Board Briefing
True Up 2007: Tracking Estimate Corrections and True Up of 2002-2006 Savings and Generation

August 8, 2007

Introduction

This report presents the 2007 adjustments to reports of Energy Trust-funded energy savings and renewable energy generation for the calendar years 2002-2006. The True Up analysis, which occurs annually, reports the best available current energy savings and generation figures for Energy Trust-funded programs.

This report summarizes **what we know as of *January 31, 2007 about 2002-6 savings.*** We are still evaluating 2002 through 2006 savings for some programs, and so we expect to have further refinements to 2002-2006 next year.[1]

Summary

The 2007 True-Up resulted in a 1.5% increase in electric savings, to 124 average megawatts, and 4% decrease in natural gas savings to 4.4 million annual therms. This resulted in modestly significant changes to the Building Efficiency, Home Energy Savings, Efficient New Homes and Efficient Home Products programs. Changes were less than in prior years for two reasons: first, Energy Trust already adjusted performance numbers in a prior true-up; and second, the first impact evaluations for some programs (Production Efficiency, Multifamily Home Energy Savings) will be completed in 2007, and so are not incorporated in this true-up.

Background

Working Savings/Generation are the estimates of savings that are practical for data entry by program personnel as they are approving individual projects. They are based on estimates of the typical savings or generation for prescriptive measures, and are based on site-specific engineering calculations for custom measures. Prior years' true-up adjustments may be incorporated into estimates of working savings and generation for prescriptive measures, but transmission and distribution line loss savings are not included. In addition, there are no adjustments for free riders (customers who would have installed the measures without the program) or spillover (customers who are influenced by the program but did not take the incentive). These issues are addressed in developing reportable savings.

[1] Savings for most programs are evaluated and finalized through 2004. However, the Energy Trust is still working to evaluate the multifamily retrofit program starting in 2003. This has awaited improved procedures to access and link utility bills with individual apartment units, one of the most difficult tasks in evaluation. Additionally, NEEA savings are subject to five year retrospective reviews, which are useful in looking at programs that attempt to change markets. Such a review is scheduled for 2007 and may look as far back as 2002.

Reportable Savings/Generation are the estimates of savings that will be used for public reporting of Energy Trust results. This includes transmission and delivery loss savings, market effects (free riders and spillover), true up adjustments (as described below), and any other corrections required to the original working values. These values are updated annually based on new information described through the "true-up" process.

The ***True up*** adjusts Working Savings/Generation estimates in different programs for different reasons. These fall into the following categories:

1. *Corrections*. Occasionally, through the Energy Trust's routine quality assurance processes, transaction errors are discovered in the database, which require corrections. Individual transaction errors (e.g. typos that affect savings) are usually corrected immediately, and generic transaction errors (e.g. wrong deemed savings value for a measure) are easiest to fix once per year during the True Up.

2. *New Data***.** Projections are updated based on improved measure simulations and new data on measure performance.

3. *Anticipated Evaluation Results***.** Experience shows that evaluated estimates of savings and generation are often lower than reportable estimates. Reportable estimates are often based on typical savings for prescriptive measures or "as installed" engineering analysis for custom measures. Impact evaluation uses energy use data and/or improved data on post-installation operation to improve on reportable estimates. However, impact evaluations cannot be completed until 8 months to 2 years after programs finish a year's activity, because of the need to utilize post-installation energy use data. Based on Board direction in the July, 2004 retreat, staff is attempting to anticipate these effects in reporting savings for programs where there is not yet an evaluation available. These adjustments are based on the results of evaluations for the same program in prior years, where available. For programs that have no prior evaluation, results for similar programs elsewhere are used.

4. *Evaluations***.** When finalized, evaluations provide the most reliable representation of realized savings, and can replace the refined projections based on #2 and #3. Evaluation results may change Energy Trust savings estimates for a single year or all prior years. It depends on what other evaluations have already been performed for prior years.

5. *Un-Served Utility*. This is a routine end-of year adjustment which is of modest impact. Some measures in Fast Track claim savings but documentation was not yet adequate to support the savings or could not be claimed by the Trust. This proved to be a problem especially for some savings which are in service utilities where Energy Trust activities are not funded. For example, this occurs when a measure saves gas and electricity, and the gas utility is an Energy Trust funder (e.g., Northwest Natural) and the electric utility is not an Energy Trust funder (e.g., Columbia PUD). The Energy Trust would only claim the electric savings in this case if Columbia PUD was not claiming the savings. In some cases this was simply a question of clarifying documentation in time for the True-up. The Energy Trust may claim these savings if the documentation is shown to be in order.

Results

Across the years 2002-2006 the 2007 True-Up resulted in a 1.5% increase in electric savings to 124 Average Megawatts, and 4% decrease in natural gas savings to 4.4 million annual therms. In 2007, the True-Up incorporated modestly significant changes to the following programs:

1. New Evaluation Results
    a. Building Efficiency Program
    b. Home Energy Savings
2. New Data
    a. Efficient New Homes
    b. Efficient Home Products
    c. Rounding Transmission and Distribution (T&D) line loss estimates
3. Corrections
    None resulted in significant changes.

Overall, changes were less than in prior years because the Energy Trust had performed evaluations for many programs by the prior true-up, and the first impact evaluations for some programs (Production Efficiency, Multifamily Home Energy Savings) will be completed in 2007 so did not yet impact this true-up.

To provide an example, for 2006 electric savings for all programs combined, there were net changes of 0.52% (decrease) due to corrections and un-served utilities, .25% (increase) due to new data, there were no revisions in anticipated evaluation factors, and 0.97% (increase) due to evaluations. Additionally, the rounding of the Transmission and Distribution line-loss estimates resulted in a .38% increase.

Table 2 summarizes the revisions for the years 2002 -2006 by sector. Tables 3-7 detail the revisions to each sector by year. Appendix B provides revisions by program and year. Discussion of changes follows immediately below.

Business Energy Solutions – Existing Buildings Evaluation. The previous evaluation of the 2003 program had resulted in a 71% evaluation factor[2] (i.e., 71% of working savings were claimed as reported savings) for electric efficiency. For 2004-2006 this evaluation factor had also been used as the anticipated evaluation factor for electric efficiency pending the completion of additional evaluations. In addition, because the gas sample in the 2003 and early 2004 evaluation was too small to use, the 71% evaluation factor from the electric program was also used as the evaluation factor for gas in 2003 and the anticipated evaluation factor for 2004-2006. In summary, prior to this true-up the evaluation factor for electric savings from the 2003 BE evaluation was used as the basis of all evaluation factors, gas and electric, for the BE program.

In 2006 the evaluation of electric and gas efficiency was completed for this program for the year 2004.[3] Based on the 2003 and 2004 BE evaluations the 2007 True Up applied new evaluation factors to gas and efficiency measures for the years 2004-2006. 2003 had already been evaluated so the new evaluation factors did not apply to this year. Because the 2003 BE evaluation also

[2] The evaluation factor consists of an engineering factor and market effects factor. The market effects factor is made up of free riders and spillover.
[3] These evaluations were based on site visits and site metering. An analysis of monthly consumption records is underway which may update these estimates.

covered part of 2004, the electric evaluation factor used for 2004 and the anticipated evaluation factor used for 2005 and 2006 are a savings weighted average of the results of both BE evaluations. Since there was no evaluation factor for gas from the 2003 BE evaluation, the evaluation factor for this part of the program came straight from the 2004 BE evaluation.

This resulted in a new evaluation factor for electric savings of 83%. This evaluation factor consists of a 95% engineering factor and an 86% market effects factor. The net result of the changes to the new evaluation factor was an increase in the electric savings attributed to the program during the years 2004-2006 of 17% or about 16 million kWh. For gas efficiency measures the evaluation factor was reduced from 71% to 67%. This 67% evaluation factor consists of a new engineering factor of 95% and market effects factor of 71% resulting is a net loss of 5.6% or about 61,000 therms to the BE program for the years 2004-2006. Table 1: 2007 BE Evaluation Factors details the components of the evaluation factor.

TABLE 1. 2007 BE EVALUATION FACTORS

2003 BE Evaluation

	Engineering	Free Riders	Spillover	Evaluation Factor	Total Savings
kWh	89%	80%		71%	8,749,240
Therms	N/A	N/A	N/A	71%	20,823

2004 BE Evaluation

	Engineering	Free Riders	Spillover	Evaluation Factor	Total Savings
kWh	99%	86%	101%	86%	32,025,675
Therms	95%	71%	100%	67%	58,539

BE Evaluation Factor used for 2007 True Up

	Engineering	Free Riders	Spillover	Evaluation Factor
kWh	97%	85%	101%	83%
Therms	95%	71%	100%	67%

Home Energy Solutions – Existing Homes Evaluation. This evaluation covered the single family portion of the Home Energy Solutions Program for 2003 and 2004. This evaluation resulted in various changes to the engineering estimates and market effects associated with various measures in the program. Appendix A details the effects this evaluation had on the engineering and market factor adjustments for each measure. This was the first evaluation completed for this program and impacted all years.

Note that the performance was particularly lower than expected for duct insulation; however, the evaluation was primarily designed to estimate overall savings, and did not provide a precise estimate for this measure due to its modest expected savings and limited sample size. In the next impact evaluation of this program we plan a separate analysis to clarify savings from this measure.

Efficient New Homes. Existing Builder Option Packages (BOPs), which are packages of efficiency measures that qualify for a program incentive, were modified to reflect new engineering savings estimates. These were a result of a regional survey that provided enhanced information on home characteristics and also on levels of duct leakage in nonparticipating homes. The survey provided a more accurate baseline of energy use in homes not in the

program which in turn changed the estimate program savings. As the new data were folded into savings simulations, other modeling enhancements were also employed. The net effect of these changes to the program was a decrease of 7,400 kWh or less then .01% of total program activity and a decrease of 12,000 therms or 3.7% of total program activity therms.

Efficient Home Products. The savings estimates for lighting measures in this program were revised based on new data from program operations, provided by Conservation Services Group (CSG). The information allows us to more accurately portray the reduction in wattage and the hours of operation of bulbs installed. This resulted in an additional 710,000 kWh of savings over the period 2004-2005.

Negative Therms. When incandescent bulbs are replaced by efficient compact fluorescent bulbs in homes, less heat is provided by the more efficient bulbs. This results in a modest decrease in energy use for air conditioning (because less heat from the bulbs must be removed), and a more significant (relative to savings) increase in use of energy for space heat. The Energy Trust had previously recorded this as a deduction from program savings, which was recorded in kWh for electrically heated homes and in therms for gas heated homes. An agreement was reached with the PUC that while the increased gas use is a real effect (it has been confirmed through metered studies) it is not a result of the Energy Trust's gas programs, and penalizing the gas programs for the impacts of an electric light bulb is inappropriate. As a consequence, the savings reports were revised to not include a deduction to gas savings from the CFLs. The increased gas use is still counted as an economic cost in the societal cost/benefit test for the electric programs. As a result of this decision the 170,000 therms over the period 2003-2006 are no longer counted against The Trust's goals.

Northwest Energy Efficiency Alliance (NEEA). Since 2005, NEEA made several enhancements to improve the consistency and reliability of their tracking systems, completed several evaluations, and began a long-term monitoring process that periodically reports on specific programs. These enhancements have significantly improved both the historical assessment of energy savings and the projection of expected savings. NEEA is making greater efforts to accurately measure net market effects, including consideration of baseline activity (energy savings that would occur in the absence of NEEA programs) and the impacts of utility incentive programs. Based on the better data from NEEA, significant changes were made to NEEA savings estimates in the 2006 true-up. Many of the changes had counteractive effects.

For 2006, we made changes to our methods to estimate current and future year impacts to align better with NEEA's projection of program impacts. The impacts reported for 2006 reflect this improved methodology, but precede NEEA's final reporting on their annual savings which happens after the true-up process is completed. Therefore, reconciliation of NEEA final savings will occur in the following year (e.g., final estimates of 2005 savings are included in 2007 Energy Trust true-up, 2006 savings will be reconciled in the 2008 true-up).

Rounding of Transmission and Distribution Line Loss Savings Estimates.
This adjustment enhances the consistency of our reporting efforts. Energy Trust electric savings and, where appropriate, renewable generation reports include reductions in utility line and transformer losses due to less power delivered to a site. All programs have been updated to reflect adjusted savings due to a rounding of the transformer and line losses. Previously residential, commercial, and industrial customers used factors of 1.09769, 1.09529, and 1.5820, respectively. Recognizing that the savings estimates of The Trust are not accurate to this number of decimal places these factors have been rounded to 1.1 for residential and commercial

customers and 1.06 for industrial customers. This is consistent with our general policy of estimating and reporting savings only to two digits. This resulted in a gain in reporting kWh savings of just over 4,100,000 kWh from 2002 to 2006.

In the following tables, the difference between "old reportable" and "new reportable" is the updates provided in the 2007 true-up from prior reportable estimates. In the following tables, Annual kWh and Annual Therms indicate that the measure saves or generates one kWh or therm for each year of its life. An Average Megawatt means that loads are reduced by an average of one Megawatt during each year of the measure's life. In the summary table, zero change does not mean there were no corrections, only that the corrections may not be significant enough to show due to rounding.

TABLE 2. SUMMARY FOR 2002 - 2006

	Old Reportable	New Reportable	% Change
	Electric- Average Megawatts		
Electric Efficiency	**122**	**124**	**2.1%**
Residential	44	44	0.0%
Commercial	31	33	6.3%
Industrial	47	47	0.2%
Renewables	**17**	**17**	**0.0%**
	Gas- Million Annual Therms		
Gas Efficiency	***4.6***	***4.4***	***-4.0%***
Residential	2.7	2.6	-4.3%
Commercial	1.9	1.8	-3.7%

TABLE 3. 2006 SUMMARY

	Old Reportable	New Reportable	% Change	Action Plan Conservative Goal	% of Goal Achieved
	Electric- Average Megawatts				
Electric Efficiency	**25**	**25**	**1.3%**	**16**	**158%**
Residential	10	10	-1.2%	6.4	157%
Commercial	6.1	6.6	7.3%	3.7	178%
Industrial	8.9	8.9	0.2%	6.1	147%
Renewables	**2.0**	**2.0**	**0.2%**	**33**	**6%**
	Gas- Million Annual Therms				
Gas Efficiency	**2.3**	**2.3**	**-1.7%**	**2.6**	**90%**
Residential	1.0	1.0	0.8%	1.1	92%
Commercial	1.3	1.3	-3.7%	1.4	88%

Notes: Renewable action plan goal was for installations and commitments; true up reported numbers are installs only. So the comparison to goals is not accurate. We are presenting renewables primarily to show the true up adjustment.

TABLE 4. 2005 SUMMARY					
	Old Reportable	New Reportable	% Change	Action Plan Conservative Goal	% of Goal Achieved
	Electric- Average Megawatts				
Electric Efficiency	**39**	**40**	**2.2%**	**32**	**125%**
Residential	12	12	-0.3%	5.6	208%
Commercial	7.0	7.9	12%	6.0	131%
Industrial	20	21	0.2%	20	102%
Renewables	**0.46**	**0.46**	**0.2%**	**27**	**2%**
	Gas- Million Annual Therms				
Gas Efficiency	***1.4***	***1.3***	***-6.7%***	***1.3***	***100%***
Residential	0.9	0.9	-7.6%	0.9	95%
Commercial	0.5	0.5	-3.7%	0.4	113%

Notes: Renewable action plan goal was for installations and commitments; true up reported numbers are installs only.

Best Case Targets in action plan were 37 aMW and 1.8 million therms.

TABLE 5. 2004 SUMMARY					
	Old Reportable	New Reportable	% Change	Action Plan Projection	% of Goal Achieved
	Electric- Average Megawatts				
Electric Efficiency	**26**	**27**	**2.5%**	**30**	**90%**
Residential	9.6	9.7	0.6%	4	242%
Commercial	6.6	7.2	9.0%	6.4	112%
Industrial	10	10	0.2%	19	53%
Renewables	**0.1**	**0.1**	**0.3%**	**22**	**0.40%**
	Gas- Million Annual Therms				
Gas Efficiency	**0.7**	**0.7**	**-7.8%**	**2.3**	**29%**
Residential	0.6	0.6	-7.7%	0.9	65%
Commercial	0.1	0.1	-3.5%	1.4	5%

Notes: Renewable action plan goal was for installations and commitments; true up reported numbers are installs only.

TABLE 6. 2003 SUMMARY					
	Old Reportable	**New Reportable**	**% Change**	Action Plan Projection	% of Goal Achieved
	Electric- Average Megawatts				
Electric Efficiency	**16.0**	**16.1**	**0.7%**	**33**	**49%**
Residential	6.7	6.7	1.1%	7.5	90%
Commercial	5.7	5.8	0.4%	13	44%
Industrial	3.6	3.6	0.2%	13	27%
Renewables	**14**	**14**	**0.00%**	**18**	**79%**
	Gas- Million Annual Therms				
Gas Efficiency	**0.1**	**0.2**	**2.7%**	**None**	
Residential	0.1	0.1	2.8%	None	
Commercial	0.002	0.002	0%	None	

Notes: Action plan projection was for a two year period running from October 2002 through October 2004. Half of the two-year projected savings was taken as the "projection" for this comparison.

Notes: Renewable action plan goal was for installations and commitments; true up reported numbers are installs only.

TABLE 7. 2002 SUMMARY				
	Old Reportable	**New Reportable**	**% Change**	Action Plan Projection
	Electric- Average Megawatts			
Electric Efficiency	**15**	**15**	**0.3%**	**None**
Residential	5.7	5.7	0.3%	None
Commercial	5.9	5.9	0.4%	None
Industrial	3.4	3.4	0.2%	None
Renewables	**0.002**	**0.002**	**0.00%**	**None**

Appendix A:

Effect of HES Evaluation Electric Measures

	Working Savings Adjustments			Reportable Savings Adjustments		
	Electric			Electric		
Project	Old Working Electric Savings (kWh)	Engineering Adjustment from Evaluation	New Working Electric Savings (kWh)	Market Effects (free riders & spillover)	Evaluation Net Savings FINAL (kWh)	Interactive Effects (kWh)
Ceiling/Attic insulation	1019	84%	858	78%	669	
Duct insulation	663	38%	255	78%	199	
Floor insulation	1733	73%	1,268	78%	989	
Wall insulation	1201	89%	1,075	78%	838	
Windows	687	82%	564	78%	440	
Duct Sealing	1127	68%	766	87%	667	
Air Sealing	1557	68%	1,059	87%	921	
MH Duct and Air Sealing	500	152%	760	87%	661	
Heat Pump, Replacement	6333	52%	3,300	70%	2,310	
Heat Pump, Upgrade	1088	124%	1,350	70%	945	
Water Heater	100	68%	68	87%	59	
Lighting	46	158%	73	105%	77	-31
Lighting	37	197%	73	105%	77	-31
HER Faucet Aerator	130	68%	88	87%	77	
HER Showerhead	287	68%	195	87%	170	

Effect of HES Evaluation on Gas Measures							
	Working Savings Adjustments			Reportable Savings Adjustments		
	Gas			Gas		
Project	Old Working Gas Savings (therms)	Engineering Adjustment from Evaluation	New Working Gas Savings (therms)	Market Effects (free riders & spillover)	Evaluation Net Savings FINAL (therms)	Interactive Effects (therms)
Ceiling/Attic insulation	69.00	74%	51.00	80%	40.80	
Duct insulation	29.60	42%	12.30	80%	9.84	
Floor insulation	95.00	66%	63.00	80%	50.40	
Wall insulation	79.00	83%	65.40	80%	52.32	
Windows	39.00	113%	44.11	80%	35.29	
SF Duct Sealing	31.00	69%	21.39	72%	15.40	
SF Air Sealing	37.00	69%	25.53	72%	18.38	
MH Duct and Air Sealing	81.00	51%	41.00	72%	29.52	
Direct Vent Gas Heater	68.90	69%	47.54	72%	34.23	
Gas Furnace	64.40	110%	70.56	100%	70.56	
Water Heater	23.40	69%	16.15	72%	11.63	
High Efficiency Gas Boiler	64.40	69%	44.44	72%	31.99	
HER Faucet Aerator	5.00	69%	3.45	72%	2.48	
HER Showerhead	14.00	69%	9.66	72%	6.96	

Appendix B:

Table 7: 2007 Program True-Up Summary

2002	Unadjusted Annual Savings (kWh)	Adjusted Annual Savings (kWh)	Change (kWh)	Change (%)	Unadjusted Annual Savings (Therm)	Adjusted Annual Savings (Therm)	Change (Therm)	Change (%)
Residential								
Mobile Home Duct Sealing Pilot Program	560,000	560,000	1,000	0.2%	-	-	-	0.0%
Utility Transition - Residential	7,900,000	7,900,000	17,000	0.2%	-	-	-	0.0%
NEEA - Residential Market Transformation	42,000,000	42,000,000	87,000	0.2%	-	-	-	0.0%
Subtotal	**50,000,000**	**50,000,000**	**100,000**	**0.2%**	**-**	**-**	**-**	**0.0%**
Commercial								
Green LED Traffic Signal Program Traffic Lights	1,600,000	1,600,000	7,000	0.4%	-	-	-	0.0%
NEEA - C&I Market Transformation	6,600,000	6,700,000	29,000	0.4%	-	-	-	0.0%
Utility Transition - Commercial Existing	39,000,000	39,000,000	170,000	0.4%	-	-	-	0.0%
Utility Transition - Commercial New	4,000,000	4,000,000	17,000	0.4%	-	-	-	0.0%
Restaurant Pilot Program	33,000	33,000	100	0.4%	-	-	-	0.0%
Subtotal	**51,000,000**	**52,000,000**	**220,000**	**0.4%**	**-**	**-**	**-**	**0.0%**
Industrial								
NEEA - Industrial Process Market Transformation	4,300,000	4,300,000	7,300	0.2%	-	-	-	0.0%
Utility Transition - Industrial	26,000,000	26,000,000	44,000	0.2%	-	-	-	0.0%
Subtotal	**30,000,000**	**30,000,000**	**51,000**	**0.2%**	**-**	**-**	**-**	**0.0%**
Total Efficiency (annual kWh/therms)	**131,000,000**	**132,000,000**	**380,000**	**0.3%**	**-**	**-**	**-**	**-**
Total Efficiency (AMW)		**15**						
Renewable								
Open Solicitation	22,000	22,000	-	0%	-	-	-	0.0%
Subtotal	**22,000**	**22,000**	**-**	**0%**	**-**	**-**	**-**	**0.0%**
2002 Total	**131,000,000**	**132,000,000**	**380,000**	**0.3%**	**-**	**-**	**-**	**0.0%**

2003	Unadjusted Annual Savings (kWh)	Adjusted Annual Savings (kWh)	Change (kWh)	Change (%)	Unadjusted Annual Savings (Therm)	Adjusted Annual Savings (Therm)	Change (Therm)	Change (%)
Residential								
Double Your Savings	1,200,000	1,200,000	2,000	0.2%	14,000	14,000	-	0.0%
Home Energy Savings	3,500,000	4,100,000	550,000	15.8%	130,000	130,000	4,000	3.0%
Existing Multifamily	2,600,000	2,600,000	5,400	0.2%	-	-	-	0.0%
Mobile Home Duct Sealing Pilot Program	20,000	20,000	40	0.2%	-	-	-	0.0%
NEEA - Residential Market Transformation	49,000,000	49,000,000	100,000	0.2%	-	-	-	0.0%
Utility Transition - Residential	2,100,000	2,100,000	4,400	0.2%	-	-	-	0.0%
Subtotal	**58,000,000**	**59,000,000**	**670,000**	**1.1%**	**140,000**	**150,000**	**4,000**	**2.7%**
Commercial								
Building Efficiency	9,200,000	9,200,000	39,000	0.4%	2,400	2,400	-	0%
Building Tune-Up and Operations	-	-	-	0.0%	-	-	-	0%
Green LED Traffic Signal Program Traffic Lights	75,000	75,000	320	0.4%	-	-	-	0%
LED Traffic Signal Program	930,000	930,000	4,000	0.4%	-	-	-	0%
NEEA - C&I Market Transformation	9,300,000	9,300,000	40,000	0.4%	-	-	-	0%
Restaurant Pilot Program	260,000	260,000	1,100	0.4%	-	-	-	0%
Small Scale Energy Loan Program	240,000	240,000	1,000	0.4%	-	-	-	0%
Utility Transition - Commercial Existing	24,000,000	24,000,000	100,000	0.4%	-	-	-	0%
Utility Transition - Commercial New	6,100,000	6,100,000	26,000	0.4%	-	-	-	0%
Subtotal	**50,000,000**	**50,000,000**	**220,000**	**0.4%**	**2,400**	**2,400**	**-**	**0%**
Industrial								
NEEA - Industrial Process Market Transformation	820,000	820,000	1,400	0.2%	-	-	-	0%
Production Efficiency	400,000	400,000	700	0.2%	-	-	-	0%
Utility Transition - Industrial	30,000,000	30,000,000	51,000	0.2%	-	-	-	0%
Subtotal	**31,000,000**	**31,000,000**	**53,000**	**0.2%**	**-**	**-**	**-**	**0%**
Total Efficiency (annual kWh/therms)	**140,000,000**	**141,000,000**	**940,000**	**0.7%**	**150,000**	**150,000**	**4,000**	**0.0%**
Total Efficiency (AMW)		**16**						
Renewable								
Open Solicitation	120,000	120,000	-	0.0%	-	-	-	0%
Utility Scale	125,000,000	125,000,000	-	0.0%	-	-	-	0%
Solar Electric (Photovoltaic)	250,000	250,000	1,100	0.4%			-	0%
Subtotal	**130,000,000**	**130,000,000**	**1,100**	**0.0%**	**-**	**-**	**-**	**0%**
2003 Total	**265,000,000**	**266,000,000**	**940,000**	**0.4%**	**150,000**	**150,000**	**4,000**	**2.7%**

2004	Unadjusted Annual Savings (kWh)	Adjusted Annual Savings (kWh)	Change (kWh)	Change (%)	Unadjusted Annual Savings (Therm)	Adjusted Annual Savings (Therm)	Change (Therm)	Change (%)
Residential								
Efficient Home Products	3,000,000	3,000,000	7,700	0.3%	28,000	28,000	2	0.0%
Efficient New Homes	6,400	5,400	(1,000)	-15.9%	2,200	2,200	40	1.8%
Home Energy Savings	4,500,000	4,600,000	190,000	4.2%	580,000	520,000	(58,000)	-9.9%
Multifamily Home Energy Savings	8,600,000	8,800,000	130,000	1.5%	18,000	23,000	4,800	26.2%
NEEA - Residential Market Transformation	68,000,000	68,000,000	140,000	0.4%	-	-	-	0.0%
State Home Oil Weatherization Program	19,000	19,000	50	0.2%	-	-	-	0.0%
Solar Water Heating - Residential	53,000	53,000	110	0.2%	5,200	5,200	-	0.0%
Utility Transition - Residential	330,000	330,000	690	0.2%	-	-	-	0.0%
Subtotal	**84,000,000**	**85,000,000**	**460,000**	**0.6%**	**630,000**	**580,000**	**(53,000)**	**-8.3%**
Commercial								
Building Efficiency	29,000,000	34,000,000	5,100,000	17.4%	49,000	47,000	(2,800)	-5.6%
Building Tune-Up and Operations	1,100,000	1,100,000	4,900	0.4%	-	-	-	0.0%
LED Traffic Signal Program	2,900,000	2,900,000	13,000	0.4%	-	-	-	0.0%
New Building Efficiency	520,000	520,000	2,200	0.4%	22,000	22,000	0	0.0%
NEEA - C&I Market Transformation	10,000,000	10,000,000	43,000	0.4%	-	-	-	0.0%
Solar Water Heating - Building Efficiency	20,000	20,000	80	0.4%	5,800	5,800	-	0.0%
Utility Transition - Commercial Existing	12,000,000	12,000,000	50,000	0.4%	-	-	-	0.0%
Utility Transition - Commercial New	2,400,000	2,400,000	10,000	0.4%	-	-	-	0.0%
Subtotal	**58,000,000**	**63,000,000**	**5,200,000**	**9.0%**	**78,000**	**75,000**	**(3,000)**	**-3.6%**
Industrial								
NEEA - Industrial Process Market Transformation	720,000	720,000	1,200	0.2%	-	-	-	0.0%
Production Efficiency	85,000,000	86,000,000	150,000	0.2%	-	-	-	0.0%
Utility Transition - Industrial	2,400,000	2,400,000	4,000	0.2%	-	-	-	0.0%
Subtotal	**89,000,000**	**89,000,000**	**150,000**	**0.2%**	**-**	**-**	**-**	**0.0%**
Total Efficiency (annual kWh/therms)	**231,000,000**	**236,000,000**	**5,800,000**	**2.5%**	**710,000**	**660,000**		**-7.8%**
Total Efficiency (AMW)		**27**						
Renewable								
Open Solicitation	270,000	270,000	-	0.0%	-	-	-	0.0%
Solar Electric (Photovoltaic)	520,000	520,000	2,200	0.4%	-	-	-	0.0%
Subtotal	**790,000**	**790,000**	**2,200**	**0.3%**	**-**	**-**	**-**	**0.0%**
2004 Total	**231,000,000**	**237,000,000**	**5,800,000**	**2.5%**	**710,000**	**660,000**	**(56,000)**	**-7.8%**

2005	Unadjusted Annual Savings (kWh)	Adjusted Annual Savings (kWh)	Change (kWh)	Change (%)	Unadjusted Annual Savings (Therm)	Adjusted Annual Savings (Therm)	Change (Therm)	Change (%)
Residential								
Efficient Home Products	15,000,000	16,000,000	190,000	1.2%	95,000	110,000	14,000	14.8%
Efficient New Manufactured Homes	36,000	36,000	80	0.2%	-	-	-	0.0%
Efficient New Homes	1,100,000	1,000,000	(41,000)	-3.9%	94,000	92,000	(1,500)	-1.6%
Home Energy Savings- single family & manufactured	4,300,000	3,500,000	(760,000)	-17.6%	670,000	570,000	(97,000)	-14.5%
Multifamily Home Energy Savings	14,000,000	14,000,000	210,000	1.5%	59,000	67,000	7,800	13.2%
NEEA - Residential Market Transformation	67,000,000	67,000,000	140,000	0.2%	-	-	-	0.0%
State Home Oil Weatherization Program	180,000	190,000	1,100	0.6%	-	-	-	0.0%
Solar Water Heating - Residential	150,000	150,000	270	0.2%	15,000	15,000	-	0.0%
Subtotal	**102,000,000**	**102,000,000**	**(260,000)**	**-0.3%**	**930,000**	**860,000**	**(76,000)**	**-8.2%**
Commercial								
Building Efficiency	43,000,000	50,000,000	7,000,000	17.9%	380,000	370,000	(17,000)	-4.5%
Building Tune-Up and Operations	720,000	720,000	-	0.4%	-	-	-	0.0%
LED Traffic Signal and Walk Light Program	2,800,000	2,800,000	12,000	0.4%	-	-	-	0.0%
New Building Efficiency	6,600,000	6,600,000	(6,300)	-0.1%	80,000	80,000	-	0.0%
NEEA - C&I Market Transformation	8,600,000	8,700,000	37,000	0.4%	-	-	-	0.0%
Solar Water Heating - BE	35,000	35,000	150	0.4%	3,900	3,900	-	0.0%
Subtotal	**61,000,000**	**69,000,000**	**7,700,000**	**12.5%**	**470,000**	**450,000**	**(17,000)**	**-3.7%**
Industrial								
Irrigation Initiative	-	-	-	0.0%	-	-	-	0.0%
NEEA - Industrial Process Market Transformation	260,000	260,000	400	0.2%	-	-	-	0.0%
Production Efficiency	179,000,000	180,000,000	300,000	0.2%	-	-	-	0.0%
Subtotal	**180,000,000**	**180,000,000**	**310,000**	**0.2%**	**-**	**-**	**-**	**0.0%**
Total Efficiency (annual kWh/therms)	**343,000,000**	**351,000,000**	**7,700,000**	**2.2%**	**1,400,000**	**1,300,000**	**(94,000)**	**-6.7%**
Total Efficiency (AMW)		**40**						
Renewable								
Biopower	3,600,000	3,600,000	6,000	0.2%	-	-	-	0.0%
Open Solicitation	13,000	13,000	-	0.0%	-	-	-	0.0%
Solar Electric (Photovoltaic)	480,000	480,000	1,900	0.4%	-	-	-	0.0%
Small Wind	-	-	-	0.0%	-	-	-	0.0%
Subtotal	**4,000,000**	**4,100,000**	**7,900**	**0.2%**	**-**	**-**	**-**	**0.0%**
2005 Total	**347,000,000**	**355,000,000**	**7,700,000**	**2.2%**	**1,400,000**	**1,300,000**	**(94,000)**	**-6.7%**

2006	Unadjusted Annual Savings (kWh)	Adjusted Annual Savings (kWh)	Change (kWh)	Change (%)	Unadjusted Annual Savings (Therm)	Adjusted Annual Savings (Therm)	Change (Therm)	Change (%)
Residential								
Products	23,000,000	24,000,000	670,000	2.9%	49,000	150,000	100,000	210.6%
New Manufactured Homes	1,200,000	1,200,000	(1,800)	-0.2%	3,300	3,300	8	0.2%
New Homes	3,100,000	3,200,000	56,000	1.8%	240,000	230,000	(11,000)	-4.7%
Existing Single Family	7,600,000	5,600,000	(2,000,000)	-26.6%	640,000	560,000	(80,000)	-12.5%
Home Performance with Energy Star	8,000	7,500	(500)	-6.3%	3,200	2,600	(600)	-19.1%
Existing Multifamily	8,800,000	8,900,000	96,000	1.1%	54,000	51,000	(3,200)	-6.0%
NEEA Residential Market Transformation	44,000,000	45,000,000	94,000	0.2%	-	-	-	0.0%
SHOW	240,000	240,000	800	0.3%	-	-	-	0.0%
Existing Homes Solar WH	230,000	230,000	500	0.2%	26,000	26,000	-	0.0%
Solar Water Heating - Residential	-	30	30	0.0%				0.0%
Subtotal	**89,000,000**	**88,000,000**	**(1,100,000)**	**-1.2%**	**1,000,000**	**1,000,000**	**8,300**	**0.8%**
Commercial		10						
Existing Buildings	25,000,000	29,000,000	3,900,000	15.8%	660,000	620,000	(42,000)	-6.3%
Operations and Maintenance	1,600,000	1,600,000	7,000	0.4%	40,000	40,000	0	0.0%
New Buildings	17,000,000	17,000,000	(19,000)	-0.1%	610,000	600,000	(7,300)	-1.2%
NEEA Commercial Market Transformation	9,700,000	9,800,000	42,000	0.4%	-	-	0	0.0%
Existing Buildings Solar WH	-	-	-	0.0%	4,200	4,200	-1	0.0%
Solar Water Heating - Commercial	-	-	-	0.0%	-	-	-	0.0%
Utility Transition - Commercial Existing	-	-	-	0.0%	-	-	-	0.0%
Utility Transition - Commercial New	-	-	-	0.0%	-	-	-	0.0%
Subtotal	**54,000,000**	**58,000,000**	**3,900,000**	**7.3%**	**1,300,000**	**1,300,000**	**(49,000)**	**-3.7%**
Industrial		7						
Irrigation	54,000	54,000	91	0.2%	-	-	-	0.0%
NEEA Industrial Market Transformation	9,500,000	9,500,000	16,000	0.2%	-	-	-	0.0%
Production Efficiency	69,000,000	69,000,000	120,000	0.2%	-	-	-	0.0%
Utility Transition - Industrial Process	-	-	-	0.0%	-	-	-	0.0%
Subtotal	**78,000,000**	**78,000,000**	**130,000**	**0.2%**	**-**	**-**	**-**	**0.0%**
Total Efficiency (annual kWh/therms)	**220,000,000**	**223,000,000**	**3,000,000**	**1.4%**	**2,300,000**	**2,300,000**	**(41,000)**	**-1.7%**
Total Efficiency (AMW)		**25**						

Renewable								
Biopower	17,000,000	17,000,000	28,000	0.2%	-	-	-	0.0%
Open Solicitation	50,000	50,000	-	0.0%	-	-	-	0.0%
Solar Electric (Photovoltaic)	700,000	700,000	3,200	0.5%	-	-	-	0.0%
Wind	-	-	-	0.0%	-	-	-	0.0%
Subtotal	**17,000,000**	**17,000,000**	**32,000**	**0.2%**	**-**	**-**	**-**	**0.0%**
2006 Total	**238,000,000**	**241,000,000**	**3,000,000**	**1.3%**	**2,300,000**	**2,300,000**	**(41,000)**	**-1.7%**
2002-2006	**Unadjusted Annual Savings (kWh)**	**Adjusted Annual Savings (kWh)**	**Change (kWh)**	**Change (%)**	**Unadjusted Annual Savings (Therm)**	**Adjusted Annual Savings (Therm)**	**Change (Therm)**	**Change (%)**
	1,210,000,000	**1,230,000,000**	**18,000,000**	**1.5%**	**4,600,000**	**4,400,000**	**(190,000)**	**-4.1%**