projects. Staff assigned to the state buildings market provided targeted technical assistance and financial analysis that helped support the State's decision-making process for its building improvements. This was particularly evident from the increased use of the revolving fund established for projects outside the major maintenance budget.

The State's collaboration with Efficiency Vermont was sufficiently strong that it resulted in not only opportunities to achieve greater efficiencies but also alternative financing mechanisms to pay for projects. The cost savings from efficiency measures will accrue to Vermont taxpayers, through the lower burden on the state budget.

### *Colleges and Universities*

Account Management helped increase access to decision makers in the colleges and universities market in 2010—an important innovation in this long-standing Efficiency Vermont business market segment. Until 2010, account managers typically developed deep relationships in the institutions' structure through the facility manager, as a way of influencing decision making. However, in 2010, Efficiency Vermont gained access to college presidents and Chief Financial Officers for the first time. Efficiency Vermont also initiated a working relationship with the network of sustainability coordinators at many sites. These positions are bridges between student and faculty activity and administration policies related to environmental and energy goals.

The increased engagement with decision makers in this market helped increase the number of projects and the amount of energy savings. In 2010, 70 projects were completed, an increase of 75% from 2009. Energy savings increased by 20% to more than 2,700 MWh. This higher level of engagement not only led to greater results, but also helped shift the conversation about efficiency from a discussion of costs to a discussion with a fuller understanding of efficiency as an investment.

Also in 2010, Efficiency Vermont initiated a partnership with the Sustainable Endowments Institute to develop the concept of an energy efficiency financing mechanism known as a Green Revolving Fund. This initiative will be further developed in 2011.

### *K–12 Schools*

In 2010, there were three key objectives for the K–12 school market. The first was to target the dozens of known project opportunities in schools that have never been brought to completion. The second was to illustrate and promote a predictable path that schools can follow to take action in developing energy efficiency practices. The third was to transform the way schools pay for efficiency projects by encouraging them to pursue tax-exempt leasing.

The NewLIGHT and RELIGHT lighting retrofit services greatly enhanced Efficiency Vermont's ability to help schools develop projects in 2010. Further, Efficiency Vermont reached a milestone when it influenced the first use of tax-exempt leasing for an efficiency project. Efficiency Vermont also used a project development specialist to examine schools known to have cost-effective savings opportunities, and schools with which Efficiency Vermont could leverage its strong lighting initiatives.

The most important result for 2010 was the development and implementation of a new K–12 strategic plan to address barriers to financing and project processes. These activities helped Efficiency Vermont achieve approximately 3,000 MWh in annual savings with approximately 170 projects. Of particular note, reduced energy costs in schools benefit both ratepayers and taxpayers, not just in the first year of savings, but across the lifetime of the measures.

Extensive efforts were made to engage school district business managers, the Vermont Principals' Association, the Vermont Superintendents Association, and other market players to help Efficiency Vermont understand how to be more effective in this market. Of key importance are the barriers to the use of alternative financing models such as leasing. Monthly check-ins with the Vermont Department of Education resulted in improved channels of communication and program support. Efficiency Vermont's contract with the School Energy Management Program enabled steady engagement with the market and developed the pipeline for projects.

## **Residential Customers**

### **Existing Homes**

The Home Performance with ENERGY STAR comprehensive retrofit service was a major focus for Efficiency Vermont's Existing Homes initiative in 2010. To help residential customers reduce the cost of energy efficiency home improvements, a prescriptive incentive structure was created. The structure allows up to \$2,500 in incentives for completing Home Performance with ENERGY STAR projects.

Home Performance with ENERGY STAR is a market-based initiative in which Efficiency Vermont supports a network of private contractors certified by the Building Performance Institute to perform energy audits and improvements and diagnostic testing. After significant expansion of the network in 2009, 2010 focused on strengthening the existing Home Performance contractor network.

The Home Performance with ENERGY STAR incentive structure was designed to encourage comprehensive installation of efficiency measures. In 2010, the program achieved on average a 32% reduction in air infiltration in existing homes, 50% of projects included at least 1,500 square feet of added insulation, and 11% of projects involved both building shell and heating system measures.



Through this service, Efficiency Vermont's network of private-sector contractors completed approximately 600 comprehensive energy efficiency retrofit projects, resulting in energy savings of 22,200 MMBtu.<sup>9</sup> There was a significant increase in the number of contractors reporting completion of multiple (10 or more) projects in 2010, compared to 2009. This is a positive development of the ongoing maturation and diversification of this private-sector workforce around the state.

As discussed on page 17, Efficiency Vermont continued the Vermont Community Energy Mobilization pilot project, working with community volunteers to install low-cost energy efficiency measures in homes, and to educate neighbors about the benefits of energy efficiency home improvements.

### **Residential New Construction**

The key objectives for Residential New Construction in 2010 were: 1) the promotion of market transformation through technical assistance and incentives; 2) an increase in market penetration; 3) meeting savings goals; 4) preparing the market for 2011 Efficiency Vermont program changes and the new Residential Building Energy Standard (energy code); and 5) laying the groundwork for an initiative promoting designed-in low energy loads for new homes ("low-load home").

Recognizing that the availability of energy performance information is an important component of market transformation, Efficiency Vermont, the Vermont Association of REALTORS®, and other stakeholders made Home Energy Rating System (HERS) and ENERGY STAR rating information available on the Multiple Listing Service. This is an effective way to promote energy ratings and add value to the marketability of new homes.

In terms of market penetration, participation rates were up in 2010 from 2009—to 35%, an increase of 5%. The average HERS score improved, as well, decreasing to HERS 59. On a scale of 0 to 250, a HERS rating of 101 to 250 is typical for a standard home; a rating of 59 is considered a high-energy-efficiency home. In other words, the lower the HERS rating number, the better the energy efficiency of the home.

Overall, Residential New Construction programs resulted in 330 completed projects, with savings of 650 MWh and 15,500 MMBtu. These results are significant. Increased market penetration indicates that although the new construction market has continued to be slow, a greater share of new homes is participating in Efficiency Vermont services. These results do not include multifamily housing, which is discussed separately below.

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<sup>9</sup> This number includes 224 projects funded through the Green Mountain Power Energy Efficiency Fund.

Efficiency Vermont continued its Passive House collaboration with Green Mountain Habitat for Humanity, which provided the opportunity for Efficiency Vermont to become involved in low-load home design and construction. This collaboration is laying the foundation for a future low-load home tier in Residential New Construction. The Passive House project attracted a significant amount of public attention and media coverage, creating an opportunity for Vermont builders and architects to consider ways to employ Passive House principles in their own design and construction work.

### **Multifamily Housing**

Activity for the Multifamily Housing market initiative in 2010 featured the launch of a significant new service, and a continued focus on deepening collaborations and partnerships with key stakeholders to address this market sector comprehensively.

New for 2010 was the Building Performance service, an expansion of the Home Performance with ENERGY STAR service to include small businesses and multifamily buildings. Efficiency Vermont also revamped its Rental Property Owner Rebate form, helping to reduce participation barriers in this challenging market. Efficiency Vermont expanded the Low-income Single-family housing program (implemented through weatherization agencies) into multifamily buildings. These new services helped drive a 25% increase in savings over what was achieved in 2009. The Multifamily division completed more than 200 projects, with savings of more than 2,100 MWh and 10,200 MMBtu.

Comprehensive measures are a critical component of Efficiency Vermont's multifamily new construction and major rehabilitation projects. Through collaborations with the Vermont Housing Finance Agency and the Vermont Housing and Conservation Board, and supported by a MacArthur Foundation grant, Efficiency Vermont helped develop a "road map" for long-term affordability of multifamily housing through reduced energy costs. This project was completed in 2010. The next step is to use the results to design increased energy efficiency standards for Efficiency Vermont and funders of affordable housing. This work is critical to the creation and maintenance of affordable housing for Vermont's most vulnerable residents. The 2010 work is expected to bring significant positive results to this market sector.

### **Low-Income Single-Family and Multifamily Housing**

The primary objectives for the Low-income Single-family and Multifamily market initiatives for 2010 were: 1) building closer partnerships with the WAPs; 2) identifying new energy-saving measures that can be installed through the work of the weatherization agencies; and 3) extending coverage of single-family homes to include multifamily buildings, and thus improving consistency of service.

One 2010 initiative was the establishment of the Low-Income Electrical Efficiency Partnership (LEEP) with the WAPs, to expand service to multifamily units so that

they and eligible single-family units are served. This partnership provides more consistent service to the market. Two other measures were added to this service: installation of advanced power strips and early replacement of inefficient clothes washers. These initiatives, combined with existing programs, resulted in the completion of 985 single-family projects and 176 multifamily projects, resulting in total savings of 2,600 MWh.

When low-income Vermonters are served through the WAPs, Efficiency Vermont is invisible to the clients because they are directly served by the WAPs. Efficiency Vermont developed a stronger relationship with the WAPs overall, and for the first time since 2000, updated its core subcontracts with the five WAP agencies.

Efficiency Vermont's traditional scope with the WAP covers only electricity because thermal measures are delivered through the federally funded WAP. The Low-Income Multifamily program continues to offer custom and comprehensive project services to customers who do not qualify as eligible clients under the federal weatherization standards. Some property owners whose buildings house low-income tenants are also served through Efficiency Vermont's Residential Rental Property Owner rebate form, offering enhanced incentives for efficient refrigerators and ventilation fans, as well as free CFLs and water conservation devices.

Another 2010 initiative in this market sector was Efficiency Vermont's collaboration with the Central Vermont Community Action Council to launch the Vermont Fuel Efficiency Partnership. This partnership offers comprehensive rehabilitation services to low-income multifamily buildings. Efficiency Vermont provided electrical energy efficiency services for these projects in 2010. The initiative's design will expand in 2011 to include heating and process fuels funding for thermal efficiency services.

Finally, Efficiency Vermont reached out to the low-income community through partnership with the Vermont Foodbank as a distribution center for approximately 80,000 specialty CFLs.

## **Technologies**

### **HVAC and Refrigeration (HVAC-R)**

The two principal objectives of Efficiency Vermont's HVAC program for 2010 were to increase savings per project by improving the technical analysis of project opportunities, and to increase the quantity of projects by leveraging the assistance of industry partners.

Efficiency Vermont made a substantive process improvement for its upstream partners by introducing an online tool that simplifies how information is submitted. This tool has reduced a significant barrier to participation for supply chain partners.

Efficiency Vermont also used principles of Account Management to improve two-way communication, participation, and awareness with the HVAC industry supply chain (trade allies). This strategy allowed Efficiency Vermont both to obtain direct feedback and market information from trade allies and to communicate program updates and other valuable information to them.

Efficiency Vermont continued its support of local industry associations by collaborating with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) to provide refrigeration training for member contractors and engineers. Promotion and outreach for this training involved both the local ASHRAE chapter and the local chapter of the Refrigeration Service Engineers Society

Overall for 2010, 221 HVAC projects were completed, resulting in 4,450 MWh in savings. These savings represent an increase of 16% compared to performance in 2009. A total of 184 refrigeration projects were completed, with savings of 3,700 MWh. The performance represents a savings increase of 86% over 2009 performance.

With regard to heating and process fuels, a new set of incentives for commercial heating systems was put in place in 2010. This effort yielded 84 projects and 14,000 MMBtu in savings.

## **Lighting**

The objectives of Efficiency Vermont's 2010 Lighting initiative were to maximize retrofits of old lighting technology (particularly replacing inefficient T12 bulbs with more efficient and effective solutions), drive demand for cost-effective adoption of LED technology, and encourage comprehensive lighting design.

To target existing T12 technology, Efficiency Vermont launched the newLIGHT service in the second quarter of 2010. This service offers businesses significantly enhanced rebates of up to 50% for upgrading their old T12 fluorescent and high-intensity discharge (HID) high-bay lighting systems to more efficient equipment. To qualify for enhanced rebates offered through newLIGHT, customers must work with a contractor, distributor, or other lighting professional. Over the course of newLIGHT's eight months of service in 2010, 245 projects were completed, resulting in savings of 4,000 MWh. These results were helped by a collaboration with contractors and other market partners and incentives for them to identify and submit projects.

The 2010 RELIGHT service promotes comprehensive efficient lighting design by encouraging commercial customers to enlist the support of lighting design professionals on lighting retrofit projects. Going beyond one-for-one replacement of

individual lighting fixtures, lighting design professionals not only provide expert advice on lighting equipment and design, but can also guide a business to consider achieving the maximum energy savings possible during a lighting upgrade. This service has helped strengthen the lighting design profession in Vermont, while also leading to 60 projects and 160 MWh in savings in 2010. Additional RELIGHT projects were initiated in 2010 and will be completed in 2011.

Efficiency Vermont's iLED service, launched late in 2010, targeted the LED screw-based replacement lamp market for commercial customers. The service proved highly successful in 2010. As a share of savings from all lighting projects, LED project savings increased from 3% in 2009 to 27% of the total in 2010.

Overall, 650 projects with savings of 4,500 MWh were completed just in the four months the service was active in 2010.

## **New and Emerging Initiatives**

### **Commercial Real Estate**

Efficiency Vermont's Commercial Real Estate initiative was established in mid-2010, with much of its activity focused on development, market research, and strategy design.

Commercial real estate property owners, property managers, developers, and tenants are all customers for whom this new initiative has been designed. All have been customers for past Efficiency Vermont projects, participating in other initiatives. For this initiative, new program offerings will focus on commercial leased spaces and collaborations with market players who influence decision making for portfolio managers who have more than one building.

### **Hospitality**

#### *Lodging*

The 2010 goal for the Lodging market initiative was to launch the program, with a primary objective of engaging the market. Activity for this initiative began in late 2010, and initial results have been promising, with 1,730 MWh in savings, an increase of 60% compared to 2009 performance among companies that now fit in this newly identified market segment.

The customers who participated in this initiative were a mix of new and repeat businesses, with the iLED service acting as one significant driver, introducing them to other services. As an initiative targeting one of Vermont's largest industries, the iLED program was adopted quickly and effectively for the Lodging market initiative.

### *Restaurants*

As with the Lodging market initiative, market initiative activity for restaurants was primarily devoted to development and planning in 2010. During this phase, strategies were developed and the initiative was launched for implementation.

The key results in 2010 were 740 MWh in savings, an increase of 96% over performance among restaurants in 2009. Because restaurants have a high level of energy intensity (about 2.5 times as much per square foot as other commercial buildings), this is a market segment with high savings potential for the future.

Relationships with the restaurant industry supply chain are a key component of this initiative. Efficiency Vermont reached out to the industry and began building those relationships in late 2010.

## **1.3 Additional Efficiency Vermont Services and Activities**

### 1.3.1 Overview

Beyond the services provided directly to customers in the residential and business markets, Efficiency Vermont has developed other capacities that support its ability to meet its contract requirements and performance objectives.

### 1.3.2 Marketing

Marketing supports Efficiency Vermont activity by aligning its resources to the performance goals of the Efficiency Vermont contract. The marketing and consumer information strategies and communications are designed to support market-specific resource acquisition and market transformation goals by providing information intended to motivate consumers to participate in energy efficiency activity.

Efficiency Vermont has developed advanced and effective marketing and education functions to inform Vermont ratepayers of the value of energy efficiency and the opportunities for participating in Efficiency Vermont services and programs. Marketing and education efforts are designed to increase general awareness and understanding of energy efficiency, to create consumer demand, and to support market transformation. Efficiency Vermont focuses heavily on customer-focused energy efficiency stories, case studies, and testimonials in the media.

In addition, Efficiency Vermont reaches customers through targeted advertising; information booths and displays at community events; and communication efforts such as volunteering to speak at public events, providing invited speakers for call-in radio and television shows, producing information columns for local newspapers (for example, “Ask the Home Team”), maintaining the Efficiency Vermont website, and developing electronic and print newsletters for both consumers and business partners.

Highlights for 2010 Efficiency Vermont services in marketing:

- Publication or broadcast of 698 stories featuring Efficiency Vermont customers.
- An increased number of website visits through search engine optimization and increased media-to-web advertising. In 2010, [www.encyvermont.com](http://www.encyvermont.com) received 614,690 visits, a 23% increase in website traffic over 2009. Between 2005 and 2010, website visits have increased 280%.
- An expanded audience for all e-newsletters. The residential customer-focused “Watts New?” monthly e-newsletter was distributed to more than 2,000 subscribers with an average open rate of 32% (the average open rate of commercial e-mail is approximately 25%). The “Contractor News” e-newsletter was distributed to 107 Home Performance with ENERGY STAR contractors; the page open rate for that piece averaged 49%. The “Lighting



eNews” e-newsletter was sent to 681 lighting contractors (42% open rate) and a hospitality industry-focused e-newsletter was launched with 179 subscribers (29% open rate).

- Use of social media to raise awareness of Efficiency Vermont services via the launch of an interactive Facebook page with engaging content and regular communications. The Efficiency Vermont Facebook page focuses primarily on residential energy (70% of content), and small business is a secondary focus (30% of content). The number of Efficiency Vermont fans grew from 344 in 2009 to 1,388 in 2010. In addition, Efficiency Vermont launched a Twitter feed and had 250 followers at the end of 2010.
- Four Open Home events to educate residents on the benefits of the Home Performance with ENERGY STAR. The events were held in four different locations in Vermont (Proctor, March 28; Dummerston, April 17; Plainfield, May 28; and South Burlington, June 12). They were held in the homes of customers who had completed a successful home improvement project in the Home Performance program. A total of 128 people, as well as the respective participating contractor for the project where each event was held, attended the Open Homes. In addition, the events received press coverage from television news outlets, radio programs, and print publications, including WCAX (Channel 3), WDEV’s Mark Johnson Show, the *Brattleboro Reformer*, the *Hardwick Gazette*, the *Burlington Free Press*, and the *Vermont Observer*.
- An update of the CFL campaign with two new 30-second television spots encouraging Vermonters to replace every bulb in their home with a CFL. The campaign also reintegrated an advertisement encouraging proper disposal and recycling of CFLs. This media buy was accented by digital banner ads, a Google AdWords buy, print ads in daily and community papers, and radio spots on 21 radio stations promoting 99-cent pricing for specialty bulbs.

### 1.3.3 Better Buildings by Design Conference

Efficiency Vermont conducted the 12th annual Better Buildings by Design conference in February 2010. The conference attracted more than 1,000 builders, architects, engineers, and contractors. Conference workshops addressed the latest techniques and technologies for building durability, superior performance, energy efficiency, and value for both residential and commercial projects. Conference workshops were offered at beginner, intermediate, and advanced levels, as well as in four tracks: building envelope, lighting, mechanical systems, and high performance and innovation.

Participant feedback for the 2010 conference was very positive. Of the attendees who completed feedback forms, 96% rated their conference experience as either “good,” “very good,” or “excellent”; 97% of respondents rated the overall quality of the conference workshops as either “good,” “very good,” or “excellent.”

### **1.3.4 Customer Support and Development**

Customer Support and Development is a new structure for several Efficiency Vermont functions. This section describes the change and its effects on general customer service, and presents brief descriptions of other activity under this new structure.

#### **Group Restructure**

In 2010, the Customer Service and Business Development group was restructured as Customer Support and Development. The new name more accurately reflects the depth and breadth of knowledge within the group providing information and other services to customers and stakeholders. From a customer perspective, phone staff and field staff both have advanced training in all aspects of energy efficiency. In 2010, the group had four certified energy managers, five business energy professionals, five Maine certified residential energy auditors, and two staff members with Building Performance Institute certifications.

In addition, the change created a clear division between the activity of the telephone staff and that of the field staff, but it united the two groups under one mission—to support internal and external customers through telephone or personal energy efficiency consultation. Together, the group supports customers more comprehensively and effectively.

#### **Telephone Staff**

Incoming calls doubled in 2010, as did outbound calls. There was also a 59% increase in managed calls (those that require personal, consultative assistance). This increase in traffic was due to changes made to the phone queue and to expanded staff schedules, which increased the overall answer rate from 81.6% in 2009 to 91.9% in 2010. The content of calls was also monitored and tracked. Both residential and commercial calls increased in 2010. Residential calls accounted for 54.1% of total calls, and primarily concerned high utility bills and the Energy Efficiency Charge. Callers were also interested in media advertising concerning the 99-cent bulb promotion and wanted more information about where bulbs could be purchased. Commercial calls made up 35.5% of call volume. Commercial callers generally asked about services and rebates offered by Efficiency Vermont, especially the newLIGHT program, iLED, and prescriptive rebates.

Significant increases in outbound calling also occurred in 2010. Hundreds of calls were made relative to the iLED screw-based lamp program to promote LED projects and Efficiency Vermont rebates. Outbound calls were also made as a follow-up to the Green Grocer program mailing, which advertised an informational guide on how grocery stores could become more efficient. In addition to the increased outbound calling, phone staff began answering calls for the Commercial Rebate Assistance Center and for agricultural inquiries. Phone staff also began fulfilling the

preapproval process for several programs, including newLIGHT, iLED, and agricultural rebates.

Further, the phone staff assisted with the second-refrigerator retirement program. A project-specific relationship with the Vermont Electric Cooperative (VEC) was also established, in which a customer support specialist answered a direct VEC extension to “continue the conversation with customers” relative to Efficiency Vermont programs and rebates for which they might be eligible. This effort was launched in response to VEC customer complaints about high electricity bills.

### **Field Staff**

The field staff expanded its services in 2010, and continued developing ways to interact with customers. The field staff reached out to targeted contractors and became more proactive in engaging upstream market players with new efficiency initiatives. The purpose of the outreach was to increase the number of commercial lighting projects by engaging contractors with Efficiency Vermont programs and customers.

Retail Account Management expanded, as retail account managers (RAMs) took over management of electrical supplier accounts, becoming the sole point of contact. RAMs were given this responsibility to create and maintain relationships. This relationship building was previously the responsibility of other Efficiency Vermont groups; the effort provided more focused customer service to suppliers. RAMs also worked closely with Retail Efficient Products and phone staff to implement the American Recovery and Reinvestment Act (ARRA) promotion (Save More with ENERGY STAR) across the state, including rebates on refrigerators and clothes washers. RAMs also played a key role in increasing awareness of the 99-cent specialty bulb promotion. RAMs collaborated with Retail Efficient Products and marketing staff to bring the promotion to Vermont retailers, and helped increase sales and 2010 savings by collaborating with stores to maintain displays and inventory.

### **1.3.5 Information Technology**

Information Technology (IT) efforts in 2010 supported both Efficiency Vermont’s day-to-day operations and its long-term strategic goals. Tools and systems developed and maintained by IT were used in the collection, processing, and reporting of data on the entire life cycle of all Efficiency Vermont projects. The level of detail for this effort included information related to project participants, work flows, locations, energy usage, and energy savings claims. This information enabled the successful delivery of service to ratepayers as well as operational reporting and regulatory claims to utilities, the Vermont Department of Public Service, and ISO New England (operator of the FCM).

IT provides baseline activities that support the delivery of services to Efficiency Vermont customers. These activities are:

- Maintenance, support, and training for developed applications used by Efficiency Vermont staff in program delivery
- Security and protection of confidential customer data
- Maintenance of databases and an effort to ensure high levels of data quality, enabling the delivery of accurate and timely reporting
- Delivery of reporting and analytical information to customers, project managers, and program managers
- Implementation of energy savings calculations in tools that allow for the tracking of savings claims

In addition to these baseline activities, technology enhancements have been made; they are either based on established plans for technology improvements or a result of new initiatives. Some highlights:

- Development of a new set of web-based tools to support the expanded Home Performance with ENERGY STAR effort
- Development of a web-based tool to support enhanced efficiency in reporting on measures supplied by upstream partners
- Systems for tracking FCM metering activity

### **1.3.6 Forward Capacity Market Participation**

In 2010, VEIC continued to claim the electric capacity savings from Efficiency Vermont activity and bid these savings into ISO New England's FCM. This effort has generated approximately \$2.8 million in total revenue for the year. These funds support efficiency initiatives for unregulated heating and process fuels. With a commitment of 60 MW of generation-equivalent peak system capacity, Efficiency Vermont will enter the 2011–2012 commitment period as the second-largest individual source of FCM capacity in the state, trailing only Vermont Yankee nuclear power plant.

VEIC continued to participate in the FCM on behalf of Efficiency Vermont in the following ways:

- Filed monthly claims of capacity savings under FCM rules beginning in June 2010.
- Continued activity to put Efficiency Vermont on track to meet the obligation of approximately 49 MW of at-the-meter capacity as of June 2011, the beginning of the second FCM commitment period. That commitment will increase to approximately 55 MW in June 2012, approximately 72 MW in June 2013, and approximately 84 MW in June 2014.
- Continued to participate in ISO New England committees and policy-setting activities, voting on behalf of Vermont ratepayers.

### **1.3.7 Building Energy Code Support**

Efficiency Vermont actively supported the State's work to update both residential and commercial building energy codes. Because Vermont was the recipient of ARRA funds from the federal Energy Efficiency and Renewable Energy office, it is subject to a requirement that it certify its intention to update these codes and provide a plan for achieving 90% code compliance by 2017.

For the Residential Building Energy Standards update, Efficiency Vermont was an active participant in a stakeholder process led by the Vermont Department of Public Service. This process is expected to result in an administrative rules filing by the Vermont Department of Public Service to update Vermont's standards to be consistent with the 2009 International Energy Conservation Code (IECC).

Efficiency Vermont has also been an active participant in updating the Commercial Building Energy Standards to meet or exceed 2009 IECC requirements, similarly through a Department-led stakeholder process.

As in past years, Efficiency Vermont staffed the Energy Code Assistance Center in 2010, answering questions relating to the Vermont Energy Code and supplying code-related materials to individuals, towns, and businesses. Information on Energy Code updates was also incorporated into Efficiency Vermont publications, presentations, and the website.

In the near future, Vermont will face significant challenges in meeting its 90% code compliance commitment. Most of Vermont has no effective Energy Code enforcement mechanism in place. As provided for in the 2009 law known as Act 45, Vermont is to have a compliance plan in place by September 2011, and active training and enforcement systems in place by June 2012. Efficiency Vermont will continue to work closely with the Department and other stakeholders in developing strategies to address this issue and fulfill the commitment.

### 1.3.8 Collaboration with Regional and National Partners

In 2010, Efficiency Vermont continued its relationships with regional and national partners to share information and leverage ratepayer resources to address common needs. In particular, Efficiency Vermont was an active collaborator in the Northeast Energy Efficiency Partnerships (NEEP), a regional partnership of energy efficiency program providers.

Efficiency Vermont supported specific NEEP policy projects in 2010, including those in regional deployment of residential and commercial efficiency initiatives; public policy and outreach; workforce development; and regional evaluation, measurement, and verification. In particular, Efficiency Vermont played a leading role in the ongoing development of the *LED Qualified Products List* of the DesignLights Consortium.

Nationally, Efficiency Vermont continued its long-standing collaboration with national efficiency organizations and programs. These included the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), the Consortium for Energy Efficiency (CEE), and the American Council for an Energy-Efficient Economy (ACEEE). Specific 2010 activities with these organizations were:

- Collaborating with CEE on a peer-reviewed paper for the national ACEEE Summer Study 2010 conference, “Defining a Framework for Comprehensive Commercial and Residential Lighting Programs.”
- Serving as the Vermont program sponsor and administrator of the EPA’s ENERGY STAR Homes program for new homes throughout Vermont.
- Serving as the Vermont program sponsor for the DOE / EPA Home Performance with ENERGY STAR program for existing homes.
- Serving on numerous CEE program committees, including Commercial HVAC, Commercial Gas Programs’ Boiler and Water Heater subcommittees, Whole Buildings, and Commercial Kitchens. Efficiency Vermont also offered collective member feedback on proposed changes to the EPA’s ENERGY STAR Homes program.
- Collaborating with CEE to complete the *Existing Homes Program Guide*, with information for new efficiency program administrators on how to design a comprehensive existing homes program.

### 1.3.9 Participation in Regulatory Proceedings

Efficiency Vermont took part in a wide range of Vermont Public Service Board proceedings throughout 2010. Most notable was the inaugural Demand Resources Plan Proceeding (DRPP), in which Efficiency Vermont was a leading participant. The DRPP, under way in the fall of 2010, is a comprehensive, multifaceted, transparent process for determining Efficiency Vermont’s budgets, performance

goals, compensation, and other issues that in many cases had previously been addressed through contract negotiations between VEIC and Board staff. The DRPP was created as part of the new Efficiency Vermont Order of Appointment regulatory structure.

Efficiency Vermont continued in 2010 to participate in the Board's Energy Efficiency Utility restructuring proceedings. In 2010, these proceedings focused on implementation issues that resulted from the Board's order in Docket 7466 shifting how Efficiency Vermont is operated, from a contract to the franchise-like Order of Appointment. The shift makes Efficiency Vermont's regulatory status more comparable to that of distribution utilities. A related process that took place in 2010 was the Overall Performance Assessment, a comprehensive evaluation of VEIC's performance in the context of its responsibilities for operating Efficiency Vermont.

Efficiency Vermont was also an active participant in other utility proceedings, notably those related to the Vermont Systems Planning Committee (VSPC). Efficiency Vermont was an active participant in full VSPC meetings, and served on the Energy Efficiency & Forecasting and Public Participation subcommittees.

## **2.1 Efficiency Vermont Electric Services and Initiatives Results**



## 2.1.1 Overall - Summary

Services	Total Efficiency Vermont Services and Initiatives	Heating and Process Fuels Services and Initiatives	EEC Funded Services and Initiatives
<b>Costs</b>			
Year to Date Costs	\$33,854,008	\$1,879,808	\$31,974,200
* Annual Budget Estimate	\$33,996,499	\$2,765,300	\$31,231,200
Unspent Annual Budget Estimate	\$142,491	\$885,492	(\$743,000)
% Annual Budget Estimate Unspent	0%	32%	-2%
<b>Other Costs and Commitments</b>			
Participant Costs Year to Date	\$20,510,176	\$2,986,589	\$17,523,587
Third Party Costs Year to Date	\$1,216,853	\$3,253	\$1,213,600
Committed Incentives	\$554,405	nap	\$554,405
<b>Savings Results</b>			
MWh Year to Date	110,771	-101	110,872
MWh cumulative starting 1/1/09	195,695	-30	195,725
<b>Winter Peak Coincident kW Savings Results</b>			
Winter Coincident Peak kW Year to Date	20,280	3	20,277
Winter Coincident Peak kW Starting 1/1/09	35,463	19	35,444
<b>Summer Peak Coincident kW Savings Results</b>			
Summer Coincident Peak kW Year to Date	16,376	13	16,363
Summer Coincident Peak kW Starting 1/1/09	29,922	17	29,905
<b>TRB Savings Results</b>			
TRB Year to Date	\$111,996,149	\$9,215,874	\$102,780,275
TRB Starting 1/1/09	\$213,443,323	\$10,039,518	\$203,403,805
<b>MMBtu Savings Results</b>			
MMBtu Year to Date	67,191	32,459	34,732
MMBtu Starting 1/1/09	127,153	36,417	90,736
<b>Participation</b>			
Partic.w/ installs Year to Date	43,416	1,011	42,405
Partic.w/ installs cumulative starting 1/1/09	76,344	1,526	74,818

### Total Costs for Services and Initiatives, Administration, IT, ISO-New England Regional Capacity Activities, Smart Grid and DRP & DRPF

Services	Total	Administration	Information Systems	Services and Initiatives Costs	ISO-New England Regional Capacity Activities	Smart Grid	DRP & DRPF
<b>Costs</b>							
Year to Date Costs	\$35,425,834	\$265,771	\$735,832	\$33,854,008	\$269,985	\$18,581	\$281,658
* Annual Budget Estimate	\$35,728,099	\$356,200	\$741,500	\$33,996,499	\$415,100	\$58,000	\$160,800
Unspent Annual Budget Estimate	\$302,265	\$90,429	\$5,668	(\$142,491)	\$145,115	\$39,419	(\$120,858)
% Annual Budget Estimate Unspent	1%	25%	1%	0%	35%	68%	-75%

2.1.2 Electric Services and Initiatives Summary

SAO  
02/25/14

Services	Totals					Business Energy Services			Residential Energy Services			Other
	All Services and Initiatives Including CC	EVT Services and Initiatives	Subtotal Business Energy Services	Subtotal Residential Energy Services	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes	Customers Credit Program		
<b>Costs</b>												
Year to Date Costs	\$31,974,200	\$31,794,936	\$21,423,350	\$10,371,586	\$2,495,959	\$18,927,391	\$2,278,731	\$5,739,794	\$2,353,062	\$179,266		
* Annual Budget Estimate	\$31,231,200	\$31,212,700	\$20,346,500	\$10,866,200	\$2,947,600	\$17,398,900	\$2,300,100	\$5,991,600	\$2,574,500	\$18,500		
Unspent Annual Budget Estimate	(\$743,000)	(\$582,236)	(\$1,076,850)	\$494,614	\$451,641	(\$1,528,491)	\$21,369	\$251,806	\$221,438	(\$160,764)		
% Annual Budget Estimate Unspent	-2%	-2%	-5%	5%	15%	-9%	1%	4%	9%	-869%		
<b>Savings Results</b>												
MWh Year to Date	110,872	110,550	55,857	54,693	9,128	46,729	1,390	50,212	3,091	322		
MWh cumulative starting 1/1/09	195,725	191,124	97,151	93,973	17,728	79,423	3,057	85,336	5,581	4,601		
3-Year MWh Goal	nap	359,700	225,900	133,800	29,142	196,758	6,263	116,912	10,625	nap		
% of 3-Year MWh Goal	nap	53%	43%	70%	61%	40%	49%	73%	53%	nap		
Winter Coincident Peak kW Year to Date	20,277	20,213	8,155	12,059	1,273	6,882	325	11,083	651	64		
Winter Coincident Peak kW cumulative starting 1/1/09	35,444	35,073	13,740	21,333	2,367	11,373	673	19,481	1,178	371		
3-Year Winter Coincident Peak kW Goal	nap	54,000	14,200	39,800	2,300	11,900	1,000	35,800	3,000	nap		
% of 3-Year Winter Coincident Peak kW Goal	nap	65%	97%	54%	103%	96%	67%	54%	39%	nap		
Summer Coincident Peak kW Year to Date	16,363	16,299	10,030	6,269	1,545	8,486	206	5,774	289	64		
Summer Coincident Peak kW cumulative starting 1/1/09	29,905	29,153	17,819	11,335	3,079	14,740	395	10,430	509	752		
3-Year Summer Coincident Peak kW Goal	nap	51,200	22,300	28,900	3,500	18,800	1,000	27,000	900	nap		
% of 3-Year Summer Coincident Peak kW Goal	nap	57%	80%	39%	88%	78%	40%	39%	57%	nap		
<b>Associated Benefits</b>												
MMBtu Year to Date	34,732	34,732	19,787	14,945	13,162	6,624	21,348	(8,753)	2,349	0		
MMBtu cumulative starting 1/1/09	90,736	89,861	52,271	37,590	35,721	16,550	41,876	(14,725)	10,438	874		
<b>Participation</b>												
Partic.w/ installs Year to Date	42,335	42,334	2,876	39,458	276	2,600	927	33,767	4,764	1		
Partic.w/ installs cumulative starting 1/1/09	74,818	74,817	3,998	70,819	491	3,507	1,726	60,898	8,195	1		

Total Costs for Services and Initiatives, Administration, IT, ISO-New England Regional Capacity Activities, Smart Grid and DRP & DRPP

Services	Total	Administration	Information Systems	Services and Initiatives Costs	ISO-New England Regional Capacity Activities	Smart Grid DRP & DRPP
<b>Costs</b>						
Year to Date Costs	\$33,546,026	\$265,771	\$735,832	\$31,974,200	\$269,985	\$281,658
* Annual Budget Estimate	\$32,962,800	\$356,200	\$741,500	\$31,231,200	\$415,100	\$160,800
Unspent Annual Budget Estimate	(\$583,226)	\$90,429	\$5,668	(\$743,000)	\$145,115	(\$120,858)
% Annual Budget Estimate Unspent	-2%	25%	1%	-2%	35%	-75%

\* Annual projections are estimates only and provided for informational purposes. The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

## 2.1.3 Electric Services and Initiatives including Customer Credit

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>	<u>Cumulative starting 3/1/00</u>
<b># participants with installations</b>	36,140	42,405	nap	74,818	283,690
<b>Services and Initiatives Costs</b>					
<b>Operating Costs</b>					
Administration	\$334,201	\$265,771	\$356,200	\$599,971	\$1,901,340
ISO-NE Regional Capacity Activities	\$281,547	\$269,985	\$415,100	\$551,532	\$935,171
Smart Grid	\$0	\$18,581	\$58,000	\$18,581	\$18,581
DRP & DRPP	\$0	\$281,658	\$160,800	\$281,658	\$281,658
Services and Initiatives	\$4,995,899	\$5,377,959	\$4,376,500	\$10,373,858	\$35,699,551
Program Planning	nap	nap	nap	nap	\$1,006,327
Marketing/Business Development	\$3,888,575	\$5,295,601	\$5,423,200	\$9,184,176	\$28,180,160
Information Systems	\$826,498	\$735,832	\$741,500	\$1,562,330	\$5,516,661
<b>Subtotal Operating Costs</b>	<u>\$10,326,720</u>	<u>\$12,245,386</u>	<u>\$11,531,300</u>	<u>\$22,572,106</u>	<u>\$73,539,448</u>
<b>Incentive Costs</b>					
Incentives to Participants	\$9,447,528	\$15,260,295	\$14,425,700	\$24,707,822	\$78,936,624
Incentives to Trade Allies	<u>\$85,649</u>	<u>\$84,986</u>	<u>\$80,900</u>	<u>\$170,635</u>	<u>\$425,846</u>
<b>Subtotal Incentive Costs</b>	<u>\$9,533,177</u>	<u>\$15,345,281</u>	<u>\$14,506,600</u>	<u>\$24,878,457</u>	<u>\$79,362,470</u>
<b>Technical Assistance Costs</b>					
Services to Participants	\$6,141,628	\$5,818,661	\$6,815,500	\$11,960,289	\$37,130,489
Services to Trade Allies	<u>\$257,831</u>	<u>\$136,698</u>	<u>\$109,400</u>	<u>\$394,529</u>	<u>\$2,825,282</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$6,399,459</u>	<u>\$5,955,359</u>	<u>\$6,924,900</u>	<u>\$12,354,818</u>	<u>\$39,955,771</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$26,259,356</u>	<u>\$33,546,026</u>	<u>\$32,962,800</u>	<u>\$59,805,382</u>	<u>\$192,857,690</u>
<b>Total Participant Costs</b>	\$19,395,728	\$17,523,587	nav	\$36,919,315	\$142,269,510
<b>Total Third Party Costs</b>	\$827,562	\$1,213,600	nav	\$2,041,162	\$7,215,521
<b>Total Services and Initiatives Costs</b>	<u>\$46,482,645</u>	<u>\$52,283,213</u>	nav	<u>\$98,765,859</u>	<u>\$342,342,721</u>
<b>Annualized MWh Savings</b>					
Annualized MWh Savings	84,854	110,872	nap	195,725	760,853
Lifetime MWh Savings	916,381	1,155,989	nap	2,072,370	8,753,257
TRB Savings (2009 \$)	\$100,623,530	\$102,780,275	nap	\$203,403,805	\$727,080,787
Winter Coincident Peak kW Savings	15,167	20,277	nap	35,444	125,779
Summer Coincident Peak kW Savings	13,542	16,363	nap	29,905	108,959
Annualized MWh Savings/Participant Weighted Lifetime	2.348	2.615	nap	2.616	2.682
	11	10	nap	11	12
<b>Committed Incentives</b>	\$587,389	\$554,405	nap	nap	nap
<b>Annualized MWh Savings (adjusted for measure life)</b>					670,665
<b>Winter Coincident Peak kW Savings (adjusted for measure life)</b>					112,188
<b>Summer Coincident Peak kW Savings (adjusted for measure life)</b>					94,823

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

## 2.1.4 Electric Services and Initiatives excluding Customer Credit

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>* Projected</u> <u>Year 2010</u>	<u>Cumulative</u> <u>starting</u> <u>1/1/09</u>	<u>Cumulative</u> <u>starting</u> <u>3/1/00</u>
<b># participants with installations</b>	36,139	42,404	nap	74,817	283,689

<b><u>Services and Initiatives Costs</u></b>					
<b>Operating Costs</b>					
Administration	\$334,201	\$265,771	\$356,200	\$599,971	\$1,901,340
ISO-NE Regional Capacity Activities	\$281,547	\$269,985	\$415,100	\$551,532	\$935,171
Smart Grid	\$0	\$18,581	\$58,000	\$18,581	\$18,581
DRP & DRPP	\$0	\$281,658	\$160,800	\$281,658	\$281,658
Services and Initiatives	\$4,992,196	\$5,377,959	\$4,358,000	\$10,370,154	\$35,539,859
Program Planning	nap	nap	nap	nap	\$977,110
Marketing/Business Development	\$3,888,575	\$5,295,601	\$5,423,200	\$9,184,176	\$28,180,160
Information Systems	<u>\$826,498</u>	<u>\$735,832</u>	<u>\$741,500</u>	<u>\$1,562,330</u>	<u>\$5,516,661</u>
<b>Subtotal Operating Costs</b>	<u>\$10,323,017</u>	<u>\$12,245,386</u>	<u>\$11,512,800</u>	<u>\$22,568,403</u>	<u>\$73,350,540</u>
<b>Incentive Costs</b>					
Incentives to Participants	\$8,570,872	\$15,081,031	\$14,425,700	\$23,651,903	\$72,615,328
Incentives to Trade Allies	<u>\$85,649</u>	<u>\$84,986</u>	<u>\$80,900</u>	<u>\$170,635</u>	<u>\$425,845</u>
<b>Subtotal Incentive Costs</b>	<u>\$8,656,521</u>	<u>\$15,166,017</u>	<u>\$14,506,600</u>	<u>\$23,822,538</u>	<u>\$73,041,173</u>
<b>Technical Assistance Costs</b>					
Services to Participants	\$6,136,621	\$5,818,661	\$6,815,500	\$11,955,282	\$37,100,644
Services to Trade Allies	<u>\$257,831</u>	<u>\$136,698</u>	<u>\$109,400</u>	<u>\$394,529</u>	<u>\$2,825,282</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$6,394,452</u>	<u>\$5,955,359</u>	<u>\$6,924,900</u>	<u>\$12,349,811</u>	<u>\$39,925,926</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$25,373,990</u>	<u>\$33,366,762</u>	<u>\$32,944,300</u>	<u>\$58,740,752</u>	<u>\$186,317,639</u>
<b>Total Participant Costs</b>	\$19,147,272	\$17,499,376	nav	\$36,646,648	\$140,519,762
<b>Total Third Party Costs</b>	<u>\$827,562</u>	<u>\$1,213,600</u>	nav	<u>\$2,041,162</u>	<u>\$7,215,521</u>
<b>Total Services and Initiatives Costs</b>	<u>\$45,348,824</u>	<u>\$52,079,738</u>	nav	<u>\$97,428,562</u>	<u>\$334,052,922</u>

Annualized MWh Savings	80,574	110,550	nap	191,124	730,066
Lifetime MWh Savings	853,842	1,151,802	nap	2,005,644	8,325,703
TRB Savings (2009 \$)	\$94,385,428	\$102,438,841	nap	\$196,824,269	\$692,360,064
Winter Coincident Peak kW Savings	14,860	20,213	nap	35,073	122,342
Summer Coincident Peak kW Savings	12,854	16,299	nap	29,153	103,653
Annualized MWh Savings/Participant	2.230	2.607	nap	2.555	2.573
Weighted Lifetime	11	10	nap	10	11
<b>Committed Incentives</b>	\$587,389	\$554,405	nap	nap	nap

<b>Annualized MWh Savings (adjusted for measure life)</b>	639,878
<b>Winter Coincident Peak kW Savings (adjusted for measure life)</b>	108,751
<b>Summer Coincident Peak kW Savings (adjusted for measure life)</b>	89,517

\* Annual projections are estimates only and provided for informational purposes.

The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

## 2.1.5 Electric Services & Initiatives - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	3,234	3,358	3,120	55,734	105	1,015	3,021	0	\$472,518	\$1,251,344
Cooking and Laundry	6,338	1,376	1,074	19,223	194	147	2,648	65,021	\$318,701	\$1,937,486
Design Assistance	83	984	869	15,810	96	226	5,065	0	\$181,913	\$922,157
Hot Water Efficiency	1,939	648	612	4,496	87	57	5,172	7,713	\$45,924	\$163,466
Hot Water Fuel Switch	169	406	440	12,173	46	30	-1,280	0	\$72,589	\$198,567
Industrial Process Eff.	72	5,539	5,802	76,717	911	590	7,535	18,146	\$535,121	\$1,663,406
Lighting	25,936	78,913	67,742	741,380	16,249	12,001	-31,562	0	\$10,664,235	\$7,069,115
Monitoring and Metering	1,054	1,139	1,009	6,496	131	110	0	0	\$105,280	-\$101,398
Motors	512	5,727	5,363	72,085	714	657	5,727	0	\$514,236	\$1,316,239
Other Efficiency	180	449	402	6,152	59	89	-9	11,982	\$117,650	\$262,754
Other Fuel Switch	285	252	280	6,613	40	41	-776	0	\$14,860	\$42,355
Other Indirect Activity	1,094	1,384	1,433	6,311	141	166	0	0	\$255,269	\$91,264
Refrigeration	8,537	7,487	7,715	84,657	905	817	1,726	13	\$1,375,043	\$1,078,413
Space Heat Efficiency	843	899	824	16,817	258	11	25,943	0	\$134,406	\$1,049,389
Space Heat Fuel Switch	159	359	338	10,769	162	0	-1,255	0	\$25,318	\$152,440
Ventilation	1,119	1,630	1,461	16,372	115	342	12,778	0	\$382,711	\$402,060
Water Conservation	2	0	0	0	0	0	2	28	\$0	\$320
<b>Totals</b>		110,550	98,483	1,151,802	20,213	16,299	34,732	102,903	\$15,081,030	\$17,499,376

### 2.1.6 Electric Services & Initiatives - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Barton	213	376	344	3,942	66	57	38	268	\$70,182	\$89,750
Burlington	22	216	212	1,450	32	45	-69	0	\$38,790	-\$5,013
CVPS	18,117	46,504	41,892	486,940	8,520	6,974	18,309	50,152	\$7,017,842	\$7,010,666
Enosburg Falls	312	656	574	6,427	148	86	1,174	701	\$71,407	\$320,166
Green Mountain	11,873	41,629	36,788	425,084	7,514	6,208	8,329	22,674	\$5,013,770	\$7,057,656
Hardwick	492	995	859	9,166	211	122	-10	618	\$143,652	\$48,752
Hyde Park	202	408	350	3,234	88	54	-103	441	\$37,592	\$65,575
Jacksonville	59	72	67	922	13	20	-51	54	\$27,408	\$7,191
Johnson	185	615	532	5,933	102	93	-198	120	\$85,616	\$86,332
Ludlow	170	755	655	5,793	166	85	-61	340	\$108,514	\$55,318
Lyndonville	596	911	808	9,179	164	120	-366	721	\$174,734	\$83,458
Morrisville	519	1,290	1,113	11,115	249	198	-164	787	\$171,072	\$146,030
Northfield	198	430	378	4,130	83	54	274	274	\$54,341	\$45,315
Orleans	163	259	246	1,496	50	46	-46	119	\$40,859	\$11,089
Readsboro	21	7	6	60	2	1	-2	11	\$999	\$838
Rochester	20	7	6	51	2	1	-1	0	\$292	\$512
Stowe	413	2,261	1,993	27,937	389	328	1,854	1,964	\$248,776	\$518,739
Swanton	446	2,477	2,275	36,953	383	369	312	1,139	\$356,561	\$301,806
VT Electric Coop	6,187	8,989	7,864	97,547	1,679	1,223	4,613	19,819	\$1,377,990	\$1,503,190
VT Marble	109	58	53	532	11	8	-2	244	\$8,584	\$7,865
Washington Electric	2,087	1,632	1,468	13,911	342	209	899	2,457	\$166,794	\$144,141
<b>Totals</b>	<b>42,404</b>	<b>110,550</b>	<b>98,483</b>	<b>1,151,802</b>	<b>20,213</b>	<b>16,299</b>	<b>34,732</b>	<b>102,903</b>	<b>\$15,081,030</b>	<b>\$17,499,376</b>

### 2.1.7 Electric Services & Initiatives - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Addison</b>	2,303	4,590	4,052	43,563	898	642	2,097	3,543	\$713,582	\$705,790
<b>Bennington</b>	2,373	7,097	6,337	71,001	1,240	1,095	1,529	3,577	\$967,770	\$885,254
<b>Caledonia</b>	1,954	3,498	3,128	35,083	640	495	1,200	2,362	\$551,144	\$334,957
<b>Chittenden</b>	8,470	32,774	28,886	330,892	5,972	4,967	202	18,119	\$4,088,693	\$4,761,028
<b>Essex</b>	379	356	313	3,472	70	47	271	332	\$70,773	\$26,912
<b>Franklin</b>	3,371	10,087	9,150	115,350	1,712	1,393	3,556	12,706	\$1,466,863	\$1,303,664
<b>Grand Isle</b>	653	794	708	7,805	158	89	685	1,073	\$124,923	\$88,533
<b>Lamoille</b>	2,061	5,430	4,748	55,983	991	788	1,518	4,432	\$678,110	\$933,256
<b>Orange</b>	1,931	2,565	2,233	24,468	515	394	144	2,377	\$331,706	\$283,765
<b>Orleans</b>	2,619	4,541	4,038	53,303	841	682	2,217	8,364	\$810,087	\$936,368
<b>Rutland</b>	4,750	13,017	11,725	135,949	2,455	2,122	1,951	26,972	\$2,368,961	\$2,194,972
<b>Washington</b>	5,065	11,098	9,883	114,287	1,983	1,423	10,532	8,144	\$1,120,130	\$2,455,380
<b>Windham</b>	3,166	8,362	7,689	98,284	1,538	1,152	8,421	5,255	\$1,047,366	\$1,670,908
<b>Windsor</b>	3,309	6,340	5,593	62,362	1,201	1,012	409	5,647	\$875,664	\$918,589
<b>Totals</b>	42,404	110,550	98,483	1,151,802	20,213	16,299	34,732	102,903	\$15,081,030	\$17,499,376

## 2.1.8 Electric Services & Initiatives - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$80,934,275
Fossil Fuel Savings (Costs)	\$662,049	\$12,290,748
Water Savings (Costs)	<u>\$770,186</u>	<u>\$9,213,671</u>
<b>Total</b>	<b>\$1,432,236</b>	<b>\$102,438,841</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	98,483	98,020	110,550
Winter on peak	38,634	38,614	43,826
Winter off peak	27,775	27,513	31,829
Summer on peak	18,640	18,599	18,599
Summer off peak	13,434	13,296	14,715
Coincident Demand Savings (kW)			
Winter	18,550	18,376	20,213
Shoulder	0	0	0
Summer	14,804	14,751	16,299

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	97,767	102,903	1,354,514
Annualized fuel savings (increase) MMBtu	37,979	34,732	844,560
LP	20,600	20,593	396,670
NG	7,006	8,021	173,884
Oil/Kerosene	7,287	3,504	224,428
Wood	3,040	2,772	49,602
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$2,249,074	\$2,402,156	\$19,620,018

<b>Net Societal Benefits</b>	<b>\$76,123,883</b>
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## 2.1.9 Electric Business Energy Services - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	1,528	2,876	nap	3,998
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$2,838,883	\$2,843,643	\$1,902,300	\$5,682,526
<b>Marketing/Business Development</b>	<u>\$2,044,641</u>	<u>\$2,920,988</u>	<u>\$3,207,900</u>	<u>\$4,965,629</u>
<b>Subtotal Operating Costs</b>	<u>\$4,883,524</u>	<u>\$5,764,631</u>	<u>\$5,110,200</u>	<u>\$10,648,155</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$5,921,991	\$10,679,801	\$9,848,700	\$16,601,792
<b>Incentives to Trade Allies</b>	<u>\$9,537</u>	<u>\$8,775</u>	<u>\$9,300</u>	<u>\$18,312</u>
<b>Subtotal Incentive Costs</b>	<u>\$5,931,528</u>	<u>\$10,688,576</u>	<u>\$9,858,000</u>	<u>\$16,620,104</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$4,950,126	\$4,970,143	\$5,378,300	\$9,920,270
<b>Services to Trade Allies</b>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$4,950,126</u>	<u>\$4,970,143</u>	<u>\$5,378,300</u>	<u>\$9,920,270</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$15,765,178</u>	<u>\$21,423,350</u>	<u>\$20,346,500</u>	<u>\$37,188,528</u>
<b>Total Participant Costs</b>	\$9,573,214	\$12,633,950	nav	\$22,207,164
<b>Total Third Party Costs</b>	<u>\$241,855</u>	<u>\$402,054</u>	nav	<u>\$643,908</u>
<b>Total Services and Initiatives Costs</b>	<u>\$25,580,247</u>	<u>\$34,459,353</u>	nav	<u>\$60,039,600</u>
<b>Annualized MWh Savings</b>				
Annualized MWh Savings	41,294	55,857	nap	97,151
Lifetime MWh Savings	541,541	731,384	nap	1,272,925
TRB Savings (2009 \$)	\$54,452,977	\$58,034,028	nap	\$112,487,005
Winter Coincident Peak kW Savings	5,586	8,155	nap	13,740
Summer Coincident Peak kW Savings	7,789	10,030	nap	17,819
Annualized MWh Savings/Participant	27.025	19.422	nap	24.300
Weighted Lifetime	13	13	nap	13
<b>Committed Incentives</b>	\$587,389	\$554,405	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 2.1.10 Electric Business Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	181	3,094	2,855	51,786	101	803	3,021	0	\$373,803	\$1,178,193
Cooking and Laundry	18	44	44	592	6	6	240	423	\$11,593	\$25,062
Design Assistance	57	984	869	15,810	96	226	5,048	0	\$181,008	\$921,904
Hot Water Efficiency	36	236	228	1,387	41	22	604	1,384	\$22,919	\$20,262
Hot Water Fuel Switch	1	4	4	125	0	0	-12	0	\$572	\$432
Industrial Process Eff.	72	5,539	5,802	76,717	911	590	7,535	18,146	\$535,121	\$1,663,406
Lighting	2,547	33,003	29,177	428,866	5,390	6,853	-20,732	0	\$8,212,204	\$5,098,731
Motors	173	5,661	5,300	71,341	709	651	5,626	0	\$510,797	\$1,299,739
Other Efficiency	180	449	402	6,152	59	89	-9	11,982	\$117,650	\$262,754
Other Fuel Switch	4	114	110	2,475	24	28	-383	0	\$3,375	\$22,976
Other Indirect Activity	22	877	791	4,286	87	94	0	0	\$53,898	\$222,876
Refrigeration	176	3,713	3,538	43,658	466	357	1,726	13	\$375,058	\$804,827
Space Heat Efficiency	42	717	660	12,679	179	4	7,611	0	\$67,619	\$729,391
Space Heat Fuel Switch	2	60	67	1,801	6	0	-196	0	\$7,539	\$41,913
Ventilation	83	1,361	1,220	13,710	80	306	9,706	0	\$308,306	\$341,165
Water Conservation	2	0	0	0	0	0	2	28	\$0	\$320
<b>Totals</b>		<b>55,857</b>	<b>51,066</b>	<b>731,384</b>	<b>8,155</b>	<b>10,030</b>	<b>19,787</b>	<b>31,977</b>	<b>\$10,679,801</b>	<b>\$12,633,950</b>

### 2.1.11 Electric Business Energy Services - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Barton	10	259	238	2,902	41	43	-30	17	\$49,581	\$79,044
Burlington	6	211	208	1,373	31	44	-67	0	\$38,157	-\$200
CVPS	1,343	25,848	23,875	332,235	3,996	4,614	12,417	18,805	\$5,218,747	\$5,442,803
Enosburg Falls	17	106	96	1,422	16	26	34	0	\$21,985	\$15,368
Green Mountain	910	19,081	17,414	249,000	2,567	3,586	4,124	189	\$3,433,078	\$5,051,607
Hardwick	31	323	283	4,535	61	43	-47	0	\$94,452	\$19,789
Hyde Park	5	54	50	745	9	14	-42	0	\$11,986	\$39,305
Jacksonville	2	51	47	735	9	17	-52	0	\$23,688	\$5,160
Johnson	15	390	341	4,305	48	69	-295	0	\$72,348	\$43,218
Ludlow	34	290	263	2,726	62	31	-103	72	\$74,170	\$40,724
Lyndonville	44	510	458	6,142	71	77	-321	61	\$141,280	\$47,654
Morrisville	38	483	424	5,536	64	105	-177	0	\$120,623	\$96,646
Northfield	8	149	135	2,065	19	21	325	0	\$31,396	\$24,826
Orleans	9	184	180	901	33	38	-38	0	\$31,613	\$5,445
Readsboro	1	2	2	19	0	1	-1	0	\$358	\$300
Stowe	51	1,749	1,551	23,514	264	274	1,584	1,024	\$200,339	\$393,947
Swanton	35	1,819	1,698	31,144	236	293	-328	5	\$287,726	\$233,973
VT Electric Coop	281	4,094	3,581	58,742	590	678	2,520	11,762	\$891,328	\$1,045,665
VT Marble	5	7	6	103	2	2	-3	0	\$2,964	\$834
Washington Electric	31	246	217	3,240	36	54	287	42	\$35,644	\$47,843
<b>Totals</b>	<b>2,876</b>	<b>55,857</b>	<b>51,066</b>	<b>731,384</b>	<b>8,155</b>	<b>10,030</b>	<b>19,787</b>	<b>31,977</b>	<b>\$10,679,801</b>	<b>\$12,633,950</b>

## 2.1.12 Electric Business Energy Services - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Addison</b>	162	1,976	1,784	24,821	322	341	1,688	0	\$514,681	\$508,905
<b>Bennington</b>	213	3,819	3,502	47,041	512	729	1,370	204	\$721,915	\$667,595
<b>Caledonia</b>	146	1,694	1,551	22,142	236	293	1,253	221	\$406,618	\$225,060
<b>Chittenden</b>	679	15,129	13,820	190,409	2,060	2,961	-2,729	0	\$2,913,028	\$3,272,038
<b>Essex</b>	16	117	106	1,346	16	23	-48	0	\$35,586	\$8,357
<b>Franklin</b>	257	6,071	5,628	81,164	809	931	-90	5,730	\$1,081,975	\$664,352
<b>Grand Isle</b>	26	237	210	2,935	39	23	-53	0	\$56,966	\$20,585
<b>Lamoille</b>	143	2,961	2,625	37,496	425	510	926	1,024	\$483,662	\$635,738
<b>Orange</b>	74	829	721	11,695	127	204	-41	39	\$191,295	\$170,879
<b>Orleans</b>	163	2,749	2,456	39,014	441	480	1,753	6,053	\$608,754	\$787,223
<b>Rutland</b>	413	7,112	6,598	93,324	1,183	1,440	1,988	18,156	\$1,844,276	\$1,749,834
<b>Washington</b>	207	4,855	4,416	67,807	617	681	8,242	160	\$628,428	\$1,820,820
<b>Windham</b>	180	5,528	5,158	75,838	933	805	5,688	183	\$750,038	\$1,430,176
<b>Windsor</b>	197	2,779	2,491	36,350	434	610	-158	207	\$544,240	\$672,387
<b>Totals</b>	2,876	55,857	51,066	731,384	8,155	10,030	19,787	31,977	\$10,679,801	\$12,633,950

## 2.1.13 Electric Residential Energy Services - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	34,611	39,528	nap	70,819
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$2,153,313	\$2,534,315	\$2,455,700	\$4,687,628
<b>Marketing/Business Development</b>	<u>\$1,843,934</u>	<u>\$2,374,613</u>	<u>\$2,215,300</u>	<u>\$4,218,547</u>
<b>Subtotal Operating Costs</b>	<u>\$3,997,247</u>	<u>\$4,908,929</u>	<u>\$4,671,000</u>	<u>\$8,906,176</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$2,648,880	\$4,401,230	\$4,577,000	\$7,050,111
<b>Incentives to Trade Allies</b>	<u>\$76,112</u>	<u>\$76,211</u>	<u>\$71,600</u>	<u>\$152,323</u>
<b>Subtotal Incentive Costs</b>	<u>\$2,724,993</u>	<u>\$4,477,441</u>	<u>\$4,648,600</u>	<u>\$7,202,434</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$1,186,494	\$848,518	\$1,437,200	\$2,035,012
<b>Services to Trade Allies</b>	<u>\$257,831</u>	<u>\$136,698</u>	<u>\$109,400</u>	<u>\$394,529</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$1,444,326</u>	<u>\$985,216</u>	<u>\$1,546,600</u>	<u>\$2,429,541</u>
				<u>\$0</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$8,166,565</u>	<u>\$10,371,585</u>	<u>\$10,866,200</u>	<u>\$18,538,151</u>
<b>Total Participant Costs</b>	\$9,574,058	\$4,865,426	nav	\$14,439,485
<b>Total Third Party Costs</b>	<u>\$585,707</u>	<u>\$811,547</u>	nav	<u>\$1,397,254</u>
<b>Total Services and Initiatives Costs</b>	<u>\$18,326,330</u>	<u>\$16,048,558</u>	nav	<u>\$34,374,889</u>
<b>Annualized MWh Savings</b>				
<b>Annualized MWh Savings</b>	39,280	54,693	nap	93,973
<b>Lifetime MWh Savings</b>	312,301	420,418	nap	732,719
<b>TRB Savings (2009 \$)</b>	\$39,932,452	\$44,404,813	nap	\$84,337,264
<b>Winter Coincident Peak kW Savings</b>	9,274	12,059	nap	21,333
<b>Summer Coincident Peak kW Savings</b>	5,066	6,269	nap	11,335
<b>Annualized MWh Savings/Participant</b>	1.135	1.384	nap	1.327
<b>Weighted Lifetime</b>	8	8	nap	8
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 2.1.14 Electric Residential Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	3,053	265	265	3,948	5	212	0	0	\$98,715	\$73,151
Cooking and Laundry	6,320	1,332	1,030	18,632	188	141	2,408	64,598	\$307,108	\$1,912,424
Design Assistance	26	0	0	0	0	0	17	0	\$905	\$254
Hot Water Efficiency	1,903	411	385	3,108	46	35	4,568	6,328	\$23,005	\$143,204
Hot Water Fuel Switch	168	402	435	12,049	46	30	-1,268	0	\$72,016	\$198,135
Lighting	23,389	45,911	38,565	312,514	10,859	5,148	-10,831	0	\$2,452,031	\$1,970,385
Monitoring and Metering	1,054	1,139	1,009	6,496	131	110	0	0	\$105,280	-\$101,398
Motors	339	66	62	744	5	6	101	0	\$3,439	\$16,499
Other Fuel Switch	281	138	170	4,138	16	13	-393	0	\$11,485	\$19,378
Other Indirect Activity	1,072	506	642	2,025	54	72	0	0	\$201,371	-\$131,612
Refrigeration	8,361	3,774	4,177	40,999	439	460	0	0	\$999,985	\$273,586
Space Heat Efficiency	801	182	164	4,138	79	6	18,332	0	\$66,787	\$319,998
Space Heat Fuel Switch	157	299	271	8,968	157	0	-1,060	0	\$17,779	\$110,527
Ventilation	1,036	269	242	2,661	35	36	3,071	0	\$74,405	\$60,896
<b>Totals</b>		54,693	47,417	420,418	12,059	6,269	14,945	70,926	\$4,401,230	\$4,865,426

### 2.1.15 Electric Residential Energy Services - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Barton</b>	203	117	107	1,040	25	13	69	251	\$20,601	\$10,706
<b>Burlington</b>	16	5	4	77	1	1	-2	0	\$633	-\$4,813
<b>CVPS</b>	16,774	20,656	18,017	154,706	4,524	2,360	5,892	31,346	\$1,799,094	\$1,567,863
<b>Enosburg Falls</b>	295	551	478	5,005	132	60	1,140	701	\$49,421	\$304,798
<b>Green Mountain</b>	10,963	22,548	19,375	176,084	4,947	2,622	4,205	22,485	\$1,580,692	\$2,006,049
<b>Hardwick</b>	461	672	576	4,631	150	78	37	618	\$49,199	\$28,963
<b>Hyde Park</b>	197	354	300	2,489	79	40	-60	441	\$25,605	\$26,270
<b>Jacksonville</b>	57	21	20	187	4	2	1	54	\$3,719	\$2,031
<b>Johnson</b>	170	225	191	1,628	53	25	97	120	\$13,268	\$43,113
<b>Ludlow</b>	136	465	392	3,068	104	54	42	268	\$34,344	\$14,594
<b>Lyndonville</b>	552	400	350	3,036	93	43	-45	660	\$33,454	\$35,804
<b>Morrisville</b>	481	807	688	5,579	185	92	13	787	\$50,450	\$49,384
<b>Northfield</b>	190	281	243	2,065	64	33	-51	274	\$22,945	\$20,489
<b>Orleans</b>	154	75	67	595	17	8	-8	119	\$9,246	\$5,644
<b>Readsboro</b>	20	5	5	41	1	1	0	11	\$642	\$538
<b>Rochester</b>	20	7	6	51	2	1	-1	0	\$292	\$512
<b>Stowe</b>	362	512	442	4,423	125	53	271	941	\$48,437	\$124,792
<b>Swanton</b>	411	658	577	5,809	148	75	640	1,134	\$68,834	\$67,833
<b>VT Electric Coop</b>	5,906	4,895	4,283	38,806	1,089	545	2,093	8,057	\$486,663	\$457,525
<b>VT Marble</b>	104	51	47	428	10	6	2	244	\$5,620	\$7,032
<b>Washington Electric</b>	2,056	1,387	1,251	10,671	306	155	612	2,415	\$131,150	\$96,299
<b>Totals</b>	39,528	54,693	47,417	420,418	12,059	6,269	14,945	70,926	\$4,401,230	\$4,865,426

## 2.1.16 Electric Residential Energy Services - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Addison</b>	2,141	2,614	2,268	18,742	576	301	409	3,543	\$198,901	\$196,885
<b>Bennington</b>	2,160	3,279	2,835	23,960	727	366	159	3,373	\$245,855	\$217,659
<b>Caledonia</b>	1,808	1,805	1,576	12,941	404	202	-53	2,141	\$144,526	\$109,897
<b>Chittenden</b>	7,791	17,645	15,066	140,483	3,912	2,006	2,931	18,119	\$1,175,665	\$1,488,990
<b>Essex</b>	363	239	207	2,126	54	24	319	332	\$35,187	\$18,555
<b>Franklin</b>	3,114	4,016	3,522	34,186	903	462	3,646	6,976	\$384,887	\$639,312
<b>Grand Isle</b>	627	557	498	4,870	119	66	738	1,073	\$67,957	\$67,948
<b>Lamoille</b>	1,918	2,470	2,124	18,487	566	278	593	3,408	\$194,449	\$297,518
<b>Orange</b>	1,857	1,736	1,512	12,772	388	190	185	2,338	\$140,410	\$112,887
<b>Orleans</b>	2,456	1,792	1,582	14,289	400	203	464	2,311	\$201,333	\$149,145
<b>Rutland</b>	4,337	5,905	5,127	42,625	1,272	682	-37	8,816	\$524,685	\$445,138
<b>Washington</b>	4,858	6,243	5,467	46,480	1,366	742	2,291	7,984	\$491,702	\$634,560
<b>Windham</b>	2,986	2,834	2,532	22,445	605	347	2,733	5,073	\$297,329	\$240,732
<b>Windsor</b>	3,112	3,560	3,102	26,012	767	402	568	5,441	\$331,424	\$246,202
<b>Totals</b>	39,528	54,693	47,417	420,418	12,059	6,269	14,945	70,926	\$4,401,230	\$4,865,426



## 2.1.17 Electric 2009-2011 Minimum Performance Requirements

MPR#	Name	Minimum Requirement	1/1/09 To Date
1 *	Minimum Electric Benefits	Total electric benefits divided by total EEU costs is greater than 1.2	2.38
2	Threshold (or minimum acceptable) Level of Participation by Residential Customers	Total residential sector spending is greater than \$19,700,000	\$18,679,486
3	Threshold (or minimum acceptable) Level of Participation by Low-Income Households	Spending for low-income single and multifamily services is greater than \$6,307,000	\$3,482,181
4	Threshold (or minimum acceptable) Level of Participation by Small Non-residential Customers	Number of total non-residential accounts with annual electric use of 40,000 kWh/yr or less that have savings is greater than 700	2,104
	Geographic Equity	TRB for each county is greater than values shown in table below	
	<b>County</b>	<b>3-Year Minimum TRB Goal</b>	<b>1/1/09 To Date</b>
	Addison	\$4,251,387	\$8,300,958
	Bennington	\$5,725,127	\$12,228,667
	Caledonia	\$2,928,436	\$6,128,800
	Chittenden	\$13,528,705	\$50,159,097
5	Essex/Orleans	\$3,051,759	\$8,907,441
	Franklin	\$5,181,847	\$18,092,913
	Grand Isle	\$359,531	\$1,385,201
	Lamoille	\$2,691,770	\$10,243,366
	Orange	\$2,442,011	\$4,187,425
	Rutland	\$9,117,465	\$26,369,337
	Washington	\$6,880,168	\$23,317,570
	Windham	\$7,293,624	\$15,320,595
	Windsor	\$7,056,592	\$12,182,900

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**2.1.18 Heating and Process Fuels Services and Initiatives**

Services	EVT Services and Initiatives	Subtotal Business Energy Services		Business Energy Services			Residential Energy Services		
		Subtotal Business Energy Services	Subtotal Residential Energy Services	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes	
<b>Costs</b>									
Year to Date Costs	\$1,879,808	\$229,400	\$1,650,408	\$44,508	\$184,892	\$949	\$0	\$1,649,458	
* Annual Budget Estimate	\$2,765,300	\$694,300	\$2,071,000	\$134,800	\$559,500	\$1,193	\$0	\$2,069,807	
Unspent Annual Budget Estimate	\$885,492	\$464,900	\$420,592	\$90,292	\$374,608	\$243	\$0	\$420,348	
% Annual Budget Estimate Unspent	32%	67%	20%	67%	67%	nap	nap	20%	
<b>Savings Results</b>									
MMBtu Year to Date	32,459	13,952	18,507	7,869	6,083	80	nap	18,427	
MMBtu cumulative starting 1/1/09	36,417	13,952	22,465	7,869	6,083	80	nap	22,385	
3-Year MMBTu Goal	67,600	22,475	45,125	4,200	18,275	160	nap	44,965	
% of 3-Year MMBTu Goal	54%	62%	50%	187%	33%	50%	nap	50%	
<b>Associated Electric Benefits</b>									
MWh Year to Date	(101)	(247)	145	(254)	8	0	nap	145	
MWh cumulative starting 1/1/09	(30)	(247)	217	(254)	8	0	nap	217	
Winter Coincident Peak kW Year to Date	3	(65)	68	(68)	3	0	nap	68	
Winter Coincident Peak kW cumulative starting 1/1/09	19	(65)	84	(68)	3	0	nap	84	
Summer Coincident Peak kW Year to Date	13	13	0	13	0	0	nap	0	
Summer Coincident Peak kW cumulative starting 1/1/09	17	13	4	13	0	0	nap	4	
<b>Participation</b>									
Partic.w/ installs Year to Date	1,011	84	927	33	51	8	nap	919	
Partic.w/ installs cumulative starting 1/1/09	1,526	84	1,442	33	51	8	nap	1,434	

**Total Costs for Services and Initiatives, Administration and IT**

Services	Total	Administration	Information Systems	Services and Initiatives Costs
<b>Costs</b>				
Year to Date Costs	\$1,879,808	\$0	\$0	\$1,879,808
* Annual Budget Estimate	\$2,765,300	\$0	\$0	\$2,765,300
Unspent Annual Budget Estimate	\$885,492	\$0	\$0	\$885,492
% Annual Budget Estimate Unspent	32%	nap	nap	32%

\* Annual projections are estimates only and provided for informational purposes. The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

## 2.1.19 Heating and Process Fuels Services and Initiatives - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	528	1,011	nap	1,526
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$36,859	\$135,538	\$128,945	\$172,397
<b>Marketing/Business Development</b>	<u>\$166,920</u>	<u>\$137,493</u>	<u>\$269,968</u>	<u>\$304,413</u>
<b>Subtotal Operating Costs</b>	<u>\$203,779</u>	<u>\$273,031</u>	<u>\$398,913</u>	<u>\$476,810</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$146,738	\$762,073	\$1,324,321	\$908,812
<b>Incentives to Trade Allies</b>	<u>\$0</u>	<u>\$19,600</u>	<u>\$0</u>	<u>\$19,600</u>
<b>Subtotal Incentive Costs</b>	<u>\$146,738</u>	<u>\$781,673</u>	<u>\$1,324,321</u>	<u>\$928,412</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$195,326	\$825,104	\$1,042,065	\$1,020,430
<b>Services to Trade Allies</b>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$195,326</u>	<u>\$825,104</u>	<u>\$1,042,065</u>	<u>\$1,020,430</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$545,844</u>	<u>\$1,879,808</u>	<u>\$2,765,300</u>	<u>\$2,425,652</u>
<b>Total Participant Costs</b>	\$301,817	\$2,986,589	nav	\$3,288,406
<b>Total Third Party Costs</b>	<u>\$0</u>	<u>\$3,253</u>	nav	<u>\$3,253</u>
<b>Total Services and Initiatives Costs</b>	<u>\$847,660</u>	<u>\$4,869,650</u>	nav	<u>\$5,717,310</u>
<b>Annualized MMBtu Savings</b>				
Annualized MMBtu Savings	3,958	32,459	nap	36,417
Lifetime MMBtu Savings	55,677	616,579	nap	672,256
TRB Savings (2009 \$)	\$823,644	\$9,215,874	nap	\$10,039,518
Annualized MMBtu Savings/Participant	7.496	32.106	nap	23.864
Weighted Lifetime	14	19	nap	18
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

## 2.1.20 Heating and Process Fuels Services & Initiatives - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1	-254	-226	-3,816	-68	13	3,432	0	\$2,938	\$333,120
Cooking and Laundry	30	0	0	0	0	0	0	0	\$0	\$3,499
Design Assistance	1	0	0	0	0	0	0	0	\$102	\$0
Hot Water Efficiency	277	4	4	30	0	0	1,033	122	\$48,049	\$18,642
Motors	3	0	0	0	0	0	3	0	\$0	\$342
Other Indirect Activity	81	0	0	0	0	0	0	0	\$0	\$6,628
Space Heat Efficiency	770	148	144	2,584	70	0	27,995	0	\$726,568	\$2,561,301
Space Heat Fuel Switch	1	1	2	42	1	0	-4	0	\$0	\$1,431
Ventilation	164	0	0	0	0	0	0	0	\$0	\$61,626
<b>Totals</b>		-101	-76	-1,159	3	13	32,459	122	\$762,073	\$2,986,589

## 2.1.21 Heating and Process Fuels Services and Initiatives - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	(\$29,536)
Fossil Fuel Savings (Costs)	\$563,789	\$9,236,870
Water Savings (Costs)	<u>\$914</u>	<u>\$8,540</u>
<b>Total</b>	<b>\$564,704</b>	<b>\$9,215,874</b>

	<b>Savings at meter</b>		<b>Savings at Generation</b>
	<b>Gross</b>	<b>Net</b>	<b>Net</b>
Annualized Energy Savings (MWh): Total	(76)	(90)	(101)
Winter on peak	(27)	(33)	(37)
Winter off peak	(73)	(81)	(73)
Summer on peak	21	21	21
Summer off peak	2	2	2
Coincident Demand Savings (kW)			
Winter	10	3	3
Shoulder	0	0	0
Summer	12	12	13

	<b>Gross</b>	<b>Net</b>	<b>Net Lifetime Savings</b>
Annualized Water Savings (ccf)	136	122	1,101
Annualized fuel savings (increase) MMBtu	34,686	32,459	616,579
LP	12,253	12,103	245,717
NG	230	209	3,602
Oil/Kerosene	17,703	16,096	295,684
Wood	4,491	4,043	71,426
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

<b>Net Societal Benefits</b>	<b>\$8,076,793</b>
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## 2.1.22 Heating and Process Fuels Business Energy Services - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	nap	84	nap	84

<u>Services and Initiatives Costs</u>				
<b>Operating Costs</b>				
Services and Initiatives	\$7,025	\$2,606	\$32,700	\$9,631
Marketing/Business Development	\$214	\$0	\$67,500	\$214
<b>Subtotal Operating Costs</b>	<u>\$7,238</u>	<u>\$2,606</u>	<u>\$100,200</u>	<u>\$9,845</u>
<b>Incentive Costs</b>				
Incentives to Participants	\$0	\$126,422	\$357,500	\$126,422
Incentives to Trade Allies	\$0	\$2,400	\$0	\$2,400
<b>Subtotal Incentive Costs</b>	<u>\$0</u>	<u>\$128,822</u>	<u>\$357,500</u>	<u>\$128,822</u>
<b>Technical Assistance Costs</b>				
Services to Participants	\$0	\$97,972	\$236,600	\$97,972
Services to Trade Allies	\$0	\$0	\$0	\$0
<b>Subtotal Technical Assistance Costs</b>	<u>\$0</u>	<u>\$97,972</u>	<u>\$236,600</u>	<u>\$97,972</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$7,238</u>	<u>\$229,400</u>	<u>\$694,300</u>	<u>\$236,638</u>
<b>Total Participant Costs</b>	\$0	\$643,628	nav	\$643,628
<b>Total Third Party Costs</b>	\$0	\$0	nav	\$0
<b>Total Services and Initiatives Costs</b>	<u>\$7,238</u>	<u>\$873,028</u>	<u>nav</u>	<u>\$880,266</u>

<b>Annualized MMBtu Savings</b>	0	13,952	nap	13,952
<b>Lifetime MMBtu Savings</b>	0	286,227	nap	286,227
<b>TRB Savings (2009 \$)</b>	\$0	\$4,810,573	nap	\$4,810,573
<b>Annualized MMBtu Savings/Participant</b>	0	166.099	nap	166.099
<b>Weighted Lifetime</b>	0	21	nap	21
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

## 2.1.23 Heating and Process Fuels Business Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1	-254	-226	-3,816	-68	13	3,432	0	\$2,938	\$333,120
Design Assistance	1	0	0	0	0	0	0	0	\$102	\$0
Hot Water Efficiency	13	0	0	0	0	0	588	0	\$46,014	\$11,778
Space Heat Efficiency	70	8	8	128	3	0	9,932	0	\$79,896	\$298,729
<b>Totals</b>		<b>-247</b>	<b>-218</b>	<b>-3,688</b>	<b>-65</b>	<b>13</b>	<b>13,952</b>	<b>0</b>	<b>\$126,422</b>	<b>\$643,628</b>

## 2.1.24 Heating and Process Fuels Residential Energy Services - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	528	927	nap	1,442
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$29,835	\$132,931	\$96,245	\$162,766
<b>Marketing/Business Development</b>	<u>\$166,706</u>	<u>\$137,493</u>	<u>\$202,468</u>	<u>\$304,199</u>
<b>Subtotal Operating Costs</b>	<u>\$196,541</u>	<u>\$270,424</u>	<u>\$298,713</u>	<u>\$466,965</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$146,738	\$635,652	\$966,821	\$782,390
<b>Incentives to Trade Allies</b>	<u>\$0</u>	<u>\$17,200</u>	<u>\$0</u>	<u>\$17,200</u>
<b>Subtotal Incentive Costs</b>	<u>\$146,738</u>	<u>\$652,852</u>	<u>\$966,821</u>	<u>\$799,590</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$195,326	\$727,132	\$805,465	\$922,458
<b>Services to Trade Allies</b>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$195,326</u>	<u>\$727,132</u>	<u>\$805,465</u>	<u>\$922,458</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$538,606</u>	<u>\$1,650,408</u>	<u>\$2,071,000</u>	<u>\$2,189,013</u>
<b>Total Participant Costs</b>	\$301,817	\$2,342,962	nav	\$2,644,778
<b>Total Third Party Costs</b>	<u>\$0</u>	<u>\$3,253</u>	nav	<u>\$3,253</u>
<b>Total Services and Initiatives Costs</b>	<u>\$840,422</u>	<u>\$3,996,623</u>	nav	<u>\$4,837,045</u>
<b>Annualized MMBtu Savings</b>				
Annualized MMBtu Savings	3,958	18,507	nap	22,465
Lifetime MMBtu Savings	55,677	330,352	nap	386,029
TRB Savings (2009 \$)	\$823,644	\$4,405,301	nap	\$5,228,945
Annualized MMBtu Savings/Participant	7.496	30	nap	26
Weighted Lifetime	14	43	nap	42
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.



## 2.1.25 Heating and Process Fuels Residential Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	30	0	0	0	0	0	0	0	\$0	\$3,499
Hot Water Efficiency	264	4	4	30	0	0	445	122	\$2,035	\$6,864
Motors	3	0	0	0	0	0	3	0	\$0	\$342
Other Indirect Activity	81	0	0	0	0	0	0	0	\$0	\$6,628
Space Heat Efficiency	700	140	137	2,456	67	0	18,063	0	\$646,672	\$2,262,572
Space Heat Fuel Switch	1	1	2	42	1	0	-4	0	\$0	\$1,431
Ventilation	164	0	0	0	0	0	0	0	\$0	\$61,626
<b>Totals</b>		145	142	2,528	68	0	18,507	122	\$635,652	\$2,342,962

## 2.1.26 Heating and Process Fuels 2009-2011 Minimum Performance Requirements and Performance Indicators

2009-2011 Heating and Process Fuels Minimum Performance Requirements			
MPR#	Name	Minimum Requirement	1/1/09 To Date
1	Threshold (or minimum acceptable) Level of Participation by Residential Customers	Total residential sector spending is greater than 62.5% of the total Heating and Process Fuels (HPF) Fund expenditures	89%

2009-2011 Heating and Process Fuels Performance Indicators			
PI#	Name	Minimum Requirement	1/1/09 To Date
1	Thermal & Mechanical Energy Efficiency Savings <sup>1</sup>	Annual incremental net MMBTU savings is at least 67,600	36,417
2	Residential single family comprehensiveness	a. Average air leakage reduction per project is at least 34% <sup>2</sup>	32%
		b. Percent of projects with at least 1,500 total square feet of insulation added is at least 44% <sup>3</sup>	50%
		c. Percent of projects with both shell measures and heating system measures installed is at least 16% <sup>4</sup>	11%

Footnotes:	
1	The Performance Indicator metric is based on six services considered for delivery. One of those services involves a collaboration with the Vermont Fuel Efficiency Partnership. The collaboration agreement is not finalized as of 1/1/2010. If the final collaboration agreement results in substantive changes from the current service offerings, this Performance Indicator target will be recalculated.
2	Projects are defined as a work project completed by a Home Performance with Energy Star (HPwES) contractor in a single family (1-4 units). All single family homes in which HPF-funded incentives are provided through HPwES will be included in the average, regardless of whether or not air infiltration reduction is achieved.
3	The total shall include all insulation that is installed in the home, including attic and ceiling insulation, wall insulation, floor insulation, foundation insulation, etc.
4	Significant heating system measures will include system replacements, distribution improvements such as duct sealing or installing improved or right-sized ductwork, burner replacements, etc. with a cost of at least \$200 per reported job. Neither setback thermostats nor clean and tunes shall count as significant heating system measures for this Performance Indicator. Shell measures include any measures that reduce conductive losses through the building shell (typically insulation measures) as well as air infiltration reductions.

## **3.1 Efficiency Vermont**

### **Detailed Electric Services and Initiatives Results**

### 3.1.1 Electric Business New Construction - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>* Projected</u> <u>Year 2010</u>	<u>Cumulative</u> <u>starting</u> <u>1/1/09</u>
<b># participants with installations</b>	233	276	nap	491
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$340,213	\$320,662	\$482,100	\$660,875
<b>Marketing/Business Development</b>	\$285,741	\$344,083	\$308,600	\$629,824
<b>Subtotal Operating Costs</b>	<u>\$625,954</u>	<u>\$664,745</u>	<u>\$790,700</u>	<u>\$1,290,699</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$855,738	\$1,201,190	\$1,355,800	\$2,056,928
<b>Incentives to Trade Allies</b>	\$2,191	\$2,700	\$4,200	\$4,891
<b>Subtotal Incentive Costs</b>	<u>\$857,930</u>	<u>\$1,203,890</u>	<u>\$1,360,000</u>	<u>\$2,061,819</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$618,882	\$627,324	\$796,900	\$1,246,207
<b>Services to Trade Allies</b>	\$0	\$0	\$0	\$0
<b>Subtotal Technical Assistance Costs</b>	<u>\$618,882</u>	<u>\$627,324</u>	<u>\$796,900</u>	<u>\$1,246,207</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$2,102,766</u>	<u>\$2,495,959</u>	<u>\$2,947,600</u>	<u>\$4,598,725</u>
<b>Total Participant Costs</b>	\$2,307,197	\$2,593,524	nav	\$4,900,720
<b>Total Third Party Costs</b>	<u>\$62,463</u>	<u>\$47,963</u>	nav	<u>\$110,426</u>
<b>Total Services and Initiatives Costs</b>	<u>\$4,472,426</u>	<u>\$5,137,445</u>	nav	<u>\$9,609,871</u>
<b>Annualized MWh Savings</b>				
Annualized MWh Savings	8,600	9,128	nap	17,728
Lifetime MWh Savings	126,695	136,621	nap	263,317
TRB Savings (2009 \$)	\$15,049,405	\$13,411,289	nap	\$28,460,694
Winter Coincident Peak kW Savings	1,094	1,273	nap	2,367
Summer Coincident Peak kW Savings	1,534	1,545	nap	3,079
Annualized MWh Savings/Participant	36.909	33.072	nap	36.105
Weighted Lifetime	15	15	nap	15
<b>Committed Incentives</b>	\$184,890	\$61,840	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.2 Electric Business New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	68	967	821	17,725	26	263	197	0	\$104,933	\$266,932
Cooking and Laundry	11	23	23	300	3	3	192	344	\$10,047	\$17,611
Design Assistance	7	451	378	11,701	48	105	2,862	0	\$66,020	\$130,651
Hot Water Efficiency	11	7	7	37	1	2	523	1,146	\$602	\$6,142
Hot Water Fuel Switch	1	4	4	125	0	0	-12	0	\$572	\$432
Industrial Process Eff.	6	91	91	1,273	24	11	-12	0	\$12,813	\$15,621
Lighting	249	4,655	3,964	66,123	779	828	-2,324	0	\$708,955	\$1,010,790
Motors	40	1,277	1,102	18,387	181	126	599	0	\$109,670	\$206,971
Other Efficiency	4	26	23	346	6	3	-35	6,093	\$17,945	\$40,647
Other Fuel Switch	1	19	18	579	3	2	-66	0	\$0	\$9,600
Other Indirect Activity	1	79	73	1,179	8	9	0	0	\$19,555	\$72,197
Refrigeration	40	795	716	10,009	96	98	1,654	0	\$100,689	\$346,358
Space Heat Efficiency	24	253	210	3,960	41	3	3,895	0	\$36,956	\$303,478
Ventilation	42	481	417	4,878	58	91	5,687	0	\$21,442	\$165,774
Water Conservation	2	0	0	0	0	0	2	28	\$0	\$320
<b>Totals</b>		9,128	7,848	136,621	1,273	1,545	13,162	7,610	\$1,201,189	\$2,593,524

### 3.1.3 Electric Business New Construction - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Barton</b>	2	42	36	640	8	9	10	17	\$5,536	\$5,706
<b>CVPS</b>	116	2,651	2,303	37,711	432	455	2,128	340	\$390,293	\$563,677
<b>Enosburg Falls</b>	7	20	17	272	4	5	51	0	\$7,231	\$3,556
<b>Green Mountain</b>	74	3,088	2,631	46,170	351	583	6,714	52	\$382,405	\$1,076,696
<b>Hardwick</b>	6	145	129	2,112	36	7	-14	0	\$24,717	\$7,247
<b>Hyde Park</b>	1	6	5	89	2	1	0	0	\$6,403	-\$760
<b>Johnson</b>	2	18	15	247	2	8	-2	0	\$5,129	\$2,157
<b>Ludlow</b>	4	34	28	499	5	6	15	72	\$10,181	\$10,546
<b>Lyndonville</b>	4	79	68	1,032	12	14	-45	61	\$11,780	\$22,177
<b>Morrisville</b>	4	18	15	269	2	3	-3	0	\$2,957	\$5,469
<b>Northfield</b>	1	47	41	719	7	7	-34	0	\$4,513	\$11,716
<b>Stowe</b>	6	1,223	1,065	17,522	180	175	1,678	1,024	\$75,446	\$295,655
<b>Swanton</b>	3	31	26	434	4	7	151	0	\$7,068	\$6,910
<b>VT Electric Coop</b>	43	1,608	1,367	26,980	217	252	2,158	6,045	\$261,445	\$559,584
<b>Washington Electric</b>	3	117	102	1,924	11	11	356	0	\$15,093	\$23,186
<b>Totals</b>	276	9,128	7,848	136,621	1,273	1,545	13,162	7,610	\$1,201,189	\$2,593,524

### 3.1.4 Electric Business New Construction - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	18	160	139	2,373	38	31	-44	0	\$66,294	\$21,956
Bennington	14	204	179	2,839	25	36	-6	129	\$27,275	\$27,492
Caledonia	11	149	127	2,012	24	31	-82	61	\$28,595	\$35,107
Chittenden	57	2,876	2,471	41,730	353	413	2,283	0	\$344,952	\$699,557
Franklin	33	171	146	2,519	42	38	2	8	\$66,824	\$28,637
Grand Isle	5	117	101	1,572	21	6	-11	0	\$23,298	\$8,998
Lamoille	19	1,288	1,121	18,468	190	192	1,660	1,024	\$101,242	\$304,493
Orange	13	147	126	2,235	35	40	299	0	\$22,466	\$69,280
Orleans	21	1,328	1,137	22,963	192	212	2,224	6,053	\$205,624	\$500,835
Rutland	30	563	485	8,016	89	97	291	10	\$82,714	\$133,986
Washington	18	1,077	912	17,436	107	201	5,465	15	\$103,429	\$353,063
Windham	11	392	340	5,255	57	67	256	104	\$23,999	\$100,320
Windsor	26	657	564	9,204	102	180	826	207	\$113,487	\$309,799
<b>Totals</b>	<b>276</b>	<b>9,128</b>	<b>7,848</b>	<b>136,621</b>	<b>1,273</b>	<b>1,545</b>	<b>13,162</b>	<b>7,610</b>	<b>\$1,201,189</b>	<b>\$2,593,524</b>

### 3.1.5 Electric Business New Construction - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$9,487,644
Fossil Fuel Savings (Costs)	\$175,430	\$3,214,474
Water Savings (Costs)	<u>\$56,925</u>	<u>\$709,171</u>
<b>Total</b>	<b>\$232,355</b>	<b>\$13,411,289</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	7,848	8,091	9,128
Winter on peak	2,892	2,979	3,381
Winter off peak	2,143	2,213	2,483
Summer on peak	1,764	1,816	1,816
Summer off peak	1,050	1,083	1,198
Coincident Demand Savings (kW)			
Winter	1,122	1,157	1,273
Shoulder	0	0	0
Summer	1,352	1,398	1,545

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	7,951	7,610	106,526
Annualized fuel savings (increase) MMBtu	12,905	13,162	269,670
LP	5,619	5,638	82,243
NG	3,257	3,416	62,782
Oil/Kerosene	2,586	2,641	79,674
Wood	1,441	1,469	44,970
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$42,609	\$44,395	\$601,181

<b>Net Societal Benefits</b>	<b>\$10,004,020</b>
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### 3.1.6 Electric Business Existing Facilities - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	1,295	2,600	nap	3,507
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$2,498,670	\$2,522,981	\$1,420,200	\$5,021,651
<b>Marketing/Business Development</b>	<u>\$1,758,900</u>	<u>\$2,576,905</u>	<u>\$2,899,300</u>	<u>\$4,335,805</u>
<b>Subtotal Operating Costs</b>	<u>\$4,257,570</u>	<u>\$5,099,886</u>	<u>\$4,319,500</u>	<u>\$9,357,456</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$5,066,253	\$9,478,611	\$8,492,900	\$14,544,864
<b>Incentives to Trade Allies</b>	<u>\$7,346</u>	<u>\$6,075</u>	<u>\$5,100</u>	<u>\$13,421</u>
<b>Subtotal Incentive Costs</b>	<u>\$5,073,599</u>	<u>\$9,484,686</u>	<u>\$8,498,000</u>	<u>\$14,558,285</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$4,331,244	\$4,342,819	\$4,581,400	\$8,674,063
<b>Services to Trade Allies</b>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$4,331,244</u>	<u>\$4,342,819</u>	<u>\$4,581,400</u>	<u>\$8,674,063</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$13,662,412</u>	<u>\$18,927,391</u>	<u>\$17,398,900</u>	<u>\$32,589,804</u>
<b>Total Participant Costs</b>	\$7,266,017	\$10,040,426	nav	\$17,306,443
<b>Total Third Party Costs</b>	<u>\$179,392</u>	<u>\$354,091</u>	nav	<u>\$533,482</u>
<b>Total Services and Initiatives Costs</b>	<u>\$21,107,821</u>	<u>\$29,321,908</u>	nav	<u>\$50,429,729</u>
<b>Annualized MWh Savings</b>				
Annualized MWh Savings	32,694	46,729	nap	79,423
Lifetime MWh Savings	414,846	594,763	nap	1,009,609
TRB Savings (2009 \$)	\$39,403,572	\$44,622,739	nap	\$84,026,310
Winter Coincident Peak kW Savings	4,491	6,882	nap	11,373
Summer Coincident Peak kW Savings	6,254	8,486	nap	14,740
Annualized MWh Savings/Participant	25.246	17.973	nap	22.647
Weighted Lifetime	13	13	nap	13
<b>Committed Incentives</b>	\$402,499	\$492,565	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.7 Electric Business Existing Facilities - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	113	2,127	2,034	34,061	75	540	2,824	0	\$268,870	\$911,260
Cooking and Laundry	7	21	20	292	3	3	48	79	\$1,546	\$7,451
Design Assistance	50	533	491	4,108	48	121	2,186	0	\$114,988	\$791,253
Hot Water Efficiency	25	229	221	1,350	41	20	81	239	\$22,317	\$14,120
Industrial Process Eff.	66	5,448	5,711	75,444	887	580	7,547	18,146	\$522,309	\$1,647,785
Lighting	2,298	28,348	25,212	362,743	4,611	6,025	-18,407	0	\$7,503,250	\$4,087,940
Motors	133	4,384	4,198	52,954	529	525	5,026	0	\$401,127	\$1,092,769
Other Efficiency	176	423	378	5,806	53	86	25	5,889	\$99,705	\$222,107
Other Fuel Switch	3	95	92	1,896	21	26	-317	0	\$3,375	\$13,376
Other Indirect Activity	21	799	717	3,108	79	85	0	0	\$34,343	\$150,679
Refrigeration	136	2,918	2,823	33,649	370	259	72	13	\$274,369	\$458,469
Space Heat Efficiency	18	464	451	8,719	138	2	3,716	0	\$30,663	\$425,914
Space Heat Fuel Switch	2	60	67	1,801	6	0	-196	0	\$7,539	\$41,913
Ventilation	41	879	803	8,832	22	215	4,019	0	\$286,864	\$175,391
<b>Totals</b>		<b>46,729</b>	<b>43,218</b>	<b>594,763</b>	<b>6,882</b>	<b>8,486</b>	<b>6,624</b>	<b>24,366</b>	<b>\$9,478,611</b>	<b>\$10,040,426</b>

### 3.1.8 Electric Business Existing Facilities - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Barton	8	217	201	2,262	33	35	-41	0	\$44,044	\$73,338
Burlington	6	211	208	1,373	31	44	-67	0	\$38,157	-\$200
CVPS	1,227	23,197	21,572	294,523	3,564	4,158	10,289	18,465	\$4,828,455	\$4,879,126
Enosburg Falls	10	86	79	1,150	12	21	-17	0	\$14,754	\$11,812
Green Mountain	836	15,993	14,783	202,831	2,215	3,004	-2,590	137	\$3,050,672	\$3,974,911
Hardwick	25	178	154	2,423	26	36	-33	0	\$69,735	\$12,542
Hyde Park	4	48	45	656	7	13	-42	0	\$5,584	\$40,065
Jacksonville	2	51	47	735	9	17	-52	0	\$23,688	\$5,160
Johnson	13	372	326	4,058	47	60	-293	0	\$67,219	\$41,061
Ludlow	30	256	235	2,227	56	25	-118	0	\$63,989	\$30,179
Lyndonville	40	431	390	5,110	59	63	-277	0	\$129,500	\$25,477
Morrisville	34	465	409	5,267	62	102	-174	0	\$117,666	\$91,177
Northfield	7	102	94	1,345	13	13	360	0	\$26,883	\$13,110
Orleans	9	184	180	901	33	38	-38	0	\$31,613	\$5,445
Readsboro	1	2	2	19	0	1	-1	0	\$358	\$300
Stowe	45	527	486	5,992	85	99	-94	0	\$124,893	\$98,291
Swanton	32	1,788	1,672	30,710	232	286	-479	5	\$280,659	\$227,062
VT Electric Coop	238	2,486	2,214	31,761	373	426	362	5,717	\$629,882	\$486,080
VT Marble	5	7	6	103	2	2	-3	0	\$2,964	\$834
Washington Electric	28	128	116	1,315	25	43	-69	42	\$20,550	\$24,656
<b>Totals</b>	<b>2,600</b>	<b>46,729</b>	<b>43,218</b>	<b>594,763</b>	<b>6,882</b>	<b>8,486</b>	<b>6,624</b>	<b>24,366</b>	<b>\$9,478,611</b>	<b>\$10,040,426</b>

### 3.1.9 Electric Business Existing Facilities - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	144	1,817	1,646	22,448	284	309	1,732	0	\$448,387	\$486,949
Bennington	199	3,615	3,323	44,202	487	693	1,376	75	\$694,640	\$640,103
Caledonia	135	1,544	1,424	20,131	211	262	1,334	161	\$378,023	\$189,954
Chittenden	622	12,253	11,349	148,679	1,707	2,548	-5,012	0	\$2,568,076	\$2,572,480
Essex	16	117	106	1,346	16	23	-48	0	\$35,586	\$8,357
Franklin	224	5,900	5,482	78,646	767	892	-92	5,722	\$1,015,151	\$635,716
Grand Isle	21	120	110	1,363	19	17	-42	0	\$33,668	\$11,588
Lamoille	124	1,673	1,504	19,028	235	318	-734	0	\$382,419	\$331,246
Orange	61	682	595	9,460	92	164	-340	39	\$168,830	\$101,599
Orleans	142	1,421	1,319	16,051	250	268	-471	0	\$403,130	\$286,388
Rutland	383	6,549	6,113	85,308	1,095	1,343	1,696	18,146	\$1,761,562	\$1,615,847
Washington	189	3,779	3,503	50,372	510	480	2,776	145	\$525,000	\$1,467,757
Windham	169	5,136	4,817	70,584	877	738	5,433	78	\$726,039	\$1,329,856
Windsor	171	2,123	1,927	27,146	332	431	-984	0	\$430,753	\$362,588
<b>Totals</b>	<b>2,600</b>	<b>46,729</b>	<b>43,218</b>	<b>594,763</b>	<b>6,882</b>	<b>8,486</b>	<b>6,624</b>	<b>24,366</b>	<b>\$9,478,611</b>	<b>\$10,040,426</b>

### 3.1.10 Electric Business Existing Facilities - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$41,235,067
Fossil Fuel Savings (Costs)	\$89,528	\$1,379,054
Water Savings (Costs)	<u>\$182,260</u>	<u>\$2,008,618</u>
<b>Total</b>	<b>\$271,788</b>	<b>\$44,622,739</b>

	Savings at meter		Savings at Generation	
	Gross	Net	Net	
Annualized Energy Savings (MWh): Total	43,218	41,411	46,729	
Winter on peak	17,290	16,570	18,806	
Winter off peak	11,060	10,534	12,770	
Summer on peak	9,202	8,870	8,870	
Summer off peak	5,666	5,437	6,019	
Coincident Demand Savings (kW)				
Winter	6,537	6,256	6,882	
Shoulder	0	0	0	
Summer	7,922	7,679	8,486	

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	26,590	24,366	286,453
Annualized fuel savings (increase) MMBtu	10,087	6,624	80,339
LP	(122)	(326)	(9,955)
NG	(2,381)	(2,269)	(36,887)
Oil/Kerosene	10,363	7,346	108,870
Wood	2,183	1,887	18,312
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$638,418	\$621,533	\$6,792,812

<b>Net Societal Benefits</b>	<b>\$31,166,382</b>
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### 3.1.11 Electric Residential New Construction - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	964	927	nap	1,726
<b>Services and Initiatives Costs</b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$855,662	\$861,670	\$734,800	\$1,717,333
<b>Marketing/Business Development</b>	\$329,647	\$266,776	\$338,400	\$596,424
<b>Subtotal Operating Costs</b>	<u>\$1,185,310</u>	<u>\$1,128,446</u>	<u>\$1,073,200</u>	<u>\$2,313,756</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$427,747	\$397,237	\$485,600	\$824,983
<b>Incentives to Trade Allies</b>	\$4,987	\$0	\$0	\$4,987
<b>Subtotal Incentive Costs</b>	<u>\$432,733</u>	<u>\$397,237</u>	<u>\$485,600</u>	<u>\$829,970</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$701,477	\$752,876	\$741,200	\$1,454,353
<b>Services to Trade Allies</b>	\$27,503	\$172	\$100	\$27,675
<b>Subtotal Technical Assistance Costs</b>	<u>\$728,979</u>	<u>\$753,048</u>	<u>\$741,300</u>	<u>\$1,482,027</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$2,347,023</u>	<u>\$2,278,731</u>	<u>\$2,300,100</u>	<u>\$4,625,753</u>
<b>Total Participant Costs</b>	\$290,669	\$390,929	nav	\$681,598
<b>Total Third Party Costs</b>	<u>\$185,623</u>	<u>\$207,798</u>	nav	<u>\$393,421</u>
<b>Total Services and Initiatives Costs</b>	<u>\$2,823,315</u>	<u>\$2,877,458</u>	nav	<u>\$5,700,773</u>
<b>Annualized MWh Savings</b>				
Annualized MWh Savings	1,666	1,390	nap	3,057
Lifetime MWh Savings	29,720	22,848	nap	52,568
TRB Savings (2009 \$)	\$8,227,180	\$8,901,755	nap	\$17,128,935
Winter Coincident Peak kW Savings	348	325	nap	673
Summer Coincident Peak kW Savings	190	206	nap	395
Annualized MWh Savings/Participant	1.729	1.500	nap	1.771
Weighted Lifetime	18	16	nap	17
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.12 Electric Residential New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	177	77	67	1,488	5	92	0	0	\$9,050	\$5,619
Cooking and Laundry	539	49	40	666	7	5	392	2,428	\$13,637	\$37,184
Hot Water Efficiency	529	0	0	0	0	0	3,555	1,364	\$0	\$77,796
Lighting	921	828	778	11,653	216	67	-75	0	\$141,745	\$106,314
Motors	16	1	1	24	1	0	0	0	\$1	\$219
Other Fuel Switch	250	124	157	3,725	14	11	-354	0	\$9,527	\$14,544
Other Indirect Activity	224	0	0	0	0	0	0	0	\$167,634	-\$158,786
Refrigeration	624	67	61	1,140	8	8	0	0	\$9,511	\$24,800
Space Heat Efficiency	551	94	80	2,252	45	2	17,551	0	\$3,668	\$262,103
Space Heat Fuel Switch	30	21	19	629	10	0	-75	0	\$907	\$4,100
Ventilation	667	130	112	1,269	19	20	354	0	\$44,536	\$17,035
<b>Totals</b>		<b>1,390</b>	<b>1,314</b>	<b>22,848</b>	<b>325</b>	<b>206</b>	<b>21,348</b>	<b>3,792</b>	<b>\$397,237</b>	<b>\$390,929</b>

### 3.1.13 Electric Residential New Construction - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Barton</b>	1	2	2	25	1	0	77	12	\$0	\$240
<b>CVPS</b>	307	381	358	5,870	92	58	6,153	1,173	\$103,397	-\$24,665
<b>Enosburg Falls</b>	54	86	82	1,829	25	7	1,227	258	\$24,200	\$271,699
<b>Green Mountain</b>	420	666	632	11,152	142	116	9,121	1,775	\$184,394	\$125,565
<b>Hardwick</b>	3	9	8	118	2	1	179	35	\$1,965	-\$1,550
<b>Hyde Park</b>	1	1	1	29	0	0	0	0	\$887	\$880
<b>Ludlow</b>	2	6	6	102	1	0	149	13	\$1,023	-\$750
<b>Morrisville</b>	10	11	11	136	3	1	149	24	\$2,274	-\$1,227
<b>Northfield</b>	1	0	0	4	0	0	0	0	\$161	\$160
<b>Stowe</b>	3	7	6	99	2	1	103	24	\$2,590	-\$200
<b>Swanton</b>	32	51	50	877	11	4	772	79	\$17,745	\$8,214
<b>VT Electric Coop</b>	79	141	131	2,172	36	16	2,652	291	\$52,040	\$27,783
<b>Washington Electric</b>	14	29	27	434	7	2	766	108	\$9,541	-\$15,220
<b>Totals</b>	927	1,390	1,314	22,848	325	206	21,348	3,792	\$397,237	\$390,929



### 3.1.14 Electric Residential New Construction - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	17	25	22	380	6	6	809	70	\$9,389	-\$3,445
Bennington	11	31	28	467	7	10	591	86	\$6,654	-\$3,845
Caledonia	3	7	6	84	2	0	230	14	\$2,092	-\$2,750
Chittenden	411	604	571	9,909	128	105	7,785	1,496	\$156,096	\$44,601
Franklin	169	284	274	5,085	68	26	4,470	922	\$92,682	\$266,660
Grand Isle	40	64	60	1,021	16	8	782	55	\$24,392	\$13,150
Lamoille	25	32	30	444	8	3	579	91	\$12,128	-\$5,037
Orange	9	19	18	318	5	2	402	73	\$5,010	-\$5,800
Orleans	14	34	31	540	9	5	703	85	\$11,595	\$25,018
Rutland	13	36	33	536	9	9	708	133	\$11,122	-\$5,331
Washington	82	123	116	1,989	31	14	2,784	529	\$43,288	\$54,564
Windham	110	88	83	1,373	25	13	571	134	\$13,749	\$17,692
Windsor	23	45	43	701	11	5	934	103	\$12,018	-\$4,548
<b>Totals</b>	<b>927</b>	<b>1,390</b>	<b>1,314</b>	<b>22,848</b>	<b>325</b>	<b>206</b>	<b>21,348</b>	<b>3,792</b>	<b>\$397,237</b>	<b>\$390,929</b>

### 3.1.15 Electric Residential New Construction - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$1,504,279
Fossil Fuel Savings (Costs)	\$490,934	\$7,079,277
Water Savings (Costs)	\$28,377	\$318,200
Total	\$519,311	\$8,901,756

	Savings at meter		Savings at Generation	
	Gross	Net		Net
Annualized Energy Savings (MWh): Total	1,314	1,235		1,390
Winter on peak	457	426		484
Winter off peak	463	437		491
Summer on peak	193	181		181
Summer off peak	201	190		210
Coincident Demand Savings (kW)				
Winter	310	295		325
Shoulder	0	0		0
Summer	190	186		206

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	3,692	3,792	45,896
Annualized fuel savings (increase) MMBtu	20,370	21,348	513,388
LP	11,014	11,513	279,719
NG	7,331	7,732	183,025
Oil/Kerosene	2,609	2,666	64,349
Wood	(584)	(584)	(13,680)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$28,573	\$26,365	\$470,716

Net Societal Benefits	\$6,835,335
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### 3.1.16 Electric Efficient Products - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	29,455	33,767	nap	60,898
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$660,755	\$870,519	\$1,120,700	\$1,531,275
<b>Marketing/Business Development</b>	<u>\$1,079,129</u>	<u>\$1,639,403</u>	<u>\$1,456,700</u>	<u>\$2,718,532</u>
<b>Subtotal Operating Costs</b>	<u>\$1,739,885</u>	<u>\$2,509,922</u>	<u>\$2,577,400</u>	<u>\$4,249,807</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$1,495,134	\$3,154,788	\$3,325,800	\$4,649,922
<b>Incentives to Trade Allies</b>	<u>\$0</u>	<u>\$7,175</u>	<u>\$0</u>	<u>\$7,175</u>
<b>Subtotal Incentive Costs</b>	<u>\$1,495,134</u>	<u>\$3,161,963</u>	<u>\$3,325,800</u>	<u>\$4,657,097</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$0	\$0	\$0	\$0
<b>Services to Trade Allies</b>	<u>\$62,315</u>	<u>\$67,908</u>	<u>\$88,400</u>	<u>\$130,223</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$62,315</u>	<u>\$67,908</u>	<u>\$88,400</u>	<u>\$130,223</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$3,297,334</u>	<u>\$5,739,794</u>	<u>\$5,991,600</u>	<u>\$9,037,127</u>
<b>Total Participant Costs</b>	\$7,454,977	\$3,791,921	nav	\$11,246,898
<b>Total Third Party Costs</b>	<u>\$318,773</u>	<u>\$394,179</u>	nav	<u>\$712,952</u>
<b>Total Services and Initiatives Costs</b>	<u>\$11,071,084</u>	<u>\$9,925,894</u>	nav	<u>\$20,996,977</u>
<b>Annualized MWh Savings</b>				
<b>Annualized MWh Savings</b>	35,124	50,212	nap	85,336
<b>Lifetime MWh Savings</b>	247,290	346,634	nap	593,924
<b>TRB Savings (2009 \$)</b>	\$27,646,467	\$32,050,756	nap	\$59,697,223
<b>Winter Coincident Peak kW Savings</b>	8,399	11,083	nap	19,481
<b>Summer Coincident Peak kW Savings</b>	4,656	5,774	nap	10,430
<b>Annualized MWh Savings/Participant</b>	1.192	1.487	nap	1.401
<b>Weighted Lifetime</b>	7	7	nap	7
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.

The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.17 Electric Efficient Products - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	2,628	109	128	1,274	0	82	0	0	\$76,283	\$30,745
Cooking and Laundry	5,596	1,276	984	17,869	180	136	1,974	61,787	\$288,195	\$1,859,325
Lighting	19,122	44,017	36,813	288,373	10,350	4,986	-10,727	0	\$2,096,883	\$1,797,989
Monitoring and Metering	1,043	1,138	1,008	6,491	131	110	0	0	\$104,980	-\$101,346
Motors	6	8	7	83	0	5	0	0	\$1,360	\$1,350
Other Indirect Activity	574	506	642	2,025	54	72	0	0	\$31,841	\$17,390
Refrigeration	6,258	3,157	3,623	30,519	368	384	0	0	\$578,906	\$186,469
<b>Totals</b>		50,212	43,206	346,634	11,083	5,774	-8,753	61,787	\$3,154,788	\$3,791,921

### 3.1.18 Electric Efficient Products - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Barton	171	92	84	695	21	11	-8	227	\$7,261	\$10,778
Burlington	13	5	4	77	1	1	-2	0	\$633	\$876
CVPS	14,127	19,124	16,576	133,604	4,203	2,201	-3,023	27,432	\$1,343,203	\$1,489,177
Enosburg Falls	206	457	389	3,079	105	53	-95	389	\$22,076	\$33,078
Green Mountain	8,992	20,529	17,461	137,678	4,511	2,370	-4,099	19,483	\$1,126,177	\$1,434,662
Hardwick	432	639	546	4,228	143	75	-142	497	\$38,568	\$30,413
Hyde Park	186	344	291	2,347	77	39	-60	432	\$20,713	\$25,390
Jacksonville	54	17	17	144	3	2	1	54	\$2,020	\$2,031
Johnson	143	205	173	1,386	48	23	-42	65	\$9,245	\$11,830
Ludlow	131	458	384	2,950	102	53	-107	248	\$32,993	\$15,344
Lyndonville	500	368	321	2,683	87	40	-45	518	\$22,847	\$35,729
Morrisville	417	775	659	5,236	176	90	-155	691	\$45,326	\$50,385
Northfield	157	267	231	1,826	61	32	-56	259	\$15,222	\$19,493
Orleans	126	67	59	481	15	8	-8	119	\$4,906	\$5,641
Readsboro	18	4	4	31	1	0	0	11	\$360	\$538
Rochester	20	7	6	51	2	1	-1	0	\$292	\$512
Stowe	253	446	378	3,039	100	51	-85	454	\$22,463	\$34,984
Swanton	350	578	501	4,425	130	69	-96	1,026	\$42,689	\$59,239
VT Electric Coop	5,403	4,488	3,913	32,784	1,000	504	-575	7,474	\$316,567	\$413,891
VT Marble	95	39	36	323	7	5	2	184	\$4,801	\$6,966
Washington Electric	1,973	1,303	1,174	9,568	287	148	-157	2,225	\$100,086	\$110,965
<b>Totals</b>	<b>33,767</b>	<b>50,212</b>	<b>43,206</b>	<b>346,634</b>	<b>11,083</b>	<b>5,774</b>	<b>-8,753</b>	<b>61,787</b>	<b>\$3,154,788</b>	<b>\$3,791,921</b>

### 3.1.19 Electric Efficient Products - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Addison</b>	1,942	2,508	2,170	17,442	553	286	-402	3,305	\$163,437	\$198,574
<b>Bennington</b>	1,839	2,997	2,573	20,638	677	341	-544	3,013	\$195,101	\$208,662
<b>Caledonia</b>	1,603	1,697	1,481	11,699	384	191	-296	1,642	\$109,046	\$107,648
<b>Chittenden</b>	6,298	16,067	13,537	108,285	3,537	1,829	-3,087	16,049	\$841,320	\$1,221,609
<b>Essex</b>	303	188	162	1,391	43	19	-14	238	\$13,070	\$14,931
<b>Franklin</b>	2,661	3,551	3,078	25,704	799	422	-617	5,756	\$233,530	\$343,601
<b>Grand Isle</b>	549	478	424	3,643	99	57	-61	994	\$34,714	\$54,543
<b>Lamoille</b>	1,640	2,301	1,966	15,816	518	265	-417	2,581	\$135,545	\$173,197
<b>Orange</b>	1,778	1,673	1,454	11,903	375	184	-217	2,246	\$115,991	\$117,929
<b>Orleans</b>	2,136	1,593	1,404	11,416	358	182	-238	2,138	\$112,106	\$121,023
<b>Rutland</b>	3,559	5,533	4,781	38,155	1,194	642	-878	7,560	\$396,004	\$426,148
<b>Washington</b>	4,316	5,813	5,075	39,881	1,288	695	-1,153	6,988	\$371,858	\$425,969
<b>Windham</b>	2,371	2,460	2,188	17,545	534	284	-338	4,244	\$204,130	\$173,319
<b>Windsor</b>	2,772	3,352	2,913	23,116	723	379	-490	5,033	\$252,597	\$204,768
<b>Totals</b>	33,767	50,212	43,206	346,634	11,083	5,774	-8,753	61,787	\$3,154,788	\$3,791,921

### 3.1.20 Electric Efficient Products - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$26,245,642
Fossil Fuel Savings (Costs)	(\$180,095)	\$2,288
Water Savings (Costs)	<u>\$462,600</u>	<u>\$5,802,679</u>
<b>Total</b>	<b>\$282,505</b>	<b>\$32,050,608</b>

	<u>Savings at meter</u>		<u>Savings at Generation</u>
	<u>Gross</u>	<u>Net</u>	<u>Net</u>
Annualized Energy Savings (MWh): Total	43,206	44,540	50,212
Winter on peak	16,961	17,665	20,049
Winter off peak	13,094	13,366	14,997
Summer on peak	7,065	7,336	7,336
Summer off peak	6,085	6,174	6,831
Coincident Demand Savings (kW)			
Winter	9,961	10,075	11,083
Shoulder	0	0	0
Summer	5,066	5,225	5,774

	<u>Gross</u>	<u>Net</u>	<u>Net Lifetime Savings</u>
Annualized Water Savings (ccf)	53,777	61,787	865,587
Annualized fuel savings (increase) MMBtu	(7,742)	(8,753)	(11,244)
LP	572	572	9,154
NG	572	572	9,154
Oil/Kerosene	(8,886)	(9,734)	(29,551)
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$1,519,225	\$1,689,266	\$11,512,174

<b>Net Societal Benefits</b>	<b>\$26,435,623</b>
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### 3.1.21 Electric Existing Homes - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	4,192	4,764	nap	8,195
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$636,895	\$802,126	\$600,200	\$1,439,021
<b>Marketing/Business Development</b>	\$435,157	\$468,434	\$420,200	\$903,592
<b>Subtotal Operating Costs</b>	<u>\$1,072,052</u>	<u>\$1,270,560</u>	<u>\$1,020,400</u>	<u>\$2,342,612</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$726,000	\$849,206	\$765,600	\$1,575,206
<b>Incentives to Trade Allies</b>	\$71,126	\$69,036	\$71,600	\$140,162
<b>Subtotal Incentive Costs</b>	<u>\$797,125</u>	<u>\$918,242</u>	<u>\$837,200</u>	<u>\$1,715,367</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$485,018	\$95,642	\$696,000	\$580,659
<b>Services to Trade Allies</b>	\$168,014	\$68,618	\$20,900	\$236,632
<b>Subtotal Technical Assistance Costs</b>	<u>\$653,031</u>	<u>\$164,260</u>	<u>\$716,900</u>	<u>\$817,291</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$2,522,209</u>	<u>\$2,353,062</u>	<u>\$2,574,500</u>	<u>\$4,875,271</u>
<b>Total Participant Costs</b>	\$1,828,412	\$682,577	nav	\$2,510,988
<b>Total Third Party Costs</b>	\$81,311	\$209,569	nav	\$290,880
<b>Total Services and Initiatives Costs</b>	<u>\$4,431,932</u>	<u>\$3,245,207</u>	nav	<u>\$7,677,139</u>
<b>Annualized MWh Savings</b>				
Annualized MWh Savings	2,490	3,091	nap	5,581
Lifetime MWh Savings	35,290	50,937	nap	86,227
TRB Savings (2009 \$)	\$4,058,805	\$3,452,302	nap	\$7,511,107
Winter Coincident Peak kW Savings	527	651	nap	1,178
Summer Coincident Peak kW Savings	220	289	nap	509
Annualized MWh Savings/Participant	0.594	0.649	nap	0.681
Weighted Lifetime	14	16	nap	15
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.



### 3.1.22 Electric Existing Homes - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	248	79	70	1,186	0	38	0	0	\$13,382	\$36,787
Cooking and Laundry	185	7	7	96	1	1	42	383	\$5,276	\$15,915
Design Assistance	26	0	0	0	0	0	17	0	\$905	\$254
Hot Water Efficiency	1,361	411	385	3,108	46	35	1,013	4,964	\$23,005	\$65,408
Hot Water Fuel Switch	168	402	435	12,049	46	30	-1,268	0	\$72,016	\$198,135
Lighting	3,278	1,066	974	12,487	294	96	-29	0	\$213,402	\$66,082
Monitoring and Metering	11	1	1	5	0	0	0	0	\$300	-\$52
Motors	317	56	54	636	4	1	101	0	\$2,078	\$14,931
Other Fuel Switch	31	14	13	413	2	1	-39	0	\$1,959	\$4,834
Other Indirect Activity	274	0	0	0	0	0	0	0	\$1,896	\$9,784
Refrigeration	1,479	550	492	9,339	63	67	0	0	\$411,568	\$62,318
Space Heat Efficiency	250	88	84	1,886	34	4	781	0	\$63,119	\$57,894
Space Heat Fuel Switch	127	278	252	8,339	146	0	-985	0	\$16,872	\$106,427
Ventilation	369	139	129	1,392	15	16	2,717	0	\$29,869	\$43,860
<b>Totals</b>		<b>3,091</b>	<b>2,897</b>	<b>50,937</b>	<b>651</b>	<b>289</b>	<b>2,349</b>	<b>5,347</b>	<b>\$849,206</b>	<b>\$682,577</b>

### 3.1.23 Electric Existing Homes - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Barton	31	24	21	320	4	3	0	13	\$13,340	-\$311
Burlington	3	0	0	0	0	0	0	0	\$0	-\$5,689
CVPS	2,340	1,151	1,083	15,232	229	101	2,762	2,742	\$352,494	\$103,351
Enosburg Falls	35	8	7	98	2	1	8	55	\$3,145	\$20
Green Mountain	1,482	1,352	1,282	27,254	293	135	-817	1,227	\$270,122	\$445,822
Hardwick	26	25	22	285	4	2	0	87	\$8,667	\$100
Hyde Park	10	8	8	113	1	1	0	9	\$4,006	\$0
Jacksonville	3	3	3	43	1	0	0	0	\$1,699	\$0
Johnson	27	20	18	242	6	2	139	55	\$4,022	\$31,283
Ludlow	3	2	2	16	0	0	0	7	\$328	\$0
Lyndonville	52	33	29	353	5	3	0	142	\$10,607	\$75
Morrisville	54	21	19	208	5	2	18	72	\$2,850	\$226
Northfield	32	14	12	235	3	1	5	14	\$7,562	\$836
Orleans	28	8	7	115	2	1	0	0	\$4,340	\$3
Readsboro	2	1	1	9	0	0	0	0	\$281	\$0
Stowe	106	59	58	1,285	23	2	252	463	\$23,384	\$90,008
Swanton	29	29	26	506	6	3	-36	28	\$8,401	\$381
VT Electric Coop	424	266	239	3,850	52	26	16	292	\$118,055	\$15,852
VT Marble	9	12	11	105	2	1	0	60	\$820	\$66
Washington Electric	68	55	50	669	11	5	2	82	\$21,523	\$554
<b>Totals</b>	<b>4,764</b>	<b>3,091</b>	<b>2,897</b>	<b>50,937</b>	<b>651</b>	<b>289</b>	<b>2,349</b>	<b>5,347</b>	<b>\$849,206</b>	<b>\$682,577</b>

### 3.1.24 Electric Existing Homes - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	175	81	76	920	17	9	2	169	\$26,075	\$1,756
Bennington	310	251	233	2,855	43	15	112	273	\$44,100	\$12,843
Caledonia	202	101	90	1,158	18	10	12	485	\$33,387	\$4,999
Chittenden	1,063	973	958	22,288	247	72	-1,767	575	\$178,250	\$222,780
Essex	60	51	45	735	11	5	334	94	\$22,118	\$3,623
Franklin	284	181	170	3,398	36	15	-207	298	\$58,675	\$29,051
Grand Isle	38	15	13	206	3	2	17	24	\$8,851	\$255
Lamoille	253	136	128	2,227	40	10	431	736	\$46,775	\$129,358
Orange	70	45	40	552	8	5	0	18	\$19,410	\$757
Orleans	306	165	146	2,333	33	17	-1	87	\$77,632	\$3,104
Rutland	765	336	313	3,934	70	32	133	1,122	\$117,559	\$24,321
Washington	426	307	276	4,610	47	32	659	468	\$76,556	\$154,027
Windham	499	286	261	3,527	46	50	2,500	694	\$79,450	\$49,721
Windsor	313	163	146	2,195	32	17	124	305	\$66,809	\$45,982
<b>Totals</b>	<b>4,764</b>	<b>3,091</b>	<b>2,897</b>	<b>50,937</b>	<b>651</b>	<b>289</b>	<b>2,349</b>	<b>5,347</b>	<b>\$849,206</b>	<b>\$682,577</b>

### 3.1.25 Electric Existing Homes - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$2,461,644
Fossil Fuel Savings (Costs)	\$86,253	\$615,655
Water Savings (Costs)	\$40,024	\$375,003
<b>Total</b>	<b>\$126,277</b>	<b>\$3,452,302</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	2,897	2,744	3,091
Winter on peak	1,034	974	1,105
Winter off peak	1,015	963	1,089
Summer on peak	416	395	395
Summer off peak	431	412	456
Coincident Demand Savings (kW)			
Winter	620	592	651
Shoulder	0	0	0
Summer	272	262	289

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	5,758	5,347	50,052
Annualized fuel savings (increase) MMBtu	2,358	2,349	(7,593)
LP	3,517	3,196	35,509
NG	(1,773)	(1,430)	(44,188)
Oil/Kerosene	615	584	1,087
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$20,249	\$20,597	\$243,135

<b>Net Societal Benefits</b>	<b>\$1,682,522</b>
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### 3.1.26 Heating and Process Fuels Business New Construction - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	nap	33	nap	33
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	nap	\$506	\$6,400	\$506
<b>Marketing/Business Development</b>	nap	\$0	\$13,100	\$0
<b>Subtotal Operating Costs</b>	nap	\$506	\$19,500	\$506
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	nap	\$23,685	\$69,400	\$23,685
<b>Incentives to Trade Allies</b>	nap	\$1,600	\$0	\$1,600
<b>Subtotal Incentive Costs</b>	nap	\$25,285	\$69,400	\$25,285
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	nap	\$18,717	\$45,900	\$18,717
<b>Services to Trade Allies</b>	nap	\$0	\$0	\$0
<b>Subtotal Technical Assistance Costs</b>	nap	\$18,717	\$45,900	\$18,717
<b>Total Efficiency Vermont Costs</b>	nap	\$44,508	\$134,800	\$44,508
<b>Total Participant Costs</b>	nap	\$390,086	nav	\$390,086
<b>Total Third Party Costs</b>	nap	\$0	nav	\$0
<b>Total Services and Initiatives Costs</b>	nap	\$434,594	nav	\$434,594
<b>Annualized MMBtu Savings</b>				
Annualized MMBtu Savings	nap	7,869	nap	7,869
Lifetime MMBtu Savings	nap	159,023	nap	159,023
TRB Savings (2009 \$)	nap	\$2,928,968	nap	\$2,928,968
Annualized MMBtu Savings/Participant	nap	238.452	nap	238.452
Weighted Lifetime	nap	20	nap	20
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.27 Heating and Process Fuels Business New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1	-254	-226	-3,816	-68	13	3,432	0	\$2,938	\$333,120
Hot Water Efficiency	1	0	0	0	0	0	33	0	\$406	\$602
Space Heat Efficiency	31	0	0	0	0	0	4,404	0	\$20,815	\$56,364
<b>Totals</b>		<b>-254</b>	<b>-226</b>	<b>-3,816</b>	<b>-68</b>	<b>13</b>	<b>7,869</b>	<b>0</b>	<b>\$23,685</b>	<b>\$390,086</b>

### 3.1.28 Heating and Process Fuels Business New Construction - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	(\$201,912)
Fossil Fuel Savings (Costs)	\$120,794	\$3,130,880
Water Savings (Costs)	\$0	\$0
<b>Total</b>	<b>\$120,794</b>	<b>\$2,928,968</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	(226)	(226)	(254)
Winter on peak	(94)	(94)	(107)
Winter off peak	(153)	(153)	(171)
Summer on peak	20	20	20
Summer off peak	1	1	1
Coincident Demand Savings (kW)			
Winter	(62)	(62)	(68)
Shoulder	0	0	0
Summer	11	11	13

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu	7,684	7,869	159,023
LP	7,504	7,677	154,302
NG	0	0	0
Oil/Kerosene	180	192	4,721
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

Net Societal Benefits	\$2,634,250
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### 3.1.29 Heating and Process Fuels Business Existing Facilities - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>* Projected</u> <u>Year 2010</u>	<u>Cumulative</u> <u>starting</u> <u>1/1/09</u>
<b># participants with installations</b>	0	51	nap	51

<u>Services and Initiatives Costs</u>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$7,025	\$2,101	\$26,300	\$9,125
<b>Marketing/Business Development</b>	\$214	\$0	\$54,400	\$214
<b>Subtotal Operating Costs</b>	<u>\$7,238</u>	<u>\$2,101</u>	<u>\$80,700</u>	<u>\$9,339</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$0	\$102,737	\$288,100	\$102,737
<b>Incentives to Trade Allies</b>	\$0	\$800	\$0	\$800
<b>Subtotal Incentive Costs</b>	<u>\$0</u>	<u>\$103,537</u>	<u>\$288,100</u>	<u>\$103,537</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$0	\$79,255	\$190,700	\$79,255
<b>Services to Trade Allies</b>	\$0	\$0	\$0	\$0
<b>Subtotal Technical Assistance Costs</b>	<u>\$0</u>	<u>\$79,255</u>	<u>\$190,700</u>	<u>\$79,255</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$7,238</u>	<u>\$184,892</u>	<u>\$559,500</u>	<u>\$192,131</u>
<b>Total Participant Costs</b>	\$0	\$253,541	nav	\$253,541
<b>Total Third Party Costs</b>	\$0	\$0	nav	\$0
<b>Total Services and Initiatives Costs</b>	<u>\$7,238</u>	<u>\$438,434</u>	<u>nav</u>	<u>\$445,672</u>

<b>Annualized MMBtu Savings</b>	0	6,083	nap	6,083
<b>Lifetime MMBtu Savings</b>	0	127,204	nap	127,204
<b>TRB Savings (2009 \$)</b>	\$0	\$1,881,605	nap	\$1,881,605
<b>Annualized MMBtu Savings/Participant</b>	0	119.282	nap	119.282
<b>Weighted Lifetime</b>	0	21	nap	21
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.



### 3.1.30 Heating and Process Fuels Business Existing Facilities - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Design Assistance	1	0	0	0	0	0	0	0	\$102	\$0
Hot Water Efficiency	12	0	0	0	0	0	555	0	\$45,608	\$11,176
Space Heat Efficiency	39	8	8	128	3	0	5,528	0	\$59,082	\$242,365
<b>Totals</b>		<b>8</b>	<b>8</b>	<b>128</b>	<b>3</b>	<b>0</b>	<b>6,083</b>	<b>0</b>	<b>\$102,737</b>	<b>\$253,541</b>

### 3.1.31 Heating and Process Fuels Business Existing Facilities - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$7,909
Fossil Fuel Savings (Costs)	\$88,705	\$1,873,696
Water Savings (Costs)	\$0	\$0
<b>Total</b>	<b>\$88,705</b>	<b>\$1,881,605</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	8	7	8
Winter on peak	3	3	3
Winter off peak	5	4	5
Summer on peak	0	0	0
Summer off peak	0	0	0
Coincident Demand Savings (kW)			
Winter	3	3	3
Shoulder	0	0	0
Summer	0	0	0

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu	6,548	6,083	127,204
LP	2,116	2,040	48,606
NG	0	0	0
Oil/Kerosene	4,432	4,044	78,598
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

<b>Net Societal Benefits</b>	<b>\$1,934,243</b>
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### 3.1.32 Heating and Process Fuels Residential New Construction - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
# participants with installations	nap	8	nap	8

<u>Services and Initiatives Costs</u>				
<b>Operating Costs</b>				
Services and Initiatives	nap	\$76	\$55	\$76
Marketing/Business Development	nap	\$79	\$117	\$79
<b>Subtotal Operating Costs</b>	nap	<u>\$156</u>	<u>\$172</u>	<u>\$156</u>
<b>Incentive Costs</b>				
Incentives to Participants	nap	\$413	\$557	\$413
Incentives to Trade Allies	nap	\$0	\$0	\$0
<b>Subtotal Incentive Costs</b>	nap	<u>\$413</u>	<u>\$557</u>	<u>\$413</u>
<b>Technical Assistance Costs</b>				
Services to Participants	nap	\$381	\$464	\$381
Services to Trade Allies	nap	\$0	\$0	\$0
<b>Subtotal Technical Assistance Costs</b>	nap	<u>\$381</u>	<u>\$464</u>	<u>\$381</u>
<b>Total Efficiency Vermont Costs</b>	nap	<u>\$949</u>	<u>\$1,193</u>	<u>\$949</u>
<b>Total Participant Costs</b>	nap	\$2,787	nav	\$2,787
<b>Total Third Party Costs</b>	nap	\$0	nav	\$0
<b>Total Services and Initiatives Costs</b>	nap	<u>\$3,737</u>	nav	<u>\$3,737</u>

<b>Annualized MMBtu Savings</b>	nap	80	nap	80
<b>Lifetime MMBtu Savings</b>	nap	1,999	nap	1,999
<b>TRB Savings (2009 \$)</b>	nap	\$37,432	nap	\$37,432
<b>Annualized MMBtu Savings/Participant</b>	nap	10.000	nap	10.000
<b>Weighted Lifetime</b>	nap	25	nap	25
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.33 Heating and Process Fuels Residential New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Space Heat Efficiency	8	0	0	0	0	0	80	0	\$421	\$2,787
<b>Totals</b>		0	0	0	0	0	80	0	\$413	\$2,787

### 3.1.34 Heating and Process Fuels Residential New Construction - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$0
Fossil Fuel Savings (Costs)	\$2,336	\$37,432
Water Savings (Costs)	\$0	\$0
<b>Total</b>	<b>\$2,336</b>	<b>\$37,432</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	0	0	0
Winter on peak	0	0	0
Winter off peak	0	0	0
Summer on peak	0	0	0
Summer off peak	0	0	0
Coincident Demand Savings (kW)			
Winter	0	0	0
Shoulder	0	0	0
Summer	0	0	0

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu	80	80	1,999
LP	80	80	1,999
NG	0	0	0
Oil/Kerosene	0	0	0
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

Net Societal Benefits	\$36,755
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### 3.1.35 Heating and Process Fuels Efficient Products - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	nap	nap	nap	nap
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	nap	nap	nap	nap
<b>Marketing/Business Development</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Subtotal Operating Costs</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	nap	nap	nap	nap
<b>Incentives to Trade Allies</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Subtotal Incentive Costs</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	nap	nap	nap	nap
<b>Services to Trade Allies</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Subtotal Technical Assistance Costs</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Total Efficiency Vermont Costs</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Total Participant Costs</b>	nap	nap	nap	nap
<b>Total Third Party Costs</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Total Services and Initiatives Costs</b>	<u>nap</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<b>Annualized MMBtu Savings</b>				
<b>Lifetime MMBtu Savings</b>	nap	nap	nap	nap
<b>TRB Savings (2009 \$)</b>	nap	nap	nap	nap
<b>Annualized MMBtu Savings/Participant</b>	nap	nap	nap	nap
<b>Weighted Lifetime</b>	nap	nap	nap	nap
<b>Committed Incentives</b>	nap	nap	nap	nap

### 3.1.36 Heating and Process Fuels Efficient Products - End Use Breakdown

End Use	# of Participants	Net MWH Saved		Gross MWH Saved		Net Lifetime MWH Saved		Net Winter KW Saved		Net Summer KW Saved		Net Other Fuel MMBTU		Net Water CCF Saved		Participant Incentives Paid		Participant Costs	
Totals	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

### 3.1.37 Heating and Process Fuels Efficient Products - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	nap
Fossil Fuel Savings (Costs)	nap	nap
Water Savings (Costs)	nap	nap
Total	nap	nap

	<u>Savings at meter</u>		<u>Savings at Generation</u>	
	Gross	Net	Gross	Net
Annualized Energy Savings (MWh): Total	nap	nap	nap	nap
Winter on peak	nap	nap	nap	nap
Winter off peak	nap	nap	nap	nap
Summer on peak	nap	nap	nap	nap
Summer off peak	nap	nap	nap	nap
Coincident Demand Savings (kW)				
Winter	nap	nap	nap	nap
Shoulder	nap	nap	nap	nap
Summer	nap	nap	nap	nap

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	nap	nap	nap
Annualized fuel savings (increase) MMBtu	nap	nap	nap
LP	nap	nap	nap
NG	nap	nap	nap
Oil/Kerosene	nap	nap	nap
Wood	nap	nap	nap
Solar	nap	nap	nap
Other	nap	nap	nap
Annualized savings (increase) in O&M(\$)	nap	nap	nap

Net Societal Benefits	nap
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### 3.1.38 Heating and Process Fuels Existing Homes - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	528	919	nap	1,434
<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$29,835	\$132,855	\$96,190	\$162,690
<b>Marketing/Business Development</b>	<u>\$166,706</u>	<u>\$137,414</u>	<u>\$202,351</u>	<u>\$304,120</u>
<b>Subtotal Operating Costs</b>	<u>\$196,541</u>	<u>\$270,269</u>	<u>\$298,541</u>	<u>\$466,810</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$146,738	\$635,239	\$966,265	\$781,977
<b>Incentives to Trade Allies</b>	<u>\$0</u>	<u>\$17,200</u>	<u>\$0</u>	<u>\$17,200</u>
<b>Subtotal Incentive Costs</b>	<u>\$146,738</u>	<u>\$652,439</u>	<u>\$966,265</u>	<u>\$799,177</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$195,326	\$726,751	\$805,001	\$922,077
<b>Services to Trade Allies</b>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$195,326</u>	<u>\$726,751</u>	<u>\$805,001</u>	<u>\$922,077</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$538,606</u>	<u>\$1,649,458</u>	<u>\$2,069,807</u>	<u>\$2,188,064</u>
<b>Total Participant Costs</b>	\$301,817	\$2,340,175	nav	\$2,641,991
<b>Total Third Party Costs</b>	<u>\$0</u>	<u>\$3,253</u>	nav	<u>\$3,253</u>
<b>Total Services and Initiatives Costs</b>	<u>\$840,422</u>	<u>\$3,992,886</u>	nav	<u>\$4,833,308</u>
<b>Annualized MMBtu Savings</b>				
Annualized MMBtu Savings	3,958	18,427	nap	22,385
Lifetime MMBtu Savings	55,677	328,354	nap	384,031
TRB Savings (2009 \$)	\$823,644	\$4,367,869	nap	\$5,191,513
Annualized MMBtu Savings/Participant	7.496	20.051	nap	15.610
Weighted Lifetime	14	18	nap	17
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

### 3.1.39 Heating and Process Fuels Existing Homes - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	30	0	0	0	0	0	0	0	\$0	\$3,499
Hot Water Efficiency	264	4	4	30	0	0	445	122	\$2,035	\$6,864
Motors	3	0	0	0	0	0	3	0	\$0	\$342
Other Indirect Activity	81	0	0	0	0	0	0	0	\$0	\$6,628
Space Heat Efficiency	692	140	137	2,456	67	0	17,983	0	\$646,250	\$2,259,785
Space Heat Fuel Switch	1	1	2	42	1	0	-4	0	\$0	\$1,431
Ventilation	164	0	0	0	0	0	0	0	\$0	\$61,626
<b>Totals</b>		145	142	2,528	68	0	18,427	122	\$635,239	\$2,340,175

### 3.1.40 Heating and Process Fuels Existing Homes - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$164,466
Fossil Fuel Savings (Costs)	\$351,955	\$4,194,863
Water Savings (Costs)	<u>\$914</u>	<u>\$8,540</u>
<b>Total</b>	<b>\$352,869</b>	<b>\$4,367,869</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	142	129	145
Winter on peak	64	58	66
Winter off peak	74	68	94
Summer on peak	1	1	1
Summer off peak	2	2	2
Coincident Demand Savings (kW)			
Winter	69	62	68
Shoulder	0	0	0
Summer	0	0	0

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	136	122	1,101
Annualized fuel savings (increase) MMBtu	20,375	18,427	328,354
LP	2,553	2,306	40,811
NG	230	209	3,602
Oil/Kerosene	13,091	11,860	212,365
Wood	4,491	4,043	71,426
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

<b>Net Societal Benefits</b>	<b>\$3,471,545</b>
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## **4.1 Customer Credit Program**

## 4.1.1 NARRATIVE

The Customer Credit program (CCP) provides an alternative program path for large businesses that meet program eligibility criteria. The program enables customers with the capability and resources to identify, analyze, and undertake efficiency projects, and self-implement energy efficiency measures with financial assistance from Efficiency Vermont. CCP customers can apply for financial incentives for any retrofit or market-driven project that saves electrical energy and passes the Vermont societal cost-effectiveness test. Once a customer elects to participate in CCP, that customer is no longer eligible to participate in other Efficiency Vermont programs.

All projects must be customer-initiated. In addition, the customer or its contractors must complete all technical analysis. Customers can receive cash incentives capped at 90% of their projected three-year contribution to the statewide energy efficiency fund at any time. Customers can draw on contributions from the current year and either the previous or ensuing year. Market-driven projects are eligible for incentives equal to 100% of the incremental measure cost. For retrofit projects, customers can receive incentives that reduce the customer payback time to 12 months.

### *Eligible Market*

To be eligible for CCP, customers must:

- Never have accepted cash incentives from any Vermont utility Demand Side Management (DSM) program;
- Have ISO 14001 certification.

## 4.1.2 Customer Credit - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>* Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	1	1	nap	1

<b><u>Services and Initiatives Costs</u></b>				
<b>Operating Costs</b>				
<b>Services and Initiatives</b>	\$3,703	\$0	\$18,500	\$3,703
<b>Marketing/Business Development</b>	\$0	\$0	\$0	\$0
<b>Subtotal Operating Costs</b>	<u>\$3,703</u>	<u>\$0</u>	<u>\$18,500</u>	<u>\$3,703</u>
<b>Incentive Costs</b>				
<b>Incentives to Participants</b>	\$876,656	\$179,264	\$0	\$1,055,920
<b>Incentives to Trade Allies</b>	\$0	\$0	\$0	\$0
<b>Subtotal Incentive Costs</b>	<u>\$876,656</u>	<u>\$179,264</u>	<u>\$0</u>	<u>\$1,055,920</u>
<b>Technical Assistance Costs</b>				
<b>Services to Participants</b>	\$5,007	\$0	\$0	\$5,007
<b>Services to Trade Allies</b>	\$0	\$0	\$0	\$0
<b>Subtotal Technical Assistance Costs</b>	<u>\$5,007</u>	<u>\$0</u>	<u>\$0</u>	<u>\$5,007</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$885,367</u>	<u>\$179,264</u>	<u>\$18,500</u>	<u>\$1,064,631</u>
<b>Total Participant Costs</b>	\$248,456	\$24,211	nap	\$272,667
<b>Total Third Party Costs</b>	\$0	\$0	nap	\$0
<b>Total Services and Initiatives Costs</b>	<u>\$1,133,823</u>	<u>\$203,475</u>	<u>nap</u>	<u>\$1,337,298</u>

<b>Annualized MWh Savings</b>	4,279	322	nap	4,601
<b>Lifetime MWh Savings</b>	62,539	4,186	nap	66,725
<b>TRB Savings (2009 \$)</b>	\$6,238,102	\$341,434	nap	\$6,579,536
<b>Winter Coincident Peak kW Savings</b>	308	64	nap	371
<b>Summer Coincident Peak kW Savings</b>	688	64	nap	752
<b>Annualized MWh Savings/Participant</b>	4,279	322	nap	4,601
<b>Weighted Lifetime</b>	15	13	nap	15
<b>Committed Incentives</b>	nap	nap	nap	nap

\* Annual projections are estimates only and provided for informational purposes.  
The Efficiency Vermont contract is based on three-year cumulative budgets and savings goals.

Note: The above budgets include the Customer Credit Net Pay Option Incentive Funds.

### 4.1.3 Customer Credit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Motors	1	322	285	4,186	64	64	0	0	\$180,608	\$24,211
<b>Totals</b>		322	285	4,186	64	64	0	0	\$179,264	\$24,211

### 4.1.4 Customer Credit - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$341,434
Fossil Fuel Savings (Costs)	\$0	\$0
Water Savings (Costs)	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$341,434</b>

	<b>Savings at meter</b>		<b>Savings at Generation</b>
	<b>Gross</b>	<b>Net</b>	<b>Net</b>
Annualized Energy Savings (MWh): Total	285	285	322
Winter on peak	147	147	167
Winter off peak	52	52	59
Summer on peak	67	67	67
Summer off peak	19	19	21
Coincident Demand Savings (kW)			
Winter	58	58	64
Shoulder	0	0	0
Summer	58	58	64

	<b>Gross</b>	<b>Net</b>	<b>Net Lifetime Savings</b>
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu	0	0	0
LP	0	0	0
NG	0	0	0
Oil/Kerosene	0	0	0
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0



## **4.2 Geographic Targeting**

## 4.2.1 Electric Geographic Targeting Regions Combined - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>Cumulative</u> <u>starting 1/1/09</u>
<b># participants with installations</b>	8,628	8,532	16,514
<b>Services and Initiatives Costs</b>			
<b>Operating Costs</b>			
<b>Services and Initiatives</b>	\$1,838,195	\$1,704,706	\$3,542,902
<b>Marketing/Business Development</b>	<u>\$1,467,629</u>	<u>\$1,907,488</u>	<u>\$3,375,117</u>
<b>Subtotal Operating Costs</b>	<u>\$3,305,824</u>	<u>\$3,612,194</u>	<u>\$6,918,019</u>
<b>Incentive Costs</b>			
<b>Incentives to Participants</b>	\$4,560,103	\$5,597,600	\$10,157,702
<b>Incentives to Trade Allies</b>	<u>\$20,023</u>	<u>\$24,384</u>	<u>\$44,408</u>
<b>Subtotal Incentive Costs</b>	<u>\$4,580,126</u>	<u>\$5,621,984</u>	<u>\$10,202,110</u>
<b>Technical Assistance Costs</b>			
<b>Services to Participants</b>	\$2,377,770	\$2,058,014	\$4,435,784
<b>Services to Trade Allies</b>	<u>\$65,300</u>	<u>\$39,437</u>	<u>\$104,737</u>
<b>Subtotal Technical Assistance Costs</b>	<u>\$2,443,070</u>	<u>\$2,097,451</u>	<u>\$4,540,521</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$10,329,020</u>	<u>\$11,331,630</u>	<u>\$21,660,650</u>
<b>Total Participant Costs</b>	\$4,986,384	\$5,648,642	\$10,635,026
<b>Total Third Party Costs</b>	<u>\$116,564</u>	<u>\$245,626</u>	<u>\$362,190</u>
<b>Total Services and Initiatives Costs</b>	<u>\$15,431,968</u>	<u>\$17,225,898</u>	<u>\$32,657,866</u>
<b>Annualized MWh Savings</b>			
<b>Annualized MWh Savings</b>	29,273	35,826	65,099
<b>Lifetime MWh Savings</b>	329,718	370,433	700,151
<b>TRB Savings (2009 \$)</b>	\$31,738,144	\$30,045,327	\$61,783,472
<b>Winter Coincident Peak kW Savings</b>	5,098	6,660	11,758
<b>Summer Coincident Peak kW Savings</b>	4,983	5,629	10,612
<b>Annualized MWh Savings/Participant</b>	3.393	4.199	3.942
<b>Weighted Lifetime</b>	11	10	11
<b>Committed Incentives</b>	\$226,626	\$3,969,270	nap

## 4.2.2 Electric Geographic Targeting Regions Combined - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$26,215,449
Fossil Fuel Savings (Costs)	\$112,496	\$2,292,909
Water Savings (Costs)	<u>\$125,479</u>	<u>\$1,536,914</u>
<b>Total</b>	<b>\$237,975</b>	<b>\$30,045,272</b>

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	32,137	31,769	35,826
Winter on peak	12,482	12,398	14,071
Winter off peak	9,168	9,021	10,122
Summer on peak	5,980	5,923	5,923
Summer off peak	4,507	4,428	4,902
Coincident Demand Savings (kW)			
Winter	6,146	6,055	6,660
Shoulder	0	0	0
Summer	5,157	5,094	5,629

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	14,953	16,761	227,549
Annualized fuel savings (increase) MMBtu	7,962	5,736	141,396
LP	3,932	3,606	45,574
NG	373	724	14,725
Oil/Kerosene	4,011	1,803	84,670
Wood	(384)	(346)	(3,572)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$897,153	\$741,631	\$6,070,930

### 4.2.3 Electric Geographic Targeting Chittenden North - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>Cumulative</u> <u>starting 1/1/09</u>
<b># participants with installations</b>	2,801	2,468	5,015
<b>Services and Initiatives Costs</b>			
<b>Operating Costs</b>			
<b>Services and Initiatives</b>	\$667,599	\$589,026	\$1,256,626
<b>Marketing/Business Development</b>	\$581,133	\$689,381	\$1,270,514
<b>Subtotal Operating Costs</b>	<u>\$1,248,733</u>	<u>\$1,278,407</u>	<u>\$2,527,140</u>
<b>Incentive Costs</b>			
<b>Incentives to Participants</b>	\$1,254,351	\$1,815,993	\$3,070,344
<b>Incentives to Trade Allies</b>	\$12,466	\$9,795	\$22,262
<b>Subtotal Incentive Costs</b>	<u>\$1,266,817</u>	<u>\$1,825,788</u>	<u>\$3,092,605</u>
<b>Technical Assistance Costs</b>			
<b>Services to Participants</b>	\$767,422	\$626,512	\$1,393,934
<b>Services to Trade Allies</b>	\$32,010	\$17,595	\$49,605
<b>Subtotal Technical Assistance Costs</b>	<u>\$799,431</u>	<u>\$644,107</u>	<u>\$1,443,539</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$3,314,981</u>	<u>\$3,748,303</u>	<u>\$7,063,284</u>
<b>Total Participant Costs</b>	\$1,936,569	\$2,252,826	\$4,189,395
<b>Total Third Party Costs</b>	<u>\$52,658</u>	<u>\$63,068</u>	<u>\$115,725</u>
<b>Total Services and Initiatives Costs</b>	<u>\$5,304,207</u>	<u>\$6,064,197</u>	<u>\$11,368,404</u>
<b>Annualized MWh Savings</b>	10,239	13,816	24,055
<b>Lifetime MWh Savings</b>	112,362	136,052	248,413
<b>TRB Savings (2009 \$)</b>	\$11,013,766	\$9,830,750	20,844,516
<b>Winter Coincident Peak kW Savings</b>	1,791	2,595	4,387
<b>Summer Coincident Peak kW Savings</b>	1,673	2,153	3,826
<b>Annualized MWh Savings/Participant</b>	3.655	5.598	4.797
<b>Weighted Lifetime</b>	11	10	10
<b>Committed Incentives</b>	\$58,035	\$1,463,175	nap

### 4.2.4 Electric Geographic Targeting Chittenden North - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	288	394	378	7,870	8	172	0	0	\$55,492	\$316,558
Cooking and Laundry	415	95	74	1,332	13	10	147	4,538	\$21,258	\$136,475
Design Assistance	6	50	49	212	4	11	63	0	\$10,431	\$23,894
Hot Water Efficiency	43	88	81	545	17	15	90	220	\$4,936	\$2,008
Hot Water Fuel Switch	47	158	176	4,739	19	10	-549	0	\$40,224	\$38,326
Industrial Process Eff.	10	518	604	6,709	84	89	-147	0	\$32,391	\$86,158
Lighting	1,322	11,201	9,472	99,226	2,290	1,701	-4,503	0	\$1,537,887	\$1,266,056
Monitoring and Metering	15	2	1	6	0	0	0	0	\$160	\$96
Motors	11	568	531	7,110	53	77	20	0	\$27,178	\$182,369
Other Efficiency	7	90	80	881	0	0	0	0	\$11,175	\$38,853
Other Fuel Switch	3	3	3	96	0	0	-10	0	\$1,556	\$1,078
Other Indirect Activity	9	163	146	871	30	25	0	0	\$13,501	\$48,337
Refrigeration	700	290	315	3,177	31	31	0	0	\$57,417	\$36,511
Space Heat Efficiency	38	96	94	1,483	18	2	136	0	\$12,841	\$929
Space Heat Fuel Switch	3	37	34	1,105	19	0	-127	0	\$0	\$21,033
Ventilation	9	65	63	689	8	9	673	0	\$3,174	\$54,145
<b>Totals</b>		<b>13,816</b>	<b>12,100</b>	<b>136,052</b>	<b>2,595</b>	<b>2,153</b>	<b>-4,207</b>	<b>4,758</b>	<b>\$1,815,993</b>	<b>\$2,252,826</b>

## 4.2.5 Electric Geographic Targeting Chittenden North - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$9,769,980
Fossil Fuel Savings (Costs)	(\$67,256)	(\$380,447)
Water Savings (Costs)	<u>\$35,623</u>	<u>\$441,183</u>
Total	(\$31,633)	\$9,830,715

	Savings at meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	12,100	12,248	13,816
Winter on peak	4,758	4,832	5,484
Winter off peak	3,321	3,376	3,789
Summer on peak	2,411	2,413	2,413
Summer off peak	1,610	1,629	1,803
Coincident Demand Savings (kW)			
Winter	2,337	2,359	2,595
Shoulder	0	0	0
Summer	1,952	1,948	2,153

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	4,190	4,758	65,555
Annualized fuel savings (increase) MMBtu	(4,265)	(4,207)	(45,061)
LP	63	62	2,143
NG	(657)	(454)	(14,657)
Oil/Kerosene	(3,338)	(3,482)	(29,487)
Wood	(344)	(306)	(3,060)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$324,386	\$355,119	\$2,797,525

## 4.2.6 Electric Geographic Targeting Saint Albans - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>Cumulative</u> <u>starting 1/1/09</u>
<b># participants with installations</b>	1,960	2,009	4,003
<b><u>Services and Initiatives Costs</u></b>			
<b>Operating Costs</b>			
Services and Initiatives	\$255,179	\$411,093	\$666,272
Marketing/Business Development	\$198,045	\$450,924	\$648,968
<b>Subtotal Operating Costs</b>	<u>\$453,224</u>	<u>\$862,016</u>	<u>\$1,315,240</u>
<b>Incentive Costs</b>			
Incentives to Participants	\$837,187	\$1,070,181	\$1,907,368
Incentives to Trade Allies	\$3,794	\$4,500	\$8,294
<b>Subtotal Incentive Costs</b>	<u>\$840,980</u>	<u>\$1,074,681</u>	<u>\$1,915,662</u>
<b>Technical Assistance Costs</b>			
Services to Participants	\$298,565	\$542,403	\$840,968
Services to Trade Allies	\$14,735	\$6,826	\$21,561
<b>Subtotal Technical Assistance Costs</b>	<u>\$313,300</u>	<u>\$549,229</u>	<u>\$862,529</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$1,607,505</u>	<u>\$2,485,927</u>	<u>\$4,093,432</u>
<b>Total Participant Costs</b>	\$1,131,734	\$1,050,962	\$2,182,696
<b>Total Third Party Costs</b>	<u>\$34,239</u>	<u>\$27,181</u>	<u>\$61,420</u>
<b>Total Services and Initiatives Costs</b>	<u>\$2,773,478</u>	<u>\$3,564,069</u>	<u>\$6,337,547</u>
<b>Annualized MWh Savings</b>			
Annualized MWh Savings	5,807	8,348	14,155
Lifetime MWh Savings	61,129	86,645	147,774
TRB Savings (2009 \$)	\$6,306,889	\$6,672,626	\$12,979,515
Winter Coincident Peak kW Savings	1,001	1,413	2,414
Summer Coincident Peak kW Savings	916	1,168	2,084
Annualized MWh Savings/Participant	2.963	4.155	3.536
Weighted Lifetime	11	10	10
<b>Committed Incentives</b>	\$35,005	\$678,486	nap

### 4.2.7 Electric Geographic Targeting Saint Albans - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	234	219	216	2,762	12	37	0	0	\$17,656	\$41,325
Cooking and Laundry	511	112	87	1,561	16	12	182	5,169	\$24,310	\$156,339
Design Assistance	3	0	0	0	0	0	0	0	\$3,714	\$3,283
Hot Water Efficiency	38	17	16	132	3	2	120	95	\$3,885	\$2,628
Hot Water Fuel Switch	25	83	93	2,502	10	5	-295	0	\$16,788	\$23,939
Industrial Process Eff.	6	105	118	768	11	13	0	0	\$21,405	\$24,510
Lighting	1,344	4,860	4,215	48,650	1,020	687	-1,564	0	\$771,019	\$389,029
Monitoring and Metering	8	1	1	6	0	0	0	0	\$174	\$87
Motors	9	804	750	9,140	91	148	0	0	\$38,005	\$142,478
Other Efficiency	4	159	142	2,274	24	34	0	0	\$32,744	\$83,838
Other Fuel Switch	1	1	1	23	0	0	-2	0	\$50	\$0
Other Indirect Activity	11	277	248	948	29	41	0	0	\$11,788	\$21,110
Refrigeration	377	1,562	1,568	15,825	188	166	0	0	\$103,236	\$145,369
Space Heat Efficiency	28	7	6	144	3	1	1,906	0	\$8,864	-\$7,966
Space Heat Fuel Switch	2	25	28	752	7	0	-96	0	\$1,008	\$14,909
Ventilation	14	116	103	1,158	0	22	84	0	\$23,563	\$10,084
<b>Totals</b>		<b>8,348</b>	<b>7,592</b>	<b>86,645</b>	<b>1,413</b>	<b>1,168</b>	<b>334</b>	<b>5,264</b>	<b>\$1,070,181</b>	<b>\$1,050,962</b>



## 4.2.8 Electric Geographic Targeting Saint Albans - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$5,942,194
Fossil Fuel Savings (Costs)	\$4,484	\$238,598
Water Savings (Costs)	<u>\$39,411</u>	<u>\$491,825</u>
<b>Total</b>	<b>\$43,896</b>	<b>\$6,672,617</b>

	Savings at meter		Savings at Generation	
	Gross	Net	Gross	Net
Annualized Energy Savings (MWh): Total	7,592	7,406	8,348	8,348
Winter on peak	2,816	2,768	3,142	3,142
Winter off peak	2,316	2,240	2,513	2,513
Summer on peak	1,320	1,295	1,295	1,295
Summer off peak	1,141	1,103	1,221	1,221
Coincident Demand Savings (kW)				
Winter	1,316	1,285	1,413	1,413
Shoulder	0	0	0	0
Summer	1,078	1,057	1,168	1,168

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	4,607	5,264	73,256
Annualized fuel savings (increase) MMBtu	216	334	28,497
LP	376	394	9,825
NG	894	1,037	25,915
Oil/Kerosene	(1,045)	(1,092)	(7,142)
Wood	(11)	(11)	(101)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	<b>\$324,386</b>	<b>\$122,776</b>	<b>\$1,004,292</b>

## 4.2.9 Electric Geographic Targeting Southern Loop - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>Cumulative</u> <u>starting 1/1/09</u>
<b># participants with installations</b>	2,165	2,250	4,423
<b>Services and Initiatives Costs</b>			
<b>Operating Costs</b>			
<b>Services and Initiatives</b>	\$328,053	\$270,131	\$598,184
<b>Marketing/Business Development</b>	\$244,984	\$290,830	\$535,815
<b>Subtotal Operating Costs</b>	<u>\$573,038</u>	<u>\$560,961</u>	<u>\$1,133,998</u>
<b>Incentive Costs</b>			
<b>Incentives to Participants</b>	\$685,921	\$923,853	\$1,609,774
<b>Incentives to Trade Allies</b>	\$1,068	\$4,846	\$5,915
<b>Subtotal Incentive Costs</b>	<u>\$686,989</u>	<u>\$928,700</u>	<u>\$1,615,689</u>
<b>Technical Assistance Costs</b>			
<b>Services to Participants</b>	\$423,119	\$310,164	\$733,283
<b>Services to Trade Allies</b>	\$12,149	\$7,504	\$19,653
<b>Subtotal Technical Assistance Costs</b>	<u>\$435,268</u>	<u>\$317,668</u>	<u>\$752,936</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$1,695,295</u>	<u>\$1,807,328</u>	<u>\$3,502,623</u>
<b>Total Participant Costs</b>	\$965,832	\$959,215	\$1,925,047
<b>Total Third Party Costs</b>	<u>\$15,757</u>	<u>\$15,080</u>	<u>\$30,837</u>
<b>Total Services and Initiatives Costs</b>	<u>\$2,676,885</u>	<u>\$2,781,623</u>	<u>\$5,458,508</u>
<b>Annualized MWh Savings</b>			
Annualized MWh Savings	4,718	5,239	10,008
Lifetime MWh Savings	48,324	54,545	102,971
TRB Savings (2009 \$)	\$4,662,082	\$6,183,671	\$10,853,477
Winter Coincident Peak kW Savings	916	1,083	1,999
Summer Coincident Peak kW Savings	750	777	1,528
Annualized MWh Savings/Participant	2.179	2.328	2.263
Weighted Lifetime	10	10	10
<b>Committed Incentives</b>	\$54,296	\$602,224	nap

### 4.2.10 Electric Geographic Targeting Southern Loop - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	154	184	185	1,979	0	23	0	0	\$17,673	\$46,341
Cooking and Laundry	256	69	56	957	10	8	173	2,964	\$13,392	\$84,433
Design Assistance	2	0	0	0	0	0	0	0	\$504	\$301
Hot Water Efficiency	99	33	31	244	4	3	117	389	\$1,618	\$269
Industrial Process Eff.	4	682	745	10,378	199	17	6,347	0	\$71,201	\$503,962
Lighting	1,689	3,674	3,172	35,855	792	688	-1,801	0	\$734,058	\$196,435
Monitoring and Metering	7	1	1	2	0	0	0	0	\$74	\$31
Motors	60	88	85	1,024	34	4	101	0	\$4,409	\$20,727
Other Efficiency	2	0	0	0	0	0	0	0	\$403	-\$400
Other Fuel Switch	1	1	1	23	0	0	-2	0	\$50	\$0
Other Indirect Activity	7	163	148	388	2	1	0	0	\$3,295	\$5,207
Refrigeration	391	259	284	2,728	32	31	0	0	\$61,855	\$15,968
Space Heat Efficiency	13	24	24	364	8	0	1,186	0	\$16,494	\$63,107
Ventilation	66	60	57	603	2	2	2,691	0	\$5,756	\$22,833
<b>Totals</b>		<b>5,239</b>	<b>4,788</b>	<b>54,545</b>	<b>1,083</b>	<b>777</b>	<b>8,813</b>	<b>3,353</b>	<b>\$923,853</b>	<b>\$959,215</b>

## 4.2.11 Electric Geographic Targeting Southern Loop - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$3,915,076
Fossil Fuel Savings (Costs)	\$164,880	\$1,964,311
Water Savings (Costs)	<u>\$25,100</u>	<u>\$304,278</u>
<b>Total</b>	<b>\$189,980</b>	<b>\$6,183,665</b>

	Savings at meter		Savings at Generation	
	Gross	Net	Gross	Net
Annualized Energy Savings (MWh): Total	4,788	4,647	5,239	5,239
Winter on peak	1,871	1,826	2,073	2,073
Winter off peak	1,415	1,348	1,513	1,513
Summer on peak	791	791	791	791
Summer off peak	711	682	754	754
Coincident Demand Savings (kW)				
Winter	1,031	984	1,083	1,083
Shoulder	0	0	0	0
Summer	705	703	777	777

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	3,037	3,353	44,890
Annualized fuel savings (increase) MMBtu	10,837	8,813	124,994
LP	3,344	2,978	30,624
NG	94	98	2,326
Oil/Kerosene	7,426	5,782	92,456
Wood	(29)	(29)	(411)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$106,200	\$113,154	\$970,026

## 4.2.12 Electric Geographic Targeting Rutland - Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2010</u>	<u>Cumulative</u> <u>starting 1/1/09</u>
<b># participants with installations</b>	1,702	1,715	3,073
<b>Services and Initiatives Costs</b>			
<b>Operating Costs</b>			
<b>Services and Initiatives</b>	\$587,364	\$434,457	\$1,021,820
<b>Marketing/Business Development</b>	\$443,466	\$476,353	\$919,820
<b>Subtotal Operating Costs</b>	<u>\$1,030,830</u>	<u>\$910,810</u>	<u>\$1,941,640</u>
<b>Incentive Costs</b>			
<b>Incentives to Participants</b>	\$1,782,644	1,787,572	\$3,570,216
<b>Incentives to Trade Allies</b>	\$2,695	\$5,243	\$7,938
<b>Subtotal Incentive Costs</b>	<u>\$1,785,339</u>	<u>\$1,792,815</u>	<u>\$3,578,154</u>
<b>Technical Assistance Costs</b>			
<b>Services to Participants</b>	\$888,664	\$578,935	\$1,467,600
<b>Services to Trade Allies</b>	\$6,406	\$7,512	\$13,918
<b>Subtotal Technical Assistance Costs</b>	<u>\$895,070</u>	<u>\$586,447</u>	<u>\$1,481,517</u>
<b>Total Efficiency Vermont Costs</b>	<u>\$3,711,240</u>	<u>\$3,290,072</u>	<u>\$7,001,311</u>
<b>Total Participant Costs</b>	\$952,249	\$1,385,639	\$2,337,888
<b>Total Third Party Costs</b>	<u>\$13,909</u>	<u>\$140,298</u>	<u>\$154,207</u>
<b>Total Services and Initiatives Costs</b>	<u>\$4,677,398</u>	<u>\$4,816,009</u>	<u>\$9,493,406</u>
<b>Annualized MWh Savings</b>			
Annualized MWh Savings	8,509	8,423	16,880
Lifetime MWh Savings	107,903	93,192	200,993
TRB Savings (2009 \$)	\$9,755,407	\$7,358,281	\$17,105,964
Winter Coincident Peak kW Savings	1,389	1,569	2,958
Summer Coincident Peak kW Savings	1,644	1,531	3,175
Annualized MWh Savings/Participant	4.999	4.911	5.493
Weighted Lifetime	13	11	12
<b>Committed Incentives</b>	\$79,290	\$1,225,385	nap

### 4.2.13 Electric Geographic Targeting Rutland - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	182	159	158	2,642	6	20	2,583	0	\$30,161	\$276,399
Cooking and Laundry	238	55	43	776	8	6	86	2,670	\$12,629	\$80,165
Design Assistance	1	0	0	0	0	0	0	0	\$5,038	\$9
Hot Water Efficiency	207	42	41	344	4	4	154	715	\$2,007	\$1,030
Industrial Process Eff.	5	819	818	10,483	107	113	-52	0	\$116,660	\$118,724
Lighting	1,042	5,859	5,138	61,610	1,239	1,230	-2,956	0	\$1,418,420	\$685,883
Monitoring and Metering	8	1	1	4	0	0	0	0	\$89	\$61
Motors	81	929	892	9,691	93	114	100	0	\$86,218	\$75,551
Other Fuel Switch	2	38	38	768	5	5	-112	0	\$202	\$1,353
Other Indirect Activity	135	0	0	0	0	0	0	0	\$7,131	\$8,988
Refrigeration	643	352	362	3,751	30	32	0	0	\$98,631	\$17,774
Space Heat Efficiency	4	144	143	2,873	75	0	126	0	\$15,314	\$107,849
Ventilation	89	25	23	251	2	7	868	0	\$8,480	\$11,855
<b>Totals</b>		<b>8,423</b>	<b>7,656</b>	<b>93,192</b>	<b>1,569</b>	<b>1,531</b>	<b>796</b>	<b>3,386</b>	<b>\$1,787,572</b>	<b>\$1,385,639</b>

### 4.2.14 Electric Geographic Targeting Rutland - Total Resource Benefits

	2010	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$6,588,199
Fossil Fuel Savings (Costs)	\$10,387	\$470,447
Water Savings (Costs)	\$25,345	\$299,628
<b>Total</b>	<b>\$35,732</b>	<b>\$7,358,274</b>

	<b>Savings at meter</b>		<b>Savings at Generation</b>
	<b>Gross</b>	<b>Net</b>	<b>Net</b>
Annualized Energy Savings (MWh): Total	7,656	7,468	8,423
Winter on peak	3,037	2,972	3,373
Winter off peak	2,116	2,057	2,308
Summer on peak	1,458	1,424	1,424
Summer off peak	1,046	1,015	1,123
Coincident Demand Savings (kW)			
Winter	1,463	1,427	1,569
Shoulder	0	0	0
Summer	1,422	1,386	1,531

	<b>Gross</b>	<b>Net</b>	<b>Net Lifetime Savings</b>
Annualized Water Savings (ccf)	3,119	3,386	43,848
Annualized fuel savings (increase) MMBtu	1,175	796	32,966
LP	150	173	2,982
NG	42	44	1,141
Oil/Kerosene	968	595	28,843
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$142,181	\$150,582	\$1,299,088

## **5.1 Submarket Results**



### 5.1.1 Electric C&I Non-Farm New Construction - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	211	236	nap	432
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$826,654	\$1,080,793	nap	\$1,907,447
<b>Participant Costs</b>	\$2,250,438	\$2,577,865	nap	\$4,828,303
<b>Third Party Costs</b>	\$14,500	\$0	nap	\$14,500
<b>Annualized MWh Savings</b>	8,371	8,858	nap	17,229
<b>Lifetime MWh Savings</b>	123,376	132,580	nap	255,956
<b>TRB Savings (2009\$)</b>	\$14,752,113	\$13,113,486	nap	\$27,865,599
<b>Winter Coincident Peak KW Savings</b>	1,031	1,198	nap	2,228
<b>Summer Coincident Peak KW Savings</b>	1,507	1,512	nap	3,020
<b>Annualized MWh Savings/Participant</b>	39.674	37.533	nap	39.882
<b>Weighted Lifetime</b>	15	15	nap	15
<b>Committed Incentives</b>	\$47,635	\$194,798	nap	nap

### 5.1.2 Electric C&I Non-Farm New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	68	967	821	17,725	26	263	197	0	\$104,933	\$266,932
Cooking and Laundry	11	23	23	300	3	3	192	344	\$10,047	\$17,611
Design Assistance	7	451	378	11,701	48	105	2,862	0	\$66,020	\$130,651
Hot Water Efficiency	11	7	7	37	1	2	523	1,146	\$602	\$6,142
Hot Water Fuel Switch	1	4	4	125	0	0	-12	0	\$572	\$432
Industrial Process Eff.	6	91	91	1,273	24	11	-13	0	\$12,813	\$15,621
Lighting	209	4,391	3,731	62,167	704	796	-2,317	0	\$580,456	\$995,662
Motors	40	1,277	1,102	18,387	181	126	599	0	\$109,670	\$206,971
Other Efficiency	4	26	23	346	6	3	-35	6,093	\$17,945	\$40,647
Other Fuel Switch	1	19	18	579	3	2	-66	0	\$0	\$9,600
Other Indirect Activity	1	79	73	1,179	8	9	0	0	\$19,555	\$72,197
Refrigeration	38	788	710	9,923	95	98	1,654	0	\$99,782	\$345,828
Space Heat Efficiency	24	253	210	3,960	41	3	3,895	0	\$36,956	\$303,478
Ventilation	42	481	417	4,878	58	91	5,687	0	\$21,442	\$165,774
Water Conservation	2	0	0	0	0	0	2	28	\$0	\$320
<b>Totals</b>		8,858	7,609	132,580	1,198	1,512	13,170	7,610	\$1,072,747	\$2,577,865

### 5.1.3 Electric C&I Non-Farm New Construction - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Barton</b>	2	42	36	640	8	9	10	17	\$5,536	\$5,706
<b>CVPS</b>	99	2,506	2,174	35,536	395	440	2,130	340	\$330,355	\$555,621
<b>Enosburg Falls</b>	2	13	11	170	2	4	52	0	\$2,141	\$4,998
<b>Green Mountain</b>	71	3,056	2,602	45,691	340	578	6,715	52	\$369,659	\$1,070,561
<b>Hardwick</b>	5	144	128	2,096	35	7	-14	0	\$24,267	\$7,259
<b>Johnson</b>	2	18	15	247	2	8	-2	0	\$5,129	\$2,157
<b>Ludlow</b>	4	34	28	499	5	6	15	72	\$10,181	\$10,546
<b>Lyndonville</b>	3	78	67	1,018	12	14	-45	61	\$11,334	\$22,279
<b>Morrisville</b>	4	18	15	269	2	3	-3	0	\$2,957	\$5,469
<b>Northfield</b>	1	47	41	719	7	7	-34	0	\$4,513	\$11,716
<b>Stowe</b>	6	1,223	1,065	17,522	180	175	1,678	1,024	\$75,446	\$295,655
<b>Swanton</b>	3	31	26	434	4	7	151	0	\$7,068	\$6,910
<b>VT Electric Coop</b>	32	1,533	1,300	25,853	196	243	2,162	6,045	\$218,918	\$556,328
<b>Washington Electric</b>	2	115	99	1,885	10	11	356	0	\$13,288	\$22,658
<b>Totals</b>	236	8,858	7,609	132,580	1,198	1,512	13,170	7,610	\$1,072,747	\$2,577,865

### 5.1.4 Electric C&I Non-Farm New Construction - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	10	74	63	1,087	17	23	-44	0	\$30,082	\$14,132
Bennington	14	204	179	2,839	25	36	-6	129	\$27,275	\$27,492
Caledonia	10	148	126	1,997	24	31	-82	61	\$28,150	\$35,209
Chittenden	54	2,856	2,453	41,432	347	409	2,286	0	\$337,478	\$698,429
Franklin	20	101	85	1,487	22	30	3	8	\$31,870	\$25,150
Grand Isle	5	117	101	1,572	21	6	-11	0	\$23,298	\$8,998
Lamoille	18	1,282	1,116	18,378	188	192	1,660	1,024	\$94,840	\$305,253
Orange	11	135	116	2,058	30	38	300	0	\$17,671	\$67,804
Orleans	16	1,302	1,113	22,568	184	208	2,225	6,053	\$185,174	\$499,478
Rutland	26	531	457	7,530	78	93	292	10	\$70,232	\$132,490
Washington	17	1,075	911	17,417	106	201	5,466	15	\$102,960	\$353,063
Windham	11	392	340	5,255	57	67	255	104	\$23,999	\$100,320
Windsor	24	640	550	8,959	98	178	826	207	\$107,765	\$310,045
<b>Totals</b>	<b>236</b>	<b>8,858</b>	<b>7,609</b>	<b>132,580</b>	<b>1,198</b>	<b>1,512</b>	<b>13,170</b>	<b>7,610</b>	<b>\$1,072,747</b>	<b>\$2,577,865</b>

## 5.1.5 Electric C&I Non-Farm New Construction Act 250 - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	44	61	nap	102
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$331,875	\$535,602	nap	\$867,476
<b>Participant Costs</b>	\$1,093,673	\$1,469,552	nap	\$2,563,225
<b>Third Party Costs</b>	\$0	\$0	nap	\$0
<b>Annualized MWh Savings</b>	3,731	4,464	nap	8,195
<b>Lifetime MWh Savings</b>	56,216	67,599	nap	123,815
<b>TRB Savings (2009\$)</b>	\$7,522,799	\$7,874,982	nap	\$15,397,780
<b>Winter Coincident Peak KW Savings</b>	436	589	nap	1,025
<b>Summer Coincident Peak KW Savings</b>	653	718	nap	1,371
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	84.799	73.185	nap	80.347
	15	15	nap	15
<b>Committed Incentives</b>	\$35,975	\$107,118	nap	nap

### 5.1.6 Electric C&I Non-Farm New Construction Act 250 - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	28	527	458	11,272	9	59	0	0	\$41,531	\$145,396
Cooking and Laundry	9	22	23	295	3	3	190	341	\$9,996	\$17,180
Design Assistance	4	122	105	3,462	2	27	2,322	0	\$32,862	\$82,711
Hot Water Efficiency	5	2	2	10	0	1	473	1,049	\$202	\$4,068
Hot Water Fuel Switch	1	4	4	125	0	0	-12	0	\$572	\$432
Industrial Process Eff.	1	0	0	2	0	0	0	0	\$151	\$0
Lighting	60	2,234	1,943	31,509	369	391	-1,244	0	\$300,513	\$537,597
Motors	21	818	721	11,847	135	105	81	0	\$85,321	\$84,116
Other Efficiency	3	18	17	232	5	1	-86	6,009	\$16,532	\$31,376
Other Fuel Switch	1	19	18	579	3	2	-66	0	\$0	\$9,600
Other Indirect Activity	1	79	73	1,179	8	9	0	0	\$19,555	\$72,197
Refrigeration	14	174	164	2,571	10	55	1,642	0	\$16,078	\$257,406
Space Heat Efficiency	13	13	11	206	7	0	3,767	0	\$1,755	\$128,170
Ventilation	22	431	375	4,311	38	65	3,010	0	\$10,533	\$99,304
<b>Totals</b>		4,464	3,914	67,599	589	718	10,077	7,398	\$531,614	\$1,469,552

## 5.1.7 Electric C&I Non-Farm New Construction Non-Act 250 - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	172	181	nap	343
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$494,780	\$545,191	nap	\$1,039,971
<b>Participant Costs</b>	\$1,156,765	\$1,108,313	nap	\$2,265,078
<b>Third Party Costs</b>	\$14,500	\$0	nap	\$14,500
<b>Annualized MWh Savings</b>	4,640	4,394	nap	9,034
<b>Lifetime MWh Savings</b>	67,160	64,981	nap	132,141
<b>TRB Savings (2009\$)</b>	\$7,229,314	\$5,238,504	nap	\$12,467,819
<b>Winter Coincident Peak KW Savings</b>	595	608	nap	1,203
<b>Summer Coincident Peak KW Savings</b>	855	794	nap	1,649
<b>Annualized MWh Savings/Participant</b>	26.978	24.274	nap	26.337
<b>Weighted Lifetime</b>	14	15	nap	15
<b>Committed Incentives</b>	\$11,660	\$87,680	nap	nap

### 5.1.8 Electric C&I Non-Farm New Construction Non-Act 250 - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	42	439	363	6,453	17	204	197	0	\$63,402	\$121,537
Cooking and Laundry	2	0	0	5	0	0	2	3	\$50	\$431
Design Assistance	3	330	273	8,239	46	78	540	0	\$33,157	\$47,939
Hot Water Efficiency	6	5	5	27	1	2	50	97	\$401	\$2,074
Industrial Process Eff.	5	91	91	1,271	24	10	-13	0	\$12,661	\$15,621
Lighting	153	2,157	1,788	30,658	336	405	-1,073	0	\$279,943	\$458,066
Motors	20	459	381	6,540	46	21	519	0	\$24,349	\$122,855
Other Efficiency	2	8	7	114	1	2	51	84	\$1,414	\$9,272
Refrigeration	25	614	546	7,352	85	43	13	0	\$83,704	\$88,422
Space Heat Efficiency	12	240	199	3,754	34	3	128	0	\$35,201	\$175,308
Ventilation	21	50	42	567	20	26	2,677	0	\$10,909	\$66,469
Water Conservation	2	0	0	0	0	0	2	28	\$0	\$320
<b>Totals</b>		4,394	3,695	64,981	608	794	3,093	212	\$541,133	\$1,108,313



## 5.1.9 Electric Farm - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	68	159	nap	215
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$197,346	\$982,022	nap	\$1,179,368
<b>Participant Costs</b>	\$167,995	\$240,074	nap	\$408,069
<b>Third Party Costs</b>	\$1,050	\$1,400	nap	\$2,450
<b>Annualized MWh Savings</b>	780	2,547	nap	3,327
<b>Lifetime MWh Savings</b>	10,573	33,096	nap	43,669
<b>TRB Savings (2009\$)</b>	\$925,259	\$2,430,402	nap	\$3,355,660
<b>Winter Coincident Peak KW Savings</b>	168	439	nap	607
<b>Summer Coincident Peak KW Savings</b>	98	396	nap	493
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	11.477	16.018	nap	15.476
	14	13	nap	13
<b>Committed Incentives</b>	\$0	\$91,655	nap	nap

### 5.1.10 Electric Farm - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	1	5	5	76	1	1	8	0	\$483	\$121
Design Assistance	2	0	0	0	0	0	0	0	\$4,350	\$976
Hot Water Efficiency	4	32	30	354	12	2	0	0	\$19,628	\$3,503
Industrial Process Eff.	4	1	2	9	0	0	0	0	\$705	\$2,326
Lighting	92	1,417	1,225	21,246	321	159	-8	0	\$528,296	\$90,381
Motors	43	347	323	3,711	71	36	0	0	\$134,658	\$68,388
Other Indirect Activity	2	0	0	0	0	0	0	0	\$795	\$0
Refrigeration	8	117	108	1,410	31	8	0	0	\$25,205	\$8,056
Ventilation	24	629	560	6,290	3	191	0	0	\$267,901	\$66,322
<b>Totals</b>		2,547	2,252	33,096	439	396	-1	0	\$973,765	\$240,074

## 5.1.11 Electric Market Rate Multifamily New Construction - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	159	127	nap	286
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$68,329	\$70,137	nap	\$138,466
<b>Participant Costs</b>	\$89,744	\$134,919	nap	\$224,663
<b>Third Party Costs</b>	\$4,375	\$0	nap	\$4,375
<b>Annualized MWh Savings</b>	275	264	nap	538
<b>Lifetime MWh Savings</b>	4,912	4,774	nap	9,686
<b>TRB Savings (2009\$)</b>	\$768,260	\$617,073	nap	\$1,385,333
<b>Winter Coincident Peak KW Savings</b>	58	53	nap	111
<b>Summer Coincident Peak KW Savings</b>	32	27	nap	59
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	1.727	2.078	nap	1.883
<b>Committed Incentives</b>	\$0	\$30,000	nap	nap

### 5.1.12 Electric Market Rate Multifamily New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	31	13	12	196	0	4	0	0	\$2,545	\$2,234
Cooking and Laundry	95	4	3	51	1	0	106	236	\$5,233	\$25,756
Hot Water Efficiency	96	0	0	0	0	0	184	633	\$0	\$585
Lighting	127	161	147	2,696	40	14	-18	0	\$37,283	\$32,993
Other Fuel Switch	95	40	51	1,205	4	4	-106	0	\$3,830	\$13,073
Refrigeration	127	14	14	236	2	2	0	0	\$3,339	\$9,511
Space Heat Efficiency	95	8	7	193	4	0	1,925	0	\$1,511	\$42,800
Ventilation	127	24	21	197	3	3	164	0	\$16,396	\$7,966
<b>Totals</b>		264	254	4,774	53	27	2,255	869	\$69,615	\$134,919

### 5.1.13 Electric Market Rate Multifamily Retrofit - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	185	440	nap	460
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$8,611	\$51,650	nap	\$60,262
<b>Participant Costs</b>	\$13,114	\$134,859	nap	\$147,973
<b>Third Party Costs</b>	\$0	\$0	nap	\$0
<b>Annualized MWh Savings</b>	54	220	nap	274
<b>Lifetime MWh Savings</b>	649	3,102	nap	3,751
<b>TRB Savings (2009\$)</b>	\$74,311	\$911,975	nap	\$986,287
<b>Winter Coincident Peak KW Savings</b>	13	41	nap	55
<b>Summer Coincident Peak KW Savings</b>	3	16	nap	20
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	0.293	0.500	nap	0.596
<b>Committed Incentives</b>	\$0	\$10,000	nap	nap

### 5.1.14 Electric Market Rate Multifamily Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	102	4	4	52	1	0	8	136	\$1,417	\$6,206
Hot Water Efficiency	131	13	12	143	1	1	286	638	\$443	\$30,964
Lighting	9	18	17	104	4	3	-11	0	\$1,199	\$1,796
Motors	56	43	42	426	1	1	101	0	\$504	\$4,494
Refrigeration	300	35	34	591	4	4	0	0	\$10,780	\$28,809
Space Heat Efficiency	103	50	49	1,203	25	0	0	0	\$33,367	\$47,357
Ventilation	51	58	58	583	6	7	2,465	0	\$3,939	\$15,232
<b>Totals</b>		220	216	3,102	41	16	2,849	774	\$51,266	\$134,859

## 5.1.15 Electric Low Income Multifamily New Construction and Retrofit - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	2,154	2,777	nap	4,123
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$242,367	\$356,033	nap	\$598,400
<b>Participant Costs</b>	\$600,173	\$877,591	nap	\$1,477,763
<b>Third Party Costs</b>	\$31,150	\$164,827	nap	\$195,977
<b>Annualized MWh Savings</b>	1,417	1,664	nap	3,081
<b>Lifetime MWh Savings</b>	21,270	28,855	nap	50,126
<b>TRB Savings (2009\$)</b>	\$2,755,871	\$3,281,018	nap	\$6,036,889
<b>Winter Coincident Peak KW Savings</b>	280	386	nap	666
<b>Summer Coincident Peak KW Savings</b>	128	169	nap	297
<b>Annualized MWh Savings/Participant</b>	0.658	0.599	nap	0.747
<b>Weighted Lifetime</b>	15	17	nap	16
<b>Committed Incentives</b>	\$23,010	\$109,740	nap	nap

### 5.1.16 Electric Low Income Multifamily New Construction & Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	295	106	94	1,587	5	45	0	0	\$15,656	\$38,922
Cooking and Laundry	223	4	3	53	1	0	155	567	\$3,860	\$19,937
Design Assistance	26	0	0	0	0	0	17	0	\$905	\$254
Hot Water Efficiency	645	94	93	850	10	6	1,240	2,828	\$1,162	\$111,654
Hot Water Fuel Switch	60	43	38	1,298	3	7	0	0	\$2,519	\$89,618
Lighting	2,119	851	785	12,729	198	73	-71	0	\$155,964	\$124,250
Motors	277	15	13	234	4	0	0	0	\$1,575	\$10,655
Other Fuel Switch	107	35	42	1,051	3	3	-99	0	\$2,674	\$2,875
Other Indirect Activity	274	0	0	0	0	0	0	0	\$1,896	\$9,784
Refrigeration	934	132	117	2,233	15	16	0	0	\$96,361	\$42,668
Space Heat Efficiency	196	14	12	245	2	0	3,791	0	\$1,613	\$327,323
Space Heat Fuel Switch	150	243	216	7,299	127	0	-857	0	\$17,779	\$58,953
Ventilation	560	126	112	1,277	19	20	442	0	\$54,070	\$40,697
<b>Totals</b>		<b>1,664</b>	<b>1,526</b>	<b>28,855</b>	<b>386</b>	<b>169</b>	<b>4,617</b>	<b>3,395</b>	<b>\$353,383</b>	<b>\$877,591</b>



### 5.1.17 Electric Low Income Multifamily New Construction & Retrofit - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Barton</b>	7	2	2	37	1	0	0	0	\$1,419	-\$311
<b>CVPS</b>	1,324	516	479	7,493	104	47	1,244	1,717	\$136,138	\$99,956
<b>Enosburg Falls</b>	54	88	84	1,850	26	7	1,235	299	\$24,397	\$271,719
<b>Green Mountain</b>	966	801	723	15,525	194	96	1,320	1,050	\$125,480	\$402,987
<b>Johnson</b>	25	16	14	205	5	1	140	55	\$2,616	\$31,283
<b>Lyndonville</b>	18	2	2	20	1	0	0	0	\$149	\$75
<b>Morrisville</b>	50	19	17	158	5	1	18	72	\$731	\$499
<b>Northfield</b>	28	12	10	211	3	1	5	14	\$6,811	\$836
<b>Orleans</b>	20	1	1	15	1	0	0	0	\$92	\$3
<b>Swanton</b>	36	42	42	728	10	3	298	35	\$8,721	\$17,960
<b>VT Electric Coop</b>	238	150	138	2,473	34	11	357	51	\$49,019	\$52,463
<b>VT Marble</b>	4	9	8	82	2	1	0	60	\$268	\$66
<b>Washington Electric</b>	7	6	6	58	1	0	2	41	\$193	\$54
<b>Totals</b>	2,777	1,664	1,526	28,855	386	169	4,617	3,395	\$353,383	\$877,591

### 5.1.18 Electric Low Income Multifamily New Construction & Retrofit - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	16	2	1	25	0	0	2	7	\$789	\$975
Bennington	94	98	87	1,346	18	2	0	0	\$14,441	\$6,889
Caledonia	107	15	13	205	3	1	12	111	\$4,102	\$3,800
Chittenden	597	445	402	9,712	150	38	-421	297	\$53,148	\$110,626
Essex	26	24	21	402	6	2	334	31	\$9,852	\$3,623
Franklin	267	249	242	4,654	57	20	2,193	790	\$58,139	\$316,362
Grand Isle	54	43	42	724	11	3	180	0	\$15,658	\$20,655
Lamoille	103	36	33	383	11	3	175	186	\$3,706	\$32,090
Orange	15	2	2	39	0	0	0	0	\$756	\$557
Orleans	172	70	63	1,084	17	5	177	46	\$19,251	\$27,503
Rutland	464	162	148	2,205	29	14	118	741	\$72,658	\$24,112
Washington	346	249	226	4,140	39	25	1,633	686	\$55,727	\$222,817
Windham	318	208	191	2,918	33	48	90	369	\$25,991	\$61,644
Windsor	198	60	54	1,020	12	6	124	131	\$21,813	\$45,938
<b>Totals</b>	<b>2,777</b>	<b>1,664</b>	<b>1,526</b>	<b>28,855</b>	<b>386</b>	<b>169</b>	<b>4,617</b>	<b>3,395</b>	<b>\$353,383</b>	<b>\$877,591</b>

### 5.1.19 Electric Low Income Multifamily New Construction - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	232	336	nap	532
<b>Costs</b>				
<b>EVT Incentives</b>	\$106,599	\$53,236	nap	\$159,834
<b>Participant Costs</b>	\$259,356	\$84,834	nap	\$344,190
<b>Third Party Costs</b>	\$28,750	\$7,700	nap	\$36,450
<b>Annualized MWh Savings</b>	509	255	nap	765
<b>Lifetime MWh Savings</b>	8,534	4,260	nap	12,794
<b>TRB Savings (2009\$)</b>	\$1,171,356	\$526,754	nap	\$1,698,110
<b>Winter Coincident Peak KW Savings</b>	102	49	nap	151
<b>Summer Coincident Peak KW Savings</b>	47	31	nap	78
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	2.196 17	0.760 17	nap	1.438 17
<b>Committed Incentives</b>	\$2,000	\$37,000	nap	nap

### 5.1.20 Electric Low Income Multifamily New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	50	12	10	175	0	8	0	0	\$3,484	\$2,067
Cooking and Laundry	113	2	2	30	0	0	110	192	\$1,045	\$5,832
Hot Water Efficiency	53	0	0	0	0	0	128	274	\$0	\$12,100
Lighting	336	179	175	2,897	43	17	-35	0	\$30,202	\$30,174
Motors	16	1	1	24	1	0	0	0	\$1	\$219
Other Fuel Switch	53	22	28	668	1	1	-59	0	\$2,105	-\$65
Refrigeration	85	10	9	175	1	1	0	0	\$2,415	\$5,678
Space Heat Efficiency	69	1	1	11	0	0	1,157	0	\$12	\$25,046
Ventilation	135	28	25	280	3	3	0	0	\$13,971	\$3,783
<b>Totals</b>		255	251	4,260	49	31	1,301	466	\$52,839	\$84,834

## 5.1.21 Electric Low Income Multifamily Retrofit - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	1,939	2,462	nap	3,665
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$135,769	\$302,797	nap	\$438,566
<b>Participant Costs</b>	\$340,816	\$792,757	nap	\$1,133,573
<b>Third Party Costs</b>	\$2,400	\$157,127	nap	\$159,527
<b>Annualized MWh Savings</b>	908	1,408	nap	2,316
<b>Lifetime MWh Savings</b>	12,736	24,595	nap	37,331
<b>TRB Savings (2009\$)</b>	\$1,584,515	\$2,754,263	nap	\$4,338,778
<b>Winter Coincident Peak KW Savings</b>	178	337	nap	515
<b>Summer Coincident Peak KW Savings</b>	81	138	nap	219
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	0.468 14	0.572 17	nap	0.632 16
<b>Committed Incentives</b>	\$21,010	\$72,740	nap	nap

### 5.1.22 Electric Low Income Multifamily Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	245	94	84	1,412	4	37	0	0	\$12,172	\$36,855
Cooking and Laundry	110	2	1	23	0	0	46	375	\$2,815	\$14,104
Design Assistance	26	0	0	0	0	0	17	0	\$905	\$254
Hot Water Efficiency	592	94	93	850	10	6	1,112	2,554	\$1,162	\$99,554
Hot Water Fuel Switch	60	43	38	1,298	3	7	0	0	\$2,519	\$89,618
Lighting	1,804	672	610	9,832	155	55	-36	0	\$125,763	\$94,076
Motors	261	13	12	210	3	0	0	0	\$1,574	\$10,436
Other Fuel Switch	54	13	14	383	2	1	-41	0	\$568	\$2,939
Other Indirect Activity	274	0	0	0	0	0	0	0	\$1,896	\$9,784
Refrigeration	849	121	108	2,059	13	15	0	0	\$93,946	\$36,990
Space Heat Efficiency	127	13	12	234	2	0	2,635	0	\$1,600	\$302,278
Space Heat Fuel Switch	150	243	216	7,299	127	0	-857	0	\$17,779	\$58,953
Ventilation	425	98	87	997	16	17	442	0	\$40,099	\$36,914
<b>Totals</b>		<b>1,408</b>	<b>1,275</b>	<b>24,595</b>	<b>337</b>	<b>138</b>	<b>3,316</b>	<b>2,929</b>	<b>\$300,543</b>	<b>\$792,757</b>

### 5.1.23 Electric C&I Equipment Replacement Non-Farm - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	979	1,480	nap	2,188
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$3,569,329	\$4,499,055	nap	\$8,068,384
<b>Participant Costs</b>	\$1,991,413	\$2,120,060	nap	\$4,111,473
<b>Third Party Costs</b>	\$0	\$0	nap	\$0
<b>Annualized MWh Savings</b>	15,407	17,116	nap	32,523
<b>Lifetime MWh Savings</b>	198,299	216,826	nap	415,125
<b>TRB Savings (2009\$)</b>	\$19,030,762	\$15,153,815	nap	\$34,184,577
<b>Winter Coincident Peak KW Savings</b>	2,132	2,785	nap	4,917
<b>Summer Coincident Peak KW Savings</b>	3,428	3,562	nap	6,989
<b>Annualized MWh Savings/Participant</b>	15.737	11.565	nap	14.864
<b>Weighted Lifetime</b>	13	13	nap	13
<b>Committed Incentives</b>	\$3,977	\$2,042,676	nap	nap

### 5.1.24 Electric C&I Equipment Replacement Non-Farm - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	87	908	832	17,796	41	356	0	0	\$169,022	\$143,930
Cooking and Laundry	6	19	18	253	2	3	55	102	\$1,271	\$9,800
Design Assistance	4	0	0	0	0	0	0	0	\$8,000	\$1,003
Hot Water Efficiency	15	82	76	410	12	17	58	161	\$1,597	\$2,561
Industrial Process Eff.	34	1,117	1,285	14,317	187	160	-147	0	\$113,815	\$324,845
Lighting	1,326	11,296	10,230	137,723	2,067	2,584	-5,711	0	\$3,884,003	\$884,915
Motors	53	1,698	1,548	21,077	190	231	1,383	0	\$110,251	\$214,535
Other Efficiency	9	227	203	3,599	45	58	30	137	\$21,490	\$142,976
Other Fuel Switch	1	53	50	1,055	17	18	-173	0	\$3,224	\$9,610
Other Indirect Activity	10	364	326	1,875	52	47	0	0	\$17,754	\$95,992
Refrigeration	104	966	898	12,572	105	64	0	13	\$149,493	\$112,791
Space Heat Efficiency	5	225	212	4,481	46	2	210	0	\$11,020	\$88,665
Ventilation	9	163	154	1,666	21	23	1,026	0	\$8,117	\$88,435
<b>Totals</b>		<b>17,116</b>	<b>15,831</b>	<b>216,826</b>	<b>2,785</b>	<b>3,562</b>	<b>-3,271</b>	<b>412</b>	<b>\$4,459,738</b>	<b>\$2,120,060</b>



## 5.1.25 Electric C&I Retrofit - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	331	1,140	nap	1,396
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$1,507,529	\$4,762,992	nap	\$6,270,521
<b>Participant Costs</b>	\$6,150,387	\$8,609,429	nap	\$14,759,816
<b>Third Party Costs</b>	\$50,347	\$224,696	nap	\$275,043
<b>Annualized MWh Savings</b>	18,780	30,849	nap	49,630
<b>Lifetime MWh Savings</b>	234,441	393,906	nap	628,347
<b>TRB Savings (2009\$)</b>	\$22,437,562	\$30,418,172	nap	\$52,855,735
<b>Winter Coincident Peak KW Savings</b>	2,534	4,206	nap	6,740
<b>Summer Coincident Peak KW Savings</b>	3,151	5,152	nap	8,303
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	56.738 12	27.061 13	nap	35.552 13
<b>Committed Incentives</b>	\$287,894	\$1,543,746	nap	nap

### 5.1.26 Electric C&I Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Air Conditioning Eff.</b>	26	1,443	1,413	19,308	40	227	2,924	0	\$110,350	\$825,159
Design Assistance	44	697	639	5,529	63	158	2,941	0	\$119,474	\$1,060,142
<b>Hot Water Efficiency</b>	6	157	156	794	22	1	23	78	\$1,516	\$10,953
<b>Industrial Process Eff.</b>	29	4,616	4,723	64,525	744	448	7,694	18,146	\$421,755	\$1,383,807
Lighting	1,027	18,073	15,909	236,491	2,612	3,741	-14,196	0	\$3,663,831	\$3,447,231
Motors	40	2,653	2,630	32,226	309	288	4,134	0	\$176,749	\$910,131
<b>Other Efficiency</b>	167	208	186	2,420	10	31	3	5,781	\$83,640	\$79,407
Other Fuel Switch	2	44	44	877	5	9	-157	0	\$151	\$4,659
<b>Other Indirect Activity</b>	9	492	442	1,475	32	42	0	0	\$18,457	\$72,649
Refrigeration	28	2,034	2,006	22,537	266	201	99	0	\$123,564	\$390,188
<b>Space Heat Efficiency</b>	13	241	241	4,267	93	0	3,618	0	\$19,809	\$339,442
Space Heat Fuel Switch	2	77	86	2,301	7	0	-250	0	\$9,954	\$57,043
Ventilation	8	116	116	1,157	1	6	3,068	0	\$13,742	\$28,618
<b>Totals</b>		30,849	28,591	393,906	4,206	5,152	9,902	24,005	\$4,704,992	\$8,609,429

## 5.1.27 Electric Residential Targeted High Use - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	1,219	1,036	nap	2,238
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$202,264	\$144,354	nap	\$346,618
<b>Participant Costs</b>	\$1,631,373	\$117,155	nap	\$1,748,528
<b>Third Party Costs</b>	\$0	\$23,645	nap	\$23,645
<b>Annualized MWh Savings</b>	812	731	nap	1,543
<b>Lifetime MWh Savings</b>	14,247	14,257	nap	28,503
<b>TRB Savings (2009\$)</b>	\$2,538,710	\$551,801	nap	\$3,090,511
<b>Winter Coincident Peak KW Savings</b>	203	154	nap	356
<b>Summer Coincident Peak KW Savings</b>	61	63	nap	124
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	0.666 18	0.705 20	nap	0.689 18
<b>Committed Incentives</b>	nap	nap	nap	nap

### 5.1.28 Electric Residential Targeted High Use - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	25	2	2	37	0	6	0	0	\$2,519	\$1,250
Hot Water Efficiency	243	90	89	643	10	8	0	780	\$2,607	\$0
Hot Water Fuel Switch	99	320	363	9,604	38	20	-1,126	0	\$63,876	\$95,000
Lighting	825	253	250	2,457	85	23	0	0	\$56,465	\$1
Monitoring and Metering	10	1	1	5	0	0	0	0	\$249	-\$52
Other Fuel Switch	5	5	5	149	1	1	-15	0	\$504	\$2,831
Refrigeration	11	7	7	121	1	1	0	0	\$1,914	\$6,130
Space Heat Efficiency	72	27	25	482	6	4	0	0	\$16,221	-\$29,545
Space Heat Fuel Switch	5	25	28	758	13	0	-96	0	\$0	\$41,541
<b>Totals</b>		731	770	14,257	154	63	-1,237	780	\$143,279	\$117,155

### 5.1.29 Electric Low Income Single Family - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	1,085	997	nap	2,075
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$443,086	\$415,490	nap	\$858,577
<b>Participant Costs</b>	\$3,767	\$14,009	nap	\$17,776
<b>Third Party Costs</b>	(\$3,381)	(\$12,095)	nap	(\$15,477)
<b>Annualized MWh Savings</b>	992	936	nap	1,928
<b>Lifetime MWh Savings</b>	12,935	12,898	nap	25,833
<b>TRB Savings (2009\$)</b>	\$662,240	\$550,522	nap	\$1,212,762
<b>Winter Coincident Peak KW Savings</b>	177	176	nap	354
<b>Summer Coincident Peak KW Savings</b>	98	95	nap	192
<b>Annualized MWh Savings/Participant</b>	0.915	0.939	nap	0.929
<b>Weighted Lifetime</b>	13	14	nap	13
<b>Committed Incentives</b>	nap	nap	nap	nap

### 5.1.30 Electric Low Income Single Family - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	4	2	2	30	0	0	3	38	\$2,660	\$0
Hot Water Efficiency	442	210	186	1,447	24	20	0	1,441	\$18,389	\$0
Hot Water Fuel Switch	9	38	34	1,147	5	3	-142	0	\$5,622	\$13,517
Lighting	808	248	220	2,404	83	23	0	0	\$65,964	\$47
Monitoring and Metering	1	0	0	0	0	0	0	0	\$52	\$0
Other Fuel Switch	2	2	2	66	0	0	-7	0	\$1,455	\$0
Refrigeration	445	402	357	6,831	47	49	0	0	\$308,685	\$0
Space Heat Efficiency	13	3	3	62	2	0	0	0	\$12,665	-\$9,587
Space Heat Fuel Switch	2	30	27	912	16	0	-106	0	\$0	\$10,033
<b>Totals</b>		936	831	12,898	176	95	-252	1,478	\$412,397	\$14,009

### 5.1.31 Electric Low Income Single Family - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
<b>Barton</b>	24	22	19	283	4	2	0	13	\$11,921	\$0
<b>CVPS</b>	419	363	323	4,636	66	38	-43	612	\$164,295	\$1,203
<b>Enosburg Falls</b>	5	6	5	76	1	1	0	13	\$2,948	\$0
<b>Green Mountain</b>	211	242	215	3,877	52	22	-172	302	\$91,614	\$12,425
<b>Hardwick</b>	24	24	22	275	4	2	0	87	\$8,531	\$0
<b>Hyde Park</b>	9	8	7	110	1	1	0	9	\$3,911	\$0
<b>Jacksonville</b>	3	3	3	43	1	0	0	0	\$1,699	\$0
<b>Johnson</b>	1	2	1	21	0	0	0	0	\$744	\$0
<b>Ludlow</b>	3	2	2	16	0	0	0	7	\$328	\$0
<b>Lyndonville</b>	34	31	27	333	5	3	0	142	\$10,458	\$0
<b>Morrisville</b>	9	6	5	63	1	1	0	0	\$1,895	\$0
<b>Northfield</b>	4	2	2	25	0	0	0	0	\$751	\$0
<b>Orleans</b>	8	7	6	100	1	1	0	0	\$4,248	\$0
<b>Readsboro</b>	2	1	1	9	0	0	0	0	\$281	\$0
<b>Stowe</b>	2	2	2	35	0	0	0	0	\$1,347	\$0
<b>Swanton</b>	9	19	17	409	3	2	-36	28	\$7,968	\$381
<b>VT Electric Coop</b>	188	154	137	2,075	28	16	0	225	\$83,709	\$0
<b>VT Marble</b>	2	1	1	8	0	0	0	0	\$149	\$0
<b>Washington Electric</b>	40	40	35	505	7	4	0	41	\$18,694	\$0
<b>Totals</b>	997	936	831	12,898	176	95	-252	1,478	\$412,397	\$14,009

### 5.1.32 Electric Low Income Single Family - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	36	37	33	515	6	4	0	100	\$19,267	\$0
Bennington	55	45	40	555	9	5	0	0	\$20,017	\$0
Caledonia	93	85	76	929	14	9	0	374	\$29,084	\$0
Chittenden	84	121	107	2,484	30	9	-186	140	\$41,171	\$12,425
Essex	32	26	23	323	5	3	0	63	\$11,941	\$0
Franklin	70	80	71	1,351	13	7	-69	166	\$37,762	\$1,584
Grand Isle	13	14	12	195	3	1	0	24	\$7,801	\$0
Lamoille	42	37	33	467	7	4	1	45	\$16,492	\$0
Orange	45	39	35	473	7	4	0	18	\$17,759	\$0
Orleans	140	110	98	1,492	19	12	0	75	\$63,771	\$0
Rutland	64	54	48	656	8	6	2	37	\$26,354	\$0
Washington	94	85	76	1,081	15	9	0	22	\$37,549	\$0
Windham	123	103	92	1,192	20	11	0	237	\$43,033	\$0
Windsor	106	99	88	1,184	19	10	0	177	\$43,491	\$0
<b>Totals</b>	<b>997</b>	<b>936</b>	<b>831</b>	<b>12,898</b>	<b>176</b>	<b>95</b>	<b>-252</b>	<b>1,478</b>	<b>\$412,397</b>	<b>\$14,009</b>



### 5.1.33 Electric C&I Large Industrial - Summary

	<u>Prior Year</u>	<u>Current Year 2010</u>	<u>Projected Year 2010</u>	<u>Cumulative starting 1/1/09</u>
<b># participants with installations</b>	58	70	nap	87
<b><u>Costs</u></b>				
<b>EVT Incentives</b>	\$622,942	\$1,046,298	nap	\$1,674,620
<b>Participant Costs</b>	\$2,890,210	\$2,825,251	nap	\$5,725,550
<b>Third Party Costs</b>	\$14,332	\$0	nap	\$14,332
<b>Annualized MWh Savings</b>	8,314	11,568	nap	20,034
<b>Lifetime MWh Savings</b>	110,864	141,411	nap	253,792
<b>TRB Savings (2009\$)</b>	\$11,864,406	\$13,501,705	nap	\$25,485,657
<b>Winter Coincident Peak KW Savings</b>	1,077	1,485	nap	2,582
<b>Summer Coincident Peak KW Savings</b>	1,273	1,374	nap	2,667
<b>Annualized MWh Savings/Participant Weighted Lifetime</b>	143.342	165.261	nap	230.280
<b>Committed Incentives</b>	nap	nap	nap	nap

### 5.1.34 Electric C&I Large Industrial - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	7	562	548	10,507	26	107	0	0	\$11,946	\$119,360
Cooking and Laundry	1	0	0	3	0	0	0	11	\$50	\$325
Design Assistance	8	357	315	3,864	20	118	2,712	0	\$49,820	\$126,755
Hot Water Efficiency	6	157	156	785	22	1	1	15	\$1,512	\$10,552
Industrial Process Eff.	19	3,104	3,266	38,667	566	230	7,002	18,146	\$346,659	\$1,205,519
Lighting	42	2,815	2,385	37,761	373	445	-1,697	0	\$356,777	\$492,968
Motors	27	2,657	2,524	31,024	226	279	2,867	0	\$178,260	\$544,269
Other Efficiency	3	23	20	458	9	10	0	0	\$4,456	\$14,725
Other Indirect Activity	4	249	223	1,199	39	35	0	0	\$16,466	\$66,785
Refrigeration	11	1,527	1,510	15,969	202	148	0	0	\$67,084	\$186,168
Space Heat Efficiency	1	0	0	0	0	0	1,526	0	\$0	\$30,000
Ventilation	5	118	117	1,174	1	1	2,563	0	\$13,268	\$27,824
<b>Totals</b>		<b>11,568</b>	<b>11,064</b>	<b>141,411</b>	<b>1,485</b>	<b>1,374</b>	<b>14,975</b>	<b>18,172</b>	<b>\$1,035,606</b>	<b>\$2,825,251</b>

### 5.1.35 Electric Cumulative Distributions by Customer Sector

	Total Resource Benefits starting 01/01/09		Annualized MWh Energy Savings starting 01/01/09		Year 2009-2011 PSB Approved Budgets	
	Total	%	Total	%	Total	%
<b>Business Energy Services</b>	\$119,066,541	59%	101,752	52%		61%
<b>Residential Energy Services</b>	<u>\$84,337,264</u>	<u>41%</u>	<u>93,973</u>	<u>48%</u>		<u>39%</u>
<b>Total</b>	\$203,403,805	100%	195,725	100%		100%

Data in this table includes Customer Credit Program results.

### 5.1.36 Electric Cumulative Distributions by County

County	% of Statewide Population	Number of Participants starting 01/01/09		Total Resource Benefits starting 01/01/09		Annualized MWh Energy Savings starting 01/01/09	
		Total	%	Total	%	Total	%
Addison	5.9%	4,009	5.4%	\$8,300,958	4.1%	8,103	4.1%
Bennington	6.1%	4,208	5.6%	\$12,228,667	6.0%	13,319	6.8%
Caledonia	4.9%	3,827	5.1%	\$6,128,800	3.0%	6,623	3.4%
Chittenden	24.1%	14,983	20.0%	\$56,738,634	27.9%	58,448	29.9%
Essex	1.1%	709	0.9%	\$587,552	0.3%	600	0.3%
Franklin	7.5%	5,631	7.5%	\$18,092,913	8.9%	17,202	8.8%
Grand Isle	1.1%	1,085	1.4%	\$1,385,201	0.7%	1,182	0.6%
Lamoille	3.8%	3,481	4.6%	\$10,243,366	5.0%	8,841	4.5%
Orange	4.6%	3,438	4.6%	\$4,187,425	2.1%	4,409	2.3%
Orleans	4.3%	4,543	6.1%	\$8,319,889	4.1%	7,154	3.7%
Rutland	10.4%	8,106	10.8%	\$26,369,337	13.0%	24,562	12.5%
Washington	9.5%	9,226	12.3%	\$23,317,570	11.5%	20,097	10.3%
Windham	7.3%	5,620	7.5%	\$15,320,595	7.5%	13,664	7.0%
Windsor	9.4%	6,022	8.0%	\$12,182,900	6.0%	11,521	5.9%
<b>Total</b>	100.0%	74,888	100.0%	\$203,403,805	100.0%	195,725	100.0%

Data in this table includes Customer Credit Program results.

## **5.2 List of Support Documents by Service**

## 5.2.1 LIST OF SUPPORT DOCUMENTS BY SERVICE

### EXISTING HOMES SERVICES

#### *Implementation and Procedure Modifications*

Subject	Document Type	Initiator	Addressee	Date of PIP
#81 - Methodology for Pre-Screening Home Performance with ENERGY STAR Measures	Program Implementation Procedure	Emily Levin	Michael Wickenden	1/1/2010

### BUSINESS NEW CONSTRUCTION SERVICES

#### *Implementation and Procedure Modifications*

Subject	Document Type	Initiator	Addressee	Date of PIP
N/A				

### BUSINESS EXISTING FACILITIES

#### *Implementation and Procedure Modifications*

Subject	Document Type	Initiator	Addressee	Date of PIP
# 80 - Commercial T12 and HID High-Bay Retirement Program	Program Implementation Procedure	Gabe Arnold	Michael Wickenden	1/1/2010
#83 - Commercial Lighting - LED Screw-Based (iLED) 2010 rebate offer	Program Implementation Procedure	Dan Mellinger	TJ Poor	9/15/2010

### RETAIL EFFICIENT PRODUCTS

#### *Implementation and Procedure Modifications*

Subject	Document Type	Initiator	Addressee	Date of PIP
N/A				

### EFFICIENCY VERMONT CROSS-SECTOR

#### *Implementation and Procedure Modifications*

Subject	Document Type	Initiator	Addressee	Date of PIP
# 79 - EVT Contract Impacts associated with External Funding Sources	Program Implementation Procedure	Jim Massie	Michael Wickenden	1/1/2010
#46 - Average Retail Electricity and Fuel Costs Calculations Annual Revision	Program Implementation Procedure	Bill Fisher	TJ Poor	Original 1/1/2006; Revised 1/1/2011

## **5.3 Gross to Net Factors**

### 5.3.1 GUIDE TO THE TABLES

Adjustments to all savings were made to account for free riders, spillover, and line losses. This section lists the adjustments that were used for this report.

Adjustments on table '5.3.2. Gross to Net Factors' represent free rider and spillover rates used throughout 2010 by mutual agreement among Efficiency Vermont, the Vermont Department of Public Service and the Contract Administrator. Free rider and spillover adjustments are applied based on the specific measure, market, and market sub-component. No adjustments are made for free riders or spillover in the Customer Credit Program.

Adjustments for free riders and spillover are presented as a single combined factor rather than percentage adjustments. That is, "no adjustment" is indicated by a factor of 1. Factors less than 1 represent a net reduction in savings due to free riders. Factors greater than 1 represent a net increase in savings due to spillover. Free rider and spillover adjustments are combined by addition. For example, a free rider adjustment of 0.8 combined with a spillover adjustment of 1.1 results in a total adjustment of 0.9. The adjusted savings would be 90% of unadjusted savings.

The column headings indicate the market and market sub-component as follows:

<u>Column</u>	<u>Market Component</u>
C&I RETR	Commercial & Industrial Retrofit
C&I PRES	Commercial & Industrial Prescriptive Equipment Replacement
C&I CUST	Commercial & Industrial Custom Equipment Replacement
C&I A250	Commercial & Industrial New Construction, Act 250
C&I NC	Commercial & Industrial New Construction, Non-Act 250
C&I UPST	Commercial & Industrial Upstream
C&I LPLUS	Commercial & Industrial Lighting Plus
FARM REPL	Farm Equipment Replacement
FARM NC	Farm New Construction
FARM PRES	Farm Prescriptive
MRMF RETR	Multifamily Market-Rate Retrofit
MRMF NC	Multifamily Market-Rate New Construction
LIMF RETR	Multifamily Low-Income Retrofit
LIMF REHB	Multifamily Low-Income Rehabilitation
LIMF NC	Multifamily Low-Income New Construction
EP ALL	Efficient Products
RNC ALL	Residential New Construction
EH RETR	Existing Homes Single-Family Retrofit
EH LISF	Existing Homes Single-Family Retrofit, Low Income



### 5.3.2 Gross to Net Factors

Measure	C&I	C&I	C&I	C&I	C&I	C&I	C&I	FARM	FARM	FARM	MRFM	MRFM	LIMF	LIMF	LIMF	EP	RNC	REB	REB	
	RETR	PRES	CUST	A250	NC	UPST	LPLUS	REPL	NC	PRES	RETR	NC	RETR	REHB	NC	ALL	ALL	LISF	LISF	
<b>Category: Air Conditioning Efficiency</b>																				
Duckless Mini Split	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Package terminal air conditioner	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Unitary air conditioning system	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
AC, Cool Choice tier 1 0-65 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
AC, Cool Choice tier 1 65-135 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
AC, Cool Choice tier 1 135-375 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
AC, Cool Choice tier 2 0-65 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
AC, Cool Choice tier 2 65-135 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
AC, Cool Choice tier 2 135-375 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Package terminal heat pump, Cool Choice tier 1	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Water chilling system	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Cooling Commissioning	0.99	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Improved air conditioning controls	0.89	0.95	0.94	1.02	1.07	1.00	0.95	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, air, Cool Choice tier 1 0-65 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, air, Cool Choice tier 1 65-135 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, air, Cool Choice tier 1 135-375 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, air, Cool Choice tier 2 0-65 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, air, Cool Choice tier 2 65-135 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, air, Cool Choice tier 2 135-375 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Package terminal AC, Cool Choice tier 1	0.99	1.10	1.04	1.02	1.07	1.10	0.98	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, water, Cool Choice tier 1 0-375 KBTU/hr	0.99	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat pump, water, Cool Choice tier 2 0-375 KBTU/hr	0.94	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Dehumidifier	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Energy Star central AC	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00

03  
02  
02

**Measure**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRMF RETR	MRMF NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	REB RETR	REB LISE		
Energy Star central AC, early replacement	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Energy Star room AC, early replacement	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Energy Star room AC	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Energy Star CEE Tier 1 AC, incremental	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Heat pump, air source	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Efficient Ground Source Heat Pump System	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	
Package terminal heat hump	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Room heat pump	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Heat pump, water source	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
HVAC economizer	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Building orientation change	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Rating based cooling savings, 81-85pts attached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 61-80pts attached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 0-60pts attached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 81-85pts detached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 61-80pts detached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 0-60pts detached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 82 plus multi	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 86 plus multi	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 82 plus mixed	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Rating based cooling savings, 86 plus mixed	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00
Proper sizing for HVAC	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Custom air conditioning	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

**Measure**

**Category: Cooking and Laundry**

Commercial efficient clothes washer	0.89	1.00	0.94	0.95	1.00	0.98	1.00	1.00	1.00	0.90	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.90	1.00
Dryer usage reductions	0.89	1.00	0.94	0.95	1.00	0.98	1.00	1.00	1.00	0.90	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.90	1.00
Energy Star dishwasher, early replacement	0.89	1.00	0.94	0.85	0.90	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Energy Star dishwasher	0.89	1.00	0.94	0.85	0.90	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Energy Star washer, early replacement	0.89	1.00	0.94	0.90	0.95	0.98	1.00	1.00	1.00	0.90	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.15	1.00	0.90
Energy Star washer	0.89	1.00	0.94	0.90	0.95	0.98	1.00	1.00	1.00	0.90	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.15	1.00	0.90
Dryer duct improvement	0.89	1.00	0.94	0.95	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.90
Custom cooking/laundry	0.89	1.00	0.94	0.95	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90

**Category: Compressed Air**

Compressed air, air treatment	0.89	0.95	0.94	0.95	1.00	0.98	1.00	0.95	0.98	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed Air Commissioning	0.99	1.00	0.99	0.95	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Compressed air, compressor	0.89	0.75	0.75	0.75	0.75	0.98	1.00	0.95	0.98	1.00	0.75	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, demand controls	0.89	0.95	0.94	0.95	1.00	0.98	1.00	0.95	0.98	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, distribution	0.89	0.95	0.94	0.95	1.00	0.98	1.00	0.95	0.98	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, Air Dryer	0.89	0.50	0.50	0.50	0.50	0.98	1.00	0.95	0.98	1.00	0.50	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, maintenance	0.89	0.95	0.94	0.95	1.00	0.98	1.00	0.95	0.98	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, Air Nozzle	0.89	0.90	0.90	0.90	0.90	0.98	1.00	0.95	0.98	1.00	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, Air Receiver	0.89	0.90	0.90	0.90	0.90	0.98	1.00	0.95	0.98	1.00	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, supply controls	0.89	0.95	0.94	0.95	1.00	0.98	1.00	0.95	0.98	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Compressed air, Snowmaking distribution	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Compressed air, Snowmaking efficiency	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Compressed air, custom	0.89	1.00	0.94	0.95	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90

**Category: Design Assistance**

Design assistance, general	0.89	0.98	0.95	1.02	1.07	0.98	1.00	0.98	0.98	1.00	0.98	1.02	1.00	0.98	0.98	1.00	1.02	1.00	1.02	0.90
Comprehensive Building Commissioning	0.99	1.00	0.99	1.02	1.07	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Comprehensive building-wide savings	0.89	0.98	0.95	1.02	1.07	0.98	1.00	0.98	0.98	1.00	0.98	1.02	1.00	0.98	0.98	1.00	1.02	1.00	1.02	0.90
Core Performance Building	0.89	0.98	0.95	1.02	1.02	0.98	1.00	0.98	0.98	1.00	0.98	0.99	1.00	0.98	0.98	1.00	0.99	1.00	0.99	0.90

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**Measure**

**Category: Office Equipment**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF REHB	LIMF REHB	LIMF NC	EP ALL	RNC ALL	REB REFR	RETR LISR	
<b>Efficient Computers/Monitors</b>	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.70	1.00	1.00	1.00	1.00
<b>Residential Entertainment Controlled Power Strip</b>	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Residential Office Controlled Power Strip</b>	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Computer monitor power management software</b>	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Efficient Televisions</b>	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Custom Office Equipment Efficiency</b>	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Category: Estimate**

Estimated gross results

**Category: Event**

Compressed Air Challenge

**Category: Health and Safety**

<b>Chimney liner</b>	0.89	0.95	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
<b>Carbon monoxide detector</b>	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
<b>Ventilation, health only</b>	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.10	1.00	1.00	1.00	1.00	1.10	1.00	0.90	1.00

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**Measure**

**Category: Hot Water Efficiency**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	REB RETR	REB LISE	
Comprehensive hot water conservation	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Improve hot water controls	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Drain Water Waste Heat Recovery	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Faucet aerator/flow restrictor	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	0.90	0.90	0.90	1.00	1.00	1.00	1.00	0.90	1.00
Heat recovery, compressor	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Heat recovery, grey water	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Insulate hot water tank	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Low flow water fixtures, mixed types	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	0.90	0.90	0.90	1.00	1.00	1.00	1.00	0.90	1.00
Insulate hot water pipes	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Rating based hot water savings, 81-85pts attached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 61-80pts attached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 0-60pts attached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 81-85pts detached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 61-80pts detached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 0-60pts detached	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 82 plus multi	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 86 plus multi	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 82 plus mixed	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Rating based hot water savings, 86 plus mixed	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	0.90	1.00
Low flow showerhead	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	0.90	0.90	0.90	1.00	1.00	1.00	1.00	0.90	1.00
Solar hot water heating	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Hot water temperature setback	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Waterbed pad	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Custom hot water efficiency	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

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**Measure**

**Category: Hot Water Fuel Switch**

Fuel switch hot water, continuous flow oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, continuous flow kerosene	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, continuous flow natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, continuous flow propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, indirect fired fuel oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, indirect fired natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, indirect fired propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, indirect fired wood	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, stand alone fuel oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, stand alone natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.50	1.00
Fuel switch hot water, stand alone propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00
Fuel switch hot water, stand alone wood	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.85	1.00	1.00	1.00	0.00	0.00	0.80	1.00

**Category: Hot Water Replacement**

Replace hot water, continuous flow oil	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, continuous flow kerosene	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, continuous flow natural gas	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, continuous flow propane	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, indirect fired fuel oil	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, indirect fired natural gas	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, indirect fired propane	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, indirect fired wood	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, stand alone fuel oil	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, stand alone natural gas	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, stand alone propane	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace hot water, stand alone wood	0.89	1.00	0.94	1.02	1.07	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

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**Measure**

**Category: Industrial Process Efficiency**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	EP ALL	RNC ALL	REB RETR	REB LISE
Industrial Process Efficient Chiller	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Industrial Process Commissioning	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Snowmaking Process Controls	0.90	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Efficient Snowmaking Guns, Other	0.80	0.80	0.80	0.80	0.80	0.80	0.98	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Efficient Snowmaking Fan Guns	0.80	0.80	0.80	0.80	0.80	0.80	0.98	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Efficient Snowmaking Ground Guns	0.80	0.80	0.80	0.80	0.80	0.80	0.98	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Injection Molding Machines	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Industrial Process Efficient Boiler	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Industrial Process Cooling Efficiency	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Industrial Process Heating Efficiency	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Rebuilt Snowmaking Guns	0.70	0.70	0.70	0.70	0.70	0.70	0.98	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Snowmaking process	0.90	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Efficient Snowmaking Tower Guns	0.80	0.80	0.80	0.80	0.80	0.80	0.98	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Snowmaking Water Distribution Efficiency	0.90	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Snowmaking Water Precooling	0.90	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Snowmaking Water Pump Rebuild	0.90	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Custom industrial process	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

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**Measure**

**Category: Light Bulb/Lamp**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	REB RETR	REB LISE
Compact fluorescent screw-base bulb	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.05	1.05	0.95	0.95	1.00	1.00	1.00	1.00	0.85	1.00	1.00	0.90	1.00
Compact fluorescent screw-base bulb Com	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.05	1.05	0.95	0.95	1.00	1.00	1.00	1.00	1.10	1.00	1.00	0.90	1.00
Free CFL screw-base bulb	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.05	1.05	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialty Bulb	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.05	1.05	0.95	0.95	1.00	1.00	1.00	1.00	1.19	1.00	1.00	0.90	1.00
Floor lamp, compact fluorescent	0.94	1.05	1.02	1.02	1.07	1.05	0.98	1.00	1.00	1.05	0.95	1.00	1.00	1.00	1.00	0.96	1.00	1.00	0.90	1.00
Halogen IR	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Integrated Ballast Metal-halide	0.89	0.90	0.90	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Screw-Base Induction Fluorescent	0.89	0.90	0.90	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
LED DOWN LIGHT	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.98	0.90	1.00
LED DOWN LIGHT	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.98	0.90	1.00
Reduced Wattage CFL	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduced Wattage MH	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LBLRWLT5	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduced-Wattage T8 Lamp	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LED Screw Base Lamp	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.98	0.90	1.00
Table/Desk lamp, compact fluorescent	0.94	1.05	1.02	1.02	1.07	1.05	0.98	1.00	1.00	1.05	0.95	1.00	1.00	1.00	1.00	0.96	1.00	1.00	0.90	1.00
Torchiere, compact fluorescent	0.94	1.05	1.02	1.02	1.07	1.05	0.98	1.00	1.00	1.05	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.90	1.00
HPT8 - F32T8 Lamps	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LBLUPHIR	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Reduced-Wattage T8 - 1L	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Custom lamp or bulb	0.89	1.00	0.97	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00



03/29/20

**Measure**

**Category: Lighting Efficiency/Controls**

Measure	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF REHB	LIMF NC	LIMF REHB	LIMF NC	EP ALL	RNC ALL	REB RETR	REB LISR
Lighting system, exterior power density reduction	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Lighting system, interior power density reduction	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Lighting System Commissioning	0.99	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Daylighting	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Lighting design improvements	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Dimming controls and ballasts	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Delamping/fixture reduction	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Exterior motion sensors	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.10	0.90	0.90	1.00	0.90	1.00	1.10	0.90	1.00
Occupancy sensors	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Photocell switches	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Lighting supplier compensation	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	0.96	1.00	0.90	0.90	0.90	1.05	0.96	0.90	1.00
Timer controls	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
2-way switching	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00
Custom lighting efficiency	0.89	0.98	0.97	1.02	1.07	0.98	0.98	1.00	1.00	0.98	0.90	1.00	0.90	0.90	1.00	0.90	1.00	1.00	0.90	1.00

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**Measure**

**Category: Lighting Hardwired Fixture**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF REHB	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	RETR	RETR	RETR	RETR		
Relamp/Reballast T8 to HPT8	0.94	1.15	1.14	1.02	1.07	1.15	0.98	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Compact fluorescent exterior fixture	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	1.01	0.90	0.90	0.90	0.95	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Compact Fluorescent farm fixture	0.94	0.90	0.94	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Compact fluorescent interior fixture, ceiling fan	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Compact fluorescent interior fixture	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	0.96	0.90	0.90	0.90	0.96	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Compact fluorescent interior fixture, recessed can	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Compact fluorescent interior fixture, surface mount	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Relamp/reballast conversion existing fixture	0.94	0.70	0.69	1.02	1.07	0.70	0.95	1.00	1.00	0.70	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Circline fluorescent fixture	0.94	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.95	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
LED Track or mono-point Light Fixture	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	0.90	0.90	0.90	1.19	0.98	0.98	0.90	0.90	0.90	0.90	0.90	1.00
Exit signs, LED	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.90	0.90	0.90	0.90	0.90	1.05	0.90	0.90	0.90	0.90	0.90	0.90	0.90	1.00
Generic linear fluorescent tube fixture	0.89	0.70	0.69	1.02	1.07	0.70	0.98	1.00	1.00	0.70	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Electronic-Ballast HID	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
High pressure sodium fixture	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.90	0.98	0.90	0.90	0.90	1.05	0.98	0.98	0.90	0.90	0.90	0.90	0.90	1.00
Low pressure sodium fixture	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.90	0.98	0.90	0.90	0.90	1.05	0.98	0.98	0.90	0.90	0.90	0.90	0.90	1.00
Metal halide fixture normal start	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.90	0.98	0.90	0.90	0.90	1.05	0.98	0.98	0.90	0.90	0.90	0.90	0.90	1.00
Metal halide fixture pulse start	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.90	0.98	0.90	0.90	0.90	1.05	0.98	0.98	0.90	0.90	0.90	0.90	0.90	1.00
Metal halide track lighting	1.09	1.10	1.09	1.02	1.07	1.10	0.98	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HID fixture, other	0.89	0.90	0.89	1.02	1.07	0.90	0.98	1.00	1.00	0.90	0.90	0.98	0.90	0.90	0.90	1.05	0.98	0.98	0.90	0.90	0.90	0.90	0.90	1.00
MH Electric Ballast	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
High bay fluorescent fixture	1.09	1.10	1.09	1.02	1.07	1.10	0.98	1.10	1.10	1.10	0.90	0.86	0.90	0.90	0.90	1.05	0.86	0.86	0.90	0.90	0.90	0.90	0.90	1.00
Linear fluorescent T5	0.89	0.70	0.69	1.02	1.07	0.70	0.98	1.00	1.00	0.70	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Linear fluorescent T8	0.89	0.50	0.49	0.52	0.57	0.50	0.97	1.00	1.00	0.50	0.90	0.86	0.90	0.90	0.90	0.00	0.86	0.86	0.90	0.90	0.90	0.90	0.90	1.00
Linear fluorescent T12	0.89	0.70	0.69	1.02	1.07	0.70	0.98	1.00	1.00	0.70	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Linear fluorescent T8, low glare	0.89	0.70	0.69	1.02	1.07	0.70	0.98	1.00	1.00	0.70	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Linear fluorescent T8, high efficiency	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00
Linear fluorescent T8, indirect	0.89	0.70	0.69	1.02	1.07	0.70	0.98	1.00	1.00	0.70	0.90	0.96	0.90	0.90	0.90	1.05	0.96	0.96	0.90	0.90	0.90	0.90	0.90	1.00

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**Measure**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF NC	EP ALL	RNC ALL	REB RETR	REB LISE
Linear fluorescent T8, w/reflector	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	0.96	1.00	0.90	0.90	1.05	0.96	0.90	0.90	1.00
Linear fluorescent T8, super	1.10	1.15	1.14	1.02	1.07	1.15	0.96	1.00	1.00	1.15	0.90	0.86	1.00	0.90	0.90	1.05	0.86	0.90	0.90	1.00
LED Outdoor Bollard	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Outdoor Decorative Pole/Arm Area or Roadway	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Outdoor Pathway Lights	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Outdoor Pole/Arm Area or Roadway Fixture	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Outdoor Steplight	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Wall-Mount Area Fixture (WallPack)	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Parking Garage/Canopy Fixture	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Portable Desk/Task Light	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Refrigerated Case Lighting	0.95	1.00	1.00	1.02	1.07	0.90	0.95	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED - Solid State Recessed Downlight	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
LED Surface of Pendant Downlight	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00
New T5 High-Bay	1.14	1.15	1.14	1.02	1.07	1.15	0.97	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New T5 Indirect	1.14	1.15	1.14	1.02	1.07	1.15	0.98	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New T5 Industrial/Strip	1.14	1.15	1.14	1.02	1.07	1.15	0.97	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New T5 Troffer/Wrap	0.96	1.15	1.14	1.02	1.07	1.15	0.98	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New T5 Vapor Proof	1.04	1.05	1.04	1.02	1.07	1.00	0.98	1.00	1.00	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New Super T8 High-Bay	1.14	1.15	1.14	1.02	1.07	1.15	0.97	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
High Performance T8 Troffer	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
New Super T8 Indirect	1.10	1.15	1.14	1.02	1.07	1.15	0.95	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New Super T8 Industrial/Strip	0.99	1.15	1.14	1.02	1.07	1.15	0.95	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Relamp/Reballast to Super T8	0.95	1.05	0.95	1.02	1.07	1.07	0.97	1.00	1.00	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New Super T8 Troffer/Wrap	0.98	1.15	1.14	1.02	1.07	1.15	0.96	1.00	1.00	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New Super T8 Vapor Proof	0.97	1.05	1.04	1.02	1.07	1.00	0.96	1.00	1.00	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2-D fluorescent fixture	0.89	1.00	0.97	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	0.96	1.00	0.90	0.90	1.05	0.96	0.90	0.90	1.00
Traffic signal, LED	0.67	0.67	0.67	0.74	0.74	0.67	0.98	1.00	1.00	0.67	0.67	0.86	1.00	0.90	0.90	1.00	0.86	0.90	0.90	1.00
LED UnderCatbnet Shelf Task Light	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00

OS  
REB  
LISE

**Measure**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	REB RETR	REB LISE	
U-Tube fluorescent fixture	0.89	0.70	0.69	1.02	1.07	0.70	0.98	1.00	1.00	0.70	0.90	0.96	1.00	0.90	0.90	1.05	0.96	0.90	0.90	1.00	
LED Wall Wash Fixture	1.00	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00	
Miscellaneous LEDs	0.99	1.00	1.00	1.02	1.07	0.90	0.98	1.00	1.00	1.00	0.90	0.98	1.00	0.90	0.90	1.19	0.98	0.90	0.90	1.00	
Other fixture	0.89	1.00	0.97	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	0.86	1.00	0.90	0.90	1.05	0.86	0.90	0.90	1.00	
<b>Category: Monitoring and Metering</b>																					
<b>Blueline Power Meter - Residential EPP</b>																					
<b>Category: Motor Controls</b>																					
<b>Motor Controls Commissioning</b>																					
Dairy Milk Pump VFD	0.99	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Kitchen Exhaust Hood Controls	0.89	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Motor Control Commissioning - HVAC	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Motor Timer Control - HVAC	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Custom Motor Control - HVAC	0.89	1.00	0.97	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Variable Frequency Drive, Industrial Process	0.89	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Variable Frequency Drive, Non Process, Non-HVAC	0.89	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Variable frequency drive motor control	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Variable speed drive motor control (non-VFD)	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Variable frequency drive, Snowmaking	0.90	0.90	0.90	0.90	0.90	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Variable frequency drive, standardized	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Motor timer control	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Custom motor control	0.89	1.00	0.97	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	

03  
REB  
LISE

**Measure**

**Category: Motors**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	REB RETR	REB LISE	
Motor, ODP 1 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 2 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 3 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 5 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 10 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 15 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 1.5 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 20 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 25 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 30 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 40 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 50 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 60 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 75 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 7.5 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 100 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 125 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 150 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, ODP 200 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Custom Motor - HVAC	0.89	0.98	0.97	0.95	1.00	0.98	0.98	1.00	1.00	0.98	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, Pool Pump	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, Pool Pump Timer	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Custom Snowmaking motor efficiency	0.90	0.90	0.90	0.97	0.97	0.90	0.98	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Motor, TEFC 1 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 2 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 3 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 5 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

02  
03  
04

**Measure**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF RETR	LIMF REHB	LIMF NC	EP ALL	RNC ALL	REB RETR	REB LISE
Motor, TEFC 10 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 15 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 1.5 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 20 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 25 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 30 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 40 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 50 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 60 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 75 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 7.5 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 100 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 125 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 150 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Motor, TEFC 200 HP	1.19	1.20	1.19	1.02	1.07	1.20	0.98	1.00	1.00	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Custom motor	0.89	0.98	0.97	0.95	1.00	0.98	0.98	1.00	1.00	0.98	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00



03  
02  
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**Measure**

**Category: Refrigeration**

	C&I REFR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM REFR	MRFM NC	LIMF REFR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	RETR REFR	RETR LIST	
Efficient blower fan	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigeration compressor, discus	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigeration compressor, scroll	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Commercial freezer	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Commercial icemaker	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigeration Commissioning	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Refrigeration compressor	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Commercial refrigerator	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Improve refrigeration controls	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigerator covers	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigeration door heater controls	0.94	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigerator Door Film	0.94	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigeration zero energy doors	0.94	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Energy star freezer	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Energy star freezer, early replacement	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Energy star refrigerator, early replacement	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Energy star refrigerator	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Energy Star CEE Tier 1 refrigerator, incremental cos	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00
Freezer early retirement program, secondary	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.81	1.00	1.00	0.90	1.00
Refrigeration floating head pressure controls	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigeration fan motor controls	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Defrost Control on Refrigeration	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Refrigerator economizer	0.94	0.95	0.94	0.95	1.00	0.95	0.98	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Plate cooler	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Remove refrigerator/freezer	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Refrigerator early retirement program, secondary	0.89	1.00	0.94	0.85	0.90	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.72	1.00	1.00	0.90	1.00
Top-third refrigerator	0.89	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00





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**Measure**

**Category: Space Heat Fuel Switch**

Fuel switch, boiler, fuel oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, boiler, natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, boiler, propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, boiler, wood	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, furnace, fuel oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, furnace, natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, furnace, propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, furnace, wood	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, space heater, fuel oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, space heater, kerosene	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, space heater, natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, space heater, propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Fuel switch, space heater, wood	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Indirect heat from DHW system, fuel oil	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Indirect heat from DHW system, natural gas	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00
Indirect heat from DHW system, propane	0.79	0.00	0.84	0.87	0.87	0.87	0.00	0.98	0.85	0.00	0.85	0.00	0.85	0.50	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.80	1.00

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**Measure**

**Category: Space Heat Replacement**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF REHB	LIMF REHB	LIMF NC	LIMF ALL	RNC ALL	REB RETR	REB LIST
Replace boiler, fuel oil	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Heat Replacement Boiler, Oil URF	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Heat Replacement Boiler, Kerosene URF	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace boiler, natural gas	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace boiler, propane	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Heat Replacement Boiler, Propane URF	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace boiler, wood	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace furnace, fuel oil	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Heat Replacement Furnace, Oil URF	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Heat Replacement Furnace, Kerosene URF	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace furnace, natural gas	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace furnace, propane	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Space Heat Replacement Furnace, Propane URF	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace furnace, wood	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace space heater, fuel oil	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace space heater, kerosene	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace space heater, natural gas	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace space heater, propane	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Replace space heater, wood	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

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**Measure**

**Category: Service**

Measure	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF REHB	LIMF RE	LIMF NC	EP ALL	RNC ALL	RETR REHB	RETR REHB	
Residential energy audit	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Appliance package bonus	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Vermont Star Home bonus	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Vermont Energy Star Home bonus	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Modular Home Thermal Bypass Inspection Incentiv	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Home energy rating, as built (ABHER)	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Home energy rating, full	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Home energy rating	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Vermont Advantage rating (82.0-85.9)	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Vermont Star rating (86.0+)	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Advance special incentive payment	0.89	0.98	0.95	0.95	1.00	0.98	0.98	1.00	1.00	0.98	0.90	1.02	1.00	0.98	0.98	1.00	1.02	1.00	0.90	1.00
Withheld special incentive payment	0.89	0.98	0.95	0.95	1.00	0.98	0.98	1.00	1.00	0.98	0.90	1.02	1.00	0.98	0.98	1.00	1.02	1.00	0.90	1.00

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**Measure**

**Category: Thermal Shell**

	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRMF RETR	MRMF NC	LIMF RETR	LIMF REHB	LIMF NC	LIMF ALL	EP ALL	RNC ALL	REB RETR	REB LIST
Airsealing	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Energy code compliance	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Comprehensive heating system and shell improvem	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Door improvements	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Attic/ceiling/wall insulation	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Insulate and airseal	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Whole-building insulation	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Foundation insulation, exterior	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Foundation insulation, interior	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Passive solar design	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 81-85pts attac	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 61-80pts attac	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 0-60pts attac	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 81-85pts detac	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 61-80pts detac	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 0-60pts detac	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 82 plus multi	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 86 plus multi	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 82 plus mixed	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Rating based space heating savings, 86 plus mixed	0.89	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Vermont Star home (OBSOLETE)	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Vermont Advantage home (OBSOLETE)	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Window improvements	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00
Custom thermal shell	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	0.90	1.05	1.00	1.00	1.00	1.00	1.00	1.05	0.90	1.00

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**Measure**

**Category: Ventilation**

Balanced ventilator, makeup heat electric	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Balanced ventilator, makeup heat oil	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Balanced ventilator, makeup heat natural gas	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Balanced ventilator, makeup heat none	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Balanced ventilator, makeup heat propane	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Ceiling fan	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Ventilation Commissioning	0.99	1.00	0.99	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Demand controlled ventilation	0.89	0.95	0.94	1.02	1.07	0.95	0.98	1.00	1.00	0.95	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
HRV ventilator, makeup heat electric	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
HRV ventilator, makeup heat oil	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
HRV ventilator, makeup heat natural gas	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
HRV ventilator, makeup heat none	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
HRV ventilator, makeup heat propane	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Mechanical ventilation, unspecified	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Exhaust fan, ceiling	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Exhaust fan, inline	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Exhaust fan, variable speed	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Exhaust fan, wall	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	
Custom ventilation	0.89	1.00	0.94	1.02	1.07	1.00	0.98	1.00	1.00	1.00	1.00	1.05	1.00	1.00	1.00	1.05	1.00	1.05	0.90	1.00	

**Category: Water conservation**

Toilet diverter	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Water leak reduction	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Low flow toilet	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00
Custom water conservation	0.89	1.00	0.94	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00

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Measure	C&I RETR	C&I PRES	C&I CUST	C&I A250	C&I NC	C&I UPST	C&I LPLUS	FARM REPL	FARM NC	FARM PRES	MRFM RETR	MRFM NC	LIMF REHB	LIMF REHB	LIMF NC	EP ALL	RNC ALL	RETR REHB	RETR REHB	
<b>Category: Other</b>																				
Block Heater Timer	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Master meter conversion	0.89	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Temporary measure code, to be reassigned	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transformer, efficient	0.89	0.99	0.98	0.95	1.00	0.99	0.98	1.00	1.00	0.99	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	
Other uncategorized efficiency	0.99	1.00	0.99	0.95	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

## **6.1 Definitions and End Notes**



## 6.1.1 DATA TABLES OVERVIEW

1 – Section **6.1.2** includes a list of definitions for items in the data tables. Section **6.1.3** includes notes for specific items in the tables. Section **6.1.4** provides a guide to the re-mapping of multifamily projects and savings into new markets.

2 – Data items for which data are not available are labeled “nav.” Data items for which data are not applicable are labeled “nap.”

3 – Except where noted, Efficiency Vermont expenditures data in this report were incurred during the period January 1, 2010, through December 31, 2010. Similarly, measure savings are for measures installed during the period January 1, 2010, through December 31, 2010.

4 – Efficiency Vermont costs include an operations fee of .75%. The operations fees are reported in all “Services and Initiative Costs” where applicable with one exception: The operations fees for “Incentives to Participants” are reported with the “Administration” costs.

5 – Data for “Incentives to Participants” in Tables **2.1.3, 2.1.4, 2.1.9, 2.1.13, 2.1.19, 2.1.22, 2.1.24, 3.1.1, 3.1.6, 3.1.11, 3.1.16, 3.1.21, 3.1.26, 3.1.29, 3.1.32, 3.1.35, 3.1.38,** and **4.1.2** are based on financial data from Vermont Energy Investment Corporation’s (VEIC’s) accounting system. “Participant Incentives Paid” on all other tables are based on data entered in Efficiency Vermont’s Knowledge-based Information Technology Tool (KITTT) tracking system.

6 – “Annualized MWh Savings (adjusted for measure life),” “Winter Coincident Peak kW Savings (adjusted for measure life),” and “Summer Coincident Peak kW Savings (adjusted for measure life)” on Tables 2.1.3 and 2.1.4 are provided for reference only. These data exclude savings for measures that have reached the end of their specified lifetime.

7 – Program planning costs have been rolled into “Services and Initiatives” for years 2003–2010. For years 2000–2002, program planning costs were reported as a separate line item. In Tables **2.1.3** and **2.1.4**, program planning costs under “Cumulative starting 3/1/00” refer to data reported prior to 2003.

8 – For years 2003–2005, multifamily costs and savings are reported in the “Business Energy Services” section. For all other contract years, multifamily costs and savings are reported in the “Residential Energy Services” section. See Section **6.1.4**, “Multifamily Reporting Changes.”

## **6.1.2 DEFINITIONS AND REPORT TEMPLATE**

The table templates that appear in the 2010 Efficiency Vermont Savings Claim Summary/Annual Report were developed as a collaborative effort among Efficiency Vermont, the Vermont Department of Public Service, the Energy Efficiency Utility Contract Administrator, and Burlington Electric Department. Note that there are two major table formats, one for the markets and services summary and the other for breakdowns by end use, county, and utility savings.

The definitions of the data reported in these tables follow. The numbers in parentheses on the template refer to the footnoted definitions that immediately follow.

		<u>Prior</u>	<u>Current</u>	<u>Projected</u>	<u>Cumulative</u>	<u>Cumulative</u>
		<u>Year</u>	<u>Year</u>	<u>Year</u>	<u>starting</u>	<u>starting</u>
		<u>2010</u>	<u>2010</u>	<u>2010</u>	<u>1/1/09</u>	<u>3/1/00</u>
		(1)	(2)	(3)	(4)	(5)
<b># participants with installations</b>	<b>(6)</b>					

<b>Services and Initiatives Costs</b>	
<b>Operating Costs</b>	
Administration	(7)
Services and Initiatives	(8)
Program Planning	(9)
Marketing / Business Development	(10)
Information Systems	(11)
Subtotal Operating Costs	(12)
<b>Incentive Costs</b>	
Incentives to Participants	(13)
Incentives to Trade Allies	(14)
Subtotal Incentive Costs	(15)
<b>Technical Assistance Costs</b>	
Services to Participants	(16)
Services to Trade Allies	(17)
Subtotal Technical Assistance Costs	(18)
Total Efficiency Vermont Costs	(19)
Total Participant Costs	(20)
Total Third-Party Costs	(21)
Total Services and Initiatives Costs	(22)

Annualized MWh Savings	(23)
Lifetime MWh Savings	(24)
TRB Savings (2009\$)	(25)
Winter Coincident Peak kW Savings	(26)
Summer Coincident Peak kW Savings	(27)
Annualized MWh Savings/Participant	(28)
Weighted Lifetime	(29)
Committed Incentives	(30)

Annualized MWh Savings (adjusted for measure life)	(31)
Winter Coincident Peak kW Savings (adjusted for measure life)	(32)
Summer Coincident Peak kW Savings (adjusted for measure life)	(33)

## X.X.X. Breakdown Report

End Use or Utility or County	# of Participants	Net MWh Saved	Gross MWh Saved	Net Lifetime MWh Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBtu	Net Water CCF	Participant Incentives Paid	Participant Costs
	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)

### Footnotes for the report table templates:

(1) Activity for the prior reporting year.

(2) Activity for the current reporting year. For savings, the figure reported is estimated savings for measures actually implemented for the current reporting period. Savings are reported in MWh, at generation and net of all approved adjustment factors, except as otherwise noted.

(3) Projected costs for year 2010 are estimates only and are provided for reference. The Efficiency Vermont contract contains three-year cumulative budgets and savings goals.

(4) Data reported for the contract period starting January 1, 2009 and continuing through December 31, 2010.

(5) Data reported for the contract period starting March 1, 2000, and continuing through December 31, 2010.

(6) Number of customers with installed measures. The “# participants with installations” is counted by summing unique physical locations (sites) where efficiency measures have been installed for the reporting period. For multifamily, the “#of participants with installations” is counted by summing the number of individual units. Under “Cumulative starting 1/1/09” and “Cumulative starting 3/1/00,” customers are counted once, regardless of the number of times the customer participates in Efficiency Vermont services throughout the period 2000–2010. Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, the same participants may be counted and reported by more than one organization. As a result, total statewide participation might be less than the sum of all the organizations’ reported participants.

(7) Costs include general management, budgeting, financial management, and Efficiency Vermont contract management. These costs are not broken out by market. This cost category is included on Tables 2.1.3 and 2.1.4 only. Administration costs prior to 2009 do not include the incentives operations fee. 2009 and all years after include the operations fee.

(8) Management and other management-related costs directly associated with market implementation work.

(9) Costs related to program design, planning, screening, and other similar functions. Program Planning costs refer to data reported prior to 2003.

(10) Costs related to marketing, outreach, customer service, and business development.

(11) Costs related to information systems development and maintenance. These costs are not broken out by market. This cost category is included on Tables 2.1.3 and 2.1.4 only.

(12) Subtotal of all operating costs detailed in the categories above: (7) + (8) + (9) + (10) + (11).

(13) Direct payments to participants to defray the costs of specific efficiency measures. Prior to 2009, participant incentive costs included the operations fee.

(14) Incentives paid to manufacturers, wholesalers, builders, retailers, or other non-customer stakeholders that do not defray the costs of specific efficiency measures. Prior to 2009, trade ally incentive costs included the operations fee.

(15) Subtotal reflecting total incentive costs: (13) + (14).

(16) Costs related to conducting analyses, preparing packages of efficiency measures, contract management, and project follow-up.

(17) Costs related to educational or other support services provided to entities other than individual participants, such as trade allies, manufacturers, wholesalers, builders, and architects.

(18) Subtotal reflecting total technical assistance costs: (16) + (17).

(19) Total costs incurred by Efficiency Vermont. All costs are in nominal dollars: (12) + (15) + (18).

(20) Total costs incurred by participants and related to Efficiency Vermont or utility activities. This category includes the participant contribution to the capital costs of installed measures and to specific demand-side-management (DSM)-related services, such as technical assistance or energy ratings.

(21) Total costs incurred by third parties (i.e., entities other than Efficiency Vermont, utilities, and participants) and directly related to Efficiency Vermont or utility DSM activities. This category includes contributions by third parties to the capital costs of installed measures and to specific DSM-related services, such as technical assistance or energy ratings.

(22) Total cost of services and initiatives: (19) + (20) + (21).

(23) Annualized MWh savings at generation, net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period.

(24) Lifetime estimated MWh savings for measures installed during the current reporting year, at generation and net of all approved adjustment factors. (Typically, this value is calculated by multiplying estimated annualized savings by the life of the measure.)

(25) Total Resource Benefits (TRB) savings for measures installed during the current reporting year. TRB includes gross electric benefits, fossil fuel savings, and water savings. TRB is stated in 2010 dollars throughout the report. Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, the same savings might be counted and reported by more than one organization. As a result, the total statewide savings might be less than the sum of all the organizations' reported savings.

(26) Estimated impact of measures at time of winter system peak, at generation, net of adjustment factors.

(27) Estimated impact of measures at time of summer system peak, at generation, net of adjustment factors.

(28) Annualized MWh savings per participant, net at generation: (23) ÷ (6).

(29) Average lifetime, in years, of measures weighted by savings: (24) ÷ (23).

(30) Incentives that have not yet been paid to a customer but where there is a signed contract as of December 31, 2010, for projects that will be completed after December 31, 2010.

(31) Adjusted annualized MWh savings at generation and net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period. These data include savings for measures that have not yet expired during the reporting period and exclude savings for measures that have reached the end of their specified lifetime.

(32) Adjusted impact of measures at time of winter system peak, at generation, net of adjustment factors. These data include savings for measures that have not yet expired during the reporting period and exclude savings for measures that have reached the end of their specified lifetime.

(33) Adjusted impact of measures at time of summer system peak, at generation, net of adjustment factors. These data include savings for measures that have not yet expired during the reporting period and exclude savings for measures that have reached the end of their specified lifetime.

**Items 34-43 reflect installed measures for the current reporting period.**

(34) Number of participants with installed measures for the “End Use, Utility and County Breakdown.” Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, the same participants may be counted and reported by more than one organization. As a result, total statewide participation might be less than the sum of all the organizations’ reported participants.

(35) Annualized MWh savings at generation, net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period. This is the same number as that reported on line (23).

(36) Annualized MWh savings, gross at the customer meter.

(37) Lifetime estimated MWh savings for measures installed during the current reporting period, at generation and net of all approved adjustment factors. This is the same number as that reported on line (24).

(38) Estimated impact of measures at time of winter system peak, at generation, net of adjustment factors. This is the same number as that reported on line (26).

(39) Estimated impact of measures at time of summer system peak, at generation, net of adjustment factors. This is the same number as that reported on line (27).

(40) MMBtu estimated to be saved (positive) or used (negative) for alternative fuels as a result of measures installed in the end use.

(41) Water saved (positive) or used (negative) as a result of measures installed in the end use.

(42) Incentives paid by Efficiency Vermont to participants for measures installed during the current reporting period. This is the same number as that reported on line (13).

(43) Costs incurred by participants and related to Efficiency Vermont or utility activities. This is the same number as that reported on line (20).

### **6.1.3 TABLE END NOTE**

#### **2.1.8 Electric Services & Initiatives - Total Resource Benefits**

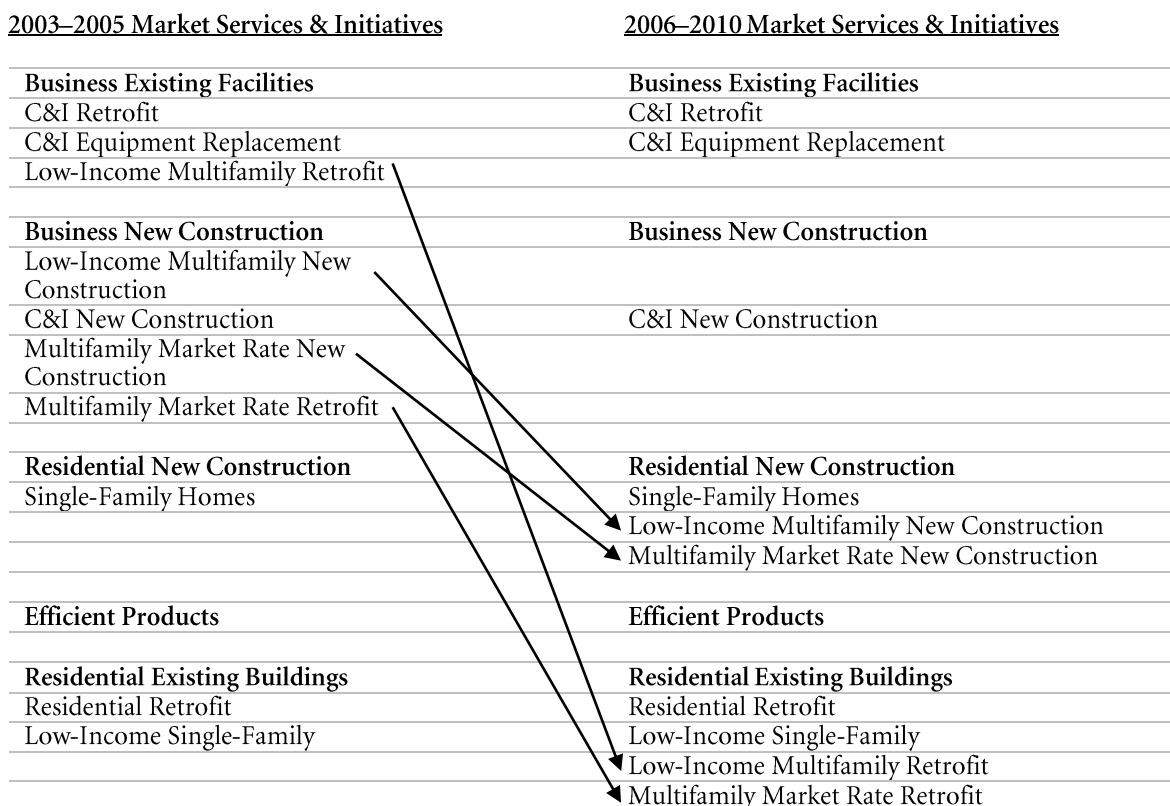
Net lifetime water savings is the net annual measure water savings multiplied by measure lifetime. Net lifetime fossil fuel savings is the net annual measure fossil fuel savings multiplied by the measure lifetime.



## 6.1.4 MULTIFAMILY REPORTING CHANGES

Throughout this report, all multifamily projects are reported in the “Business Energy Services” section years 2003–2005 and in the “Residential Energy Services” section for all other years.

Following is a diagram of the 2003–2005 Market Services and Initiatives and the 2006–2010 Market Services and Initiatives and the re-mapping of multifamily projects and savings under the new markets.





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