

**Subject** State of Wisconsin, Public Service Commission of Wisconsin,  
Focus on Energy Evaluation

FY07 Metrics Performance—Residential Programs

**To** Oscar Bloch, Public Service Commission of Wisconsin

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Acknowledgement: Ralph Prah, Prah & Associates, contributed critical review and analysis

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## Introduction

This memorandum provides the residential evaluation team's contribution to the Fiscal Year 07 (FY07) Metrics Measurement process. The metrics goals, expressed within individual program metrics matrices, were a key aspect of Wisconsin Energy Conservation Corporation's (WECC) FY07 contract for Residential Program delivery.<sup>1</sup>

This memorandum addresses the program metrics that the residential evaluation team agreed to review as part of our FY08 Detailed Evaluation Plan.<sup>2</sup> We first summarize the information presented in the remainder of this memorandum through a single metrics achievement table. For each program, this summary table lists each metric that we measured and whether or not WECC met the metric. Following this summary, details are provided for each residential program (Residential Lighting Program, Home Performance with ENERGY STAR, Efficient Heating and Cooling, and Wisconsin ENERGY STAR Homes) and for each individual metric we measured within each program.

## Metrics Achievement Summary

Table 1 summarizes the results of WECC's efforts to meet their FY07 metrics goals. By program, the table lists each individual metric we measured and whether or not the goal was met. More detailed sections, by residential program area, follow this table.

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<sup>1</sup> Amendment 11 to the Cooperative Agreement between the State of Wisconsin, Department of Administration—Division of Energy, and Wisconsin Energy Conservation Corporation (Contract 81310, Amendment 11).

<sup>2</sup> State of Wisconsin, Public Service Commission of Wisconsin, Focus on Energy Evaluation, Contract Period One Detailed Evaluation Plans, Revised Final: August 6, 2007.



**Table 1. FY07 Metrics Achievement Summary—Residential Programs**

<b>Metric</b>	<b>Metric met? (Percent achieved)</b>
<b>Residential Lighting Program (RLP)</b>	
Increase the number of CFLs and other lighting products (fixtures, lamps) sold through special promotions with new retailer types (drug, grocery, lighting showroom, and mass merchant) by 5% from the total sales during FY06.	Yes (1,360%)
<b>Home Performance with ENERGY STAR (HPWES)</b>	
Retain 90% of consultants and qualified contractors that enter the program after training.	No (90%)
Increase the number of referrals received by consultants and qualified contractors from remodeling/home improvement companies to 300 in FY07.	Yes (129%)
<b>Efficient Heating and Cooling (EHC)</b>	
Increase in market share for 90+ furnaces with ECM by 2 percentage points as compared to the baseline set in FY06.	No (0%)
<b>Wisconsin ENERGY STAR Homes (WESH)</b>	
Increase new builder participation (as defined by a 10 percent increase in the number of certified homes associated with new builders annually).	Yes (470%)

## Residential Lighting Program (RLP)

We address the RLP metric we measured below. We include a brief description of the metric, an overview of our measurement approach, and results.

### *Description*

Increase the number of CFLs and other lighting products (fixtures, lamps) sold through special promotions with new retailer types (drug, grocery, lighting showroom, and mass merchant) by 5% from the total sales during FY06.

### *Measurement Approach*

The evaluation team measured this metric by analyzing the program database to compare the distribution of CFLs by retailer type in FY07 to the distribution in FY06.

### *Results*

Our analysis indicates that RLP has met the goal for this metric. In FY07, 84,567 CFLs were sold through drug, grocery, lighting showroom, and mass merchant retailer types, compared to 50,465 CFLs in FY06 (Table 2). This represents a 68 percent increase, which exceeds the

metric goal of a 5 percent increase.<sup>3</sup> A combination of expanded efforts in the grocery channel (a springtime CFL promotion with a major grocery chain) and increased sales among existing retailers led to the program exceeding its metric goal.

**Table 2. CFLs Sales by Drug, Grocery, Lighting Showroom, and Mass Merchant Retailer Types**

<b>Retailer Type</b>	<b>FY06</b>	<b>FY07</b>
Drug	13	79
Grocery	22,255	45,638
Lighting Showroom	13,041	19,254
Mass Merchant	15,156	19,596
<b>Total</b>	<b>50,465</b>	<b>84,567</b>

## Home Performance with ENERGY STAR® Program (HPWES)

We address the two HPWES metrics we measured below. For each metric, we include a brief description, an overview of our measurement approach, and results.

### *Description*

Retain 90% of consultants and qualified contractors that enter the program after training.

### *Measurement Approach*

The evaluation team measured this metric by analyzing the program database to assess trends in program activity for each consultant and qualified contractor.

### *Results*

Our analysis indicates that HPWES has not met this metric. During FY06, 52 consultants and qualified contractors provided services through the program. Ten of these 52 did not provide services through the program in FY07. This represents a retention rate of 81 percent, which is less than the metric goal of 90 percent. An investigation into the reasons why this group of ten consultants and qualified contractors did not continue to provide services in FY07 was not planned as part of this analysis. We did, however, look at the number of assessments and ratings performed by this group and found lower activity levels. This group comprised about 20 percent of consultants and qualified contractors who provided services during FY06 but only accounted for three percent of assessments and ratings performed during FY06.

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<sup>3</sup> We were not able to include fixtures in the analysis because, unfortunately, retailers were not coded in the RLP database in FY06. We were still, however, able to use the data available to confirm attainment of the metric goal with the inclusion of fixtures. In FY07, 8,785 of the 15,811 fixtures rewarded through RLP were sold in the targeted channels (drug, grocery, lighting showroom, and mass merchant). This yields 93,352 CFLs and fixtures rewarded during FY07 in the targeted channels (84,567 + 8,785). In FY06, a total of 25,041 fixtures were rewarded through RLP. The worst case scenario in terms of metrics attainment is that all of the fixtures rewarded in FY06 were sold in the targeted channels. This would yield 75,506 CFLs and fixtures rewarded during FY06 in the targeted channels (50,465 + 25,041). This worst case scenario would yield a 24% increase from FY06 to FY07, which still exceeds the metric goal.

*Description*

Increase the number of referrals received by consultants and qualified contractors from remodeling/home improvement companies to 300 in FY07.

*Measurement Approach*

The evaluation team measured this metric by analyzing the program database to assess trends in number of referrals received by consultants and qualified contractors from remodeling/home improvement companies.

*Results*

Our analysis indicates that HPWES has met this metric. During FY07, a total of 386 referrals were received from remodeling/home improvement companies (Table 4). This exceeds the metric goal of 300. The program exceeded its goal primarily due to increased activity among remodelers and insulation allies.

**Table 3. Number of Referrals Received from Remodeling/Home Improvement Companies**

Company Type	Period of Program Activity				
	FY03	FY04	FY05	FY06	FY07
Remodeler	15	69	75	76	223
Ally—HVAC	17	9	11	13	40
Ally—Insulation	1	6	27	43	104
Ally-Other	0	3	3	2	19
<b>Total</b>	<b>33</b>	<b>87</b>	<b>116</b>	<b>134</b>	<b>386</b>

**Efficient Heating and Cooling (EHC)**

We address the EHC metric we measured below. We include a brief description of the metric, an overview of our measurement approach, and results.

*Description*

Increase in market share for 90+ furnaces with ECM by 2 percentage points as compared to the baseline set in FY06.

*Measurement Approach*

The evaluation team measured this metric by analyzing trends in annual ECM furnace market share as reported by information in the Energy Center of Wisconsin’s (ECW) Furnace and AC Tracking (FACTS) reports. These reports provide market-based information on current and

historic sales trends of residential furnaces sold in Wisconsin by distributors who agree to provide data to ECW.<sup>4</sup>

### Results

Our analysis indicates that EHC has not met its goal for this metric. In FY07, ECM market share was 25.9 percent, compared to 26.2 percent in FY06 (Table 4). This represents a 0.3 percentage point decrease, which does not meet the metric goal of a 2 percentage point increase.<sup>5</sup> We do not have information available to reach a conclusion as to why ECM market share fell between FY06 and FY07.

**Table 4. ECM Furnace Market Share**

Period	ECM Furnaces	All Furnaces	Market Share
FY06	14,651	56,000	26.2%
FY07	13,119	50,588	25.9%

## Wisconsin ENERGY STAR<sup>®</sup> Homes Program (WESH)

We address the WESH metric we measured below. We include a brief description of the metric, an overview of our measurement approach, and results.

### Description

Increase new builder participation (as defined by a 10 percent increase in the number of certified homes associated with new builders annually).

### Measurement Approach

The evaluation team measured this metric by analyzing the program database to compare the number of WESH homes certified by new builders in FY06 and FY07. A builder is classified as a new builder in FY07 if the builder had certified less than three homes through the end of FY06. Similarly, a builder is classified as a new builder in FY06 if the builder had certified less than three homes through the end of FY05.<sup>6</sup>

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<sup>4</sup> An inherent disadvantage to FACTS is that not all distributors in Wisconsin provide data, resulting in coverage of only 50–60 percent of the Wisconsin market. For the purposes of measuring this metric, we assume that the market share of ECM furnaces sold by distributors outside of FACTS is the same as that sold by distributors involved with FACTS. We recommend a continuation of the efforts to improve the market coverage of FACTS.

<sup>5</sup> It is important to note that the metrics measurement process is not assessing attribution. It simply involves measuring the total change in ECM furnace market share. Separating the change in ECM furnace market share into its component pieces (i.e., program-induced versus naturally occurring) is addressed through the net-to-gross analysis (State of Wisconsin Department of Administration, Division of Energy. Focus on Energy Public Benefits Evaluation: FY05 Net-to-Gross Savings Adjustments for 12/13+ SEER Central Air Conditioners and ECM Furnaces. Memorandum issued by Tom Talerico and Rick Winch, Glacier Consulting Group. June 27, 2006).

<sup>6</sup> This is the classification rule that was agreed to and used when this metric was previously measured.

*Results*

Our analysis indicates that WESH has met this metric. In FY07, 147 new builders certified 328 homes, compared to 223 homes certified by 123 new builders in FY06. This represents a 47 percent increase, which exceeds the metric goal of a 10 percent increase. To shed light on why the program met its goal, we looked at the distribution of the number of homes certified among new builders during FY07 and compared this to the distribution of the number of homes certified among new builders during FY06 (Table 5).

**Table 5. Number of Homes Certified by New Builders in FY06 and FY07**

# of Homes Certified	New Builders			
	FY06		FY07	
	#	%	#	%
1	81	66%	96	65%
2	23	19%	28	19%
3	9	7%	6	4%
4-5	4	3%	7	5%
6-9	4	3%	5	3%
10-14	2	2%	3	2%
25-29	0	0%	2	1%
<b>Total</b>	<b>123</b>	<b>100%</b>	<b>147</b>	<b>100%</b>

During FY07, the program added two new builders who each certified 28 homes. During FY06, the highest volume new builder certified only 14 homes. This, along with the fact that the program also added builders in the 4-5, 6-9, and 10-14 volume ranges, contributed to the program meeting its goal.