

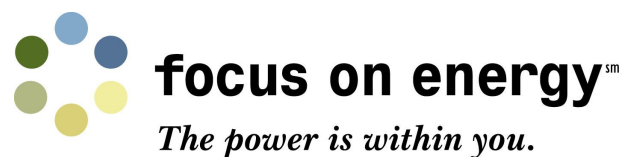
**State of Wisconsin  
Public Service Commission  
of Wisconsin**

Focus on Energy Evaluation  
*WPS Territory-wide Program Tracking Data  
Assessment*

July 29, 2010

Evaluation Contractor: Tetra Tech

Prepared by: Laura Schauer and Jeremy Kraft, Tetra Tech  
Ryan Barry, Bobbi Tannenbaum, and Ben Jones, KEMA





# State of Wisconsin Public Service Commission of Wisconsin

Focus on Energy Evaluation

*WPS Territory-wide Program Tracking Data  
Assessment (Final)*

July 29, 2010

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## 1. INTRODUCTION

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In 2010, Wisconsin Public Service Corporation (WPS) provided Focus on Energy (Focus) with additional funding for new and expanded program offerings in WPS's service territory. The Public Service Commission of Wisconsin (PSCW) directed the Focus evaluation team to design WPS Territory-wide evaluations to assess the extent to which the new program offerings (Territory-wide Offerings) can be expanded to the statewide program. As outlined in the WPS Territory-wide Evaluation Framework (Framework)<sup>1</sup>, the evaluation consists of three primary tracks:

- Track 1: Systematic analysis of participation and savings trends
- Track 2: Primary research with program participants
- Track 3: Process evaluation.

The evaluation team identified, in the detailed evaluation plan<sup>2</sup> (DEP), the need for a program tracking data assessment (subsequent to the development of the Framework). The purpose of the data assessment is to determine the evaluability of the WPS Territory-wide Offerings.

The purpose of this data assessment is to determine the feasibility of an evaluation of WPS's Territory-wide efforts, particularly in regards to the proposed Track 1 activities. The implementation of Track 1 evaluation activities, as well as the development of Track 2 and Track 3 activities, relies on the availability and completeness of data tracked by the programs. With this in mind, the evaluation team proposed completing data assessments for the calendar year 2010 (CY10) evaluation.

This report presents the initial results of the data assessment. The data assessment covers all programs for which tracking system data existed, as of May 2010.<sup>3</sup> The evaluation team will continue to assess the tracking system as programs are added to it and to update this report.<sup>4</sup> As such, this data assessment is to be viewed as an initial version of a working document.

In this section, the evaluation team provides a review of the research objectives, a summary and rationale for the different approaches used for residential and nonresidential programs, and the organization of the remainder of the report.

### 1.1 PRIMARY RESEARCH OBJECTIVES

The primary purpose of the global data assessment is to assess the current program tracking activities across all programs and how these data can be used to perform specific evaluation

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<sup>1</sup> Ralph Prah and the Focus Evaluation Team. *WPS Territory-wide Evaluation Framework – Final*. June 29, 2009.

<sup>2</sup> The Focus on Energy Evaluation Team. *WPS Territory-wide Detailed Evaluation Plan*. April 28, 2010.

<sup>3</sup> As directed within the *WPS Territory-wide Detailed Evaluation Plan*, page 1-3.

<sup>4</sup> *Ibid*, page 2-3.



tasks. The implementation of Track 1 evaluation activities, as well as the development of Track 2 and Track 3 activities, relies on the availability and completeness of data tracked by the programs. As noted in the DEP, program tracking and database management activities must be performed in a consistent and centralized manner across programs and program areas in order to ensure that the data are available to the evaluation team in a timely manner and in a reasonably consistent format. The evaluation team will use the results of this assessment to determine if and where to continue with Track 1 activities. This determination will be described in a memo no later than July 30.

The assessment also documents the database structure. This documentation indicates how and where the WPS-specific measures are being tracked, both within and external to, the existing Focus database systems.

## 1.2 SUMMARY OF APPROACH

The evaluation team began the data assessment with a review of the program tracking databases and all available documentation. This was followed up by in-person meetings at the Wisconsin Energy Conservation Corporation (WECC) with WECC program and IT staff. The evaluation team sought to learn how WPS Territory-wide Offerings are:

- Tracked within existing Focus statewide databases
- Tracked in WPS specific databases
- Linked across these databases.

We varied the data assessment approach across residential and nonresidential<sup>5</sup> programs, due to differences in data availability. The residential programs started earlier than nonresidential programs and had sufficient activity with which to develop specific evaluation tasks in the DEP. Therefore the data assessment for the residential programs assesses the ability of the tracked data to support planned evaluation activities.

Nonresidential program activity is still in the early stages. Of the nine nonresidential offerings, only the No-cost Small Industrial Assessment and the Renewable Nonprofit Match have reported gross energy savings. There was not sufficient program activity during the development of the DEP to determine the applicability of Track 1 to the nonresidential sector or specify Track 2 and 3 evaluation tasks.<sup>6</sup> Therefore, the data assessment for the nonresidential programs assesses where and how the data are being tracked.

The following sections summarize the different data assessment approaches used for residential and nonresidential offerings.

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<sup>5</sup> Nonresidential programs include all applicable Business Programs Offerings, Renewable Programs Offerings, and Cross-portfolio Initiatives.

<sup>6</sup> Applicability of Track 1 and specification of Track 2 and Track 3 activities were addressed in the DEP and discussed in Section 1.2.2 of this report.



### 1.2.1 Residential approach

The WPS Territory-wide residential offerings are well developed. In the DEP, we presented details mapping out planned evaluation efforts for the WPS Territory-wide residential programs. Because of this, we present a more comprehensive assessment of program data stores throughout this report, in regards to the residential program, including a brief synopsis of the program's description, a summary of planned evaluation activities, and the program's primary data tracking methods. Additionally, we present the various information needed to support evaluation activities, along with an indicator signifying if it is available at this time. This more specific program-level data assessment is detailed in Chapter 3.

### 1.2.2 Nonresidential approach

Most nonresidential offerings are in the early program stages. This data assessment focuses on the “where and how” of WPS Territory-wide program tracking. This includes the type of measure, WPS tracked savings, and participant information.<sup>7</sup> We did not specify evaluation activities in the DEP, but instead identified steps to identify appropriate evaluation activities as the programs progress. This data assessment is the first step. The evaluation team built decision points into the DEP for nonresidential programs in order to conserve resources for a time when programs are at an appropriate stage for evaluation. Below, we summarize the two decision points, which hinge upon the observations and recommendations made in this document.

- **Decision Point 1: July 30, 2010.** Following the submission of this assessment, the evaluation team will meet with the PSCW and WECC to decide whether to pursue the Track 1 activities for nonresidential offerings or to allocate these funds to additional Track 2 or Track 3 evaluation activities.
- **Decision Point 2: August 27, 2010.** Following the submission of a sector-level data assessment report the evaluation team will meet with the PSCW and WECC to discuss the most meaningful Track 2 and Track 3 activities to pursue, given limited evaluation funds and a broad portfolio of Business Programs/Cross-portfolio/Renewable Program Offerings.

## 1.3 REPORT ORGANIZATION

The remainder of this report documents the results of the global data assessment.

First, we provide an overview of the Focus statewide program tracking databases. These databases are used, in part, to track the WPS Territory-wide Offerings. Second, this report details program-specific tracking issues and, where information is available, the specific fields and any issues related to those fields, including any impacts on planned research activities.

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<sup>7</sup> The Focus on Energy Evaluation Team. *WPS Territory-wide Detailed Evaluation Plan*, page 3-3. April 28, 2010.



For each of the WPS Territory-wide Offerings, we provide a brief program description, the current status of the offering, and a high-level overview of the program's data tracking method. The offerings documented in this review are as follows:

- Residential Program Offerings
  - Heating Equipment Bonus
  - Home Performance with ENERGY STAR® Increased Incentives
  - Rental Housing Energy Evaluation Program
  - Air Sealing for Multifamily Buildings
  - Heating and Cooling Early Retirement
  - Bundled Measures for Existing Multifamily Buildings
- Business Programs Offerings
  - No-cost Small Industrial Assessments
  - Multi-project Bonus
  - Building Permit Lead Generation
- Renewable Program Offerings
  - Large Project Grants
  - Nonprofit Match
  - Commercial Solar Space-heating
- Cross-portfolio Initiatives
  - Farm Multi-project Bonus
  - Affinity Groups/Social Networking
  - Opportunity Grant<sup>8</sup>.

This report concludes with overarching findings and provides the PSCW and WECC with recommendations for improvement to data tracking and documentation.

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<sup>8</sup> This program is split between Residential and Business Programs offerings. Rather than include identical sections under both Residential Program Offerings and Business Programs Offerings, this program is included under Cross-portfolio Initiatives.



## 2. REVIEWED TRACKING SYSTEMS

WPS Territory-wide Offerings leverage the tracking databases used for Focus on Energy (Focus). The Focus databases track measures installed through the WPS Territory-wide program because many of the WPS offerings provide incentives for customers to install measures through Focus. Measures offered through the WPS programs that do not also receive Focus on Energy incentives are also tracked in the Focus databases, but have unique codes that identify them as WPS-only measures.

As shown in Table 2-1, the Focus program uses two primary database systems for tracking program activity: WISEerts and WECC program tracking.

- The WISEerts database (maintained by the PSCW) has tracked installed Business Program measures since January 1, 2008, and installed Business Program Renewable measures since January 1, 2010.<sup>9</sup>
- The WECC program tracking database tracks all residential measures (including renewable measures) and tracked all renewable measures prior to January 1, 2010.

**Table 2-1. Focus on Energy Program Tracking Databases**

Focus on Energy Programs	Database	
	WISEerts	WECC Database
Residential Programs		All years
Business Programs	After 1/1/2008	Prior to 1/1/2008
Residential Programs Renewables		All years
Business Programs Renewables	After 1/1/2010	Prior to 1/1/2010

A key objective of this data assessment is to determine whether key pieces of data required for the evaluation are being collected and to what extent.

In the next two subsections, we identify critical data and whether and how they are captured in either of the databases (i.e., the WECC or WISEerts databases). We present a general overview of the fields captured in the tracking systems that are necessary or useful for the evaluation, description of these fields, and adequacy of the data being captured.

### 2.1 WECC PROGRAM TRACKING DATABASE

Residential WPS Territory-wide Offerings are currently being tracked in the existing WECC tracking database. The key data are found in six tables:

- WECCMeasures. Key measure information
- WECCCustomers. Customer names and information
- WECCCustomersAddresses. Customer’s addresses and building information

<sup>9</sup> In January 2010, Focus integrated the Renewables program into the Business and Residential programs and began tracking renewable systems installed by business customers in WISEerts.





- WECCBusinesses. Trade ally (e.g., contractor) information
- WECCBusLookupContacts. Trade ally contacts
- ACESMeasures. Measure recommendations, their current status, and proposed savings amounts.

The WECCMeasureMainTable links customer with measure data through a series of ID fields including MainID, PKCustomerID, and CAddressID. This table is essential for creating complete customer records for evaluation purposes.

Table 2-2 lists the critical pieces of data across all programs that we identified as part of our global assessment. This list contains the table in which the data are found, the field name of that data, a brief description, and an example of the values found in that data.

**Table 2-2. Critical Data for All Programs**

Table	Field	Description	Examples
WECCMeasures	MeasureID	Unique identifier for each needed for linking to other tables	Unique ID
WECCMeasures, WECCMeasureMainTable	MainID	Unique identifier for each project	Unique ID
WECCMeasures	Qualified	Does the measure qualify for the program savings?	1, 0
WECCMeasures	RewardAmount	Incentive amount	200, 250
WECCMeasures	FuelTypeSaved	Fuel saved due to measure	Ele, Gas, Both
WECCMeasures	Quantity	Quantity of the measure installed	NA
WECCMeasures	KWSaved	kW saved	NA
WECCMeasures	KWHSaved	kWh saved	NA
WECCMeasures	ThermSaved	therm saved	NA
WECCMeasures, WECCBusinesses, WECCBusLookupContacts	BusinessID	Links measure table to contractor table	Unique ID
WECCMeasures	MeasureStatus	Is the measure installed, implemented, or completed?	Installed, Completed
WECCMeasures	Custom	Is it a custom measure?	1, 0
WECCMeasures	Deemed	Is it a deemed measure?	1, 0
WECCMeasures	DateEntered	Date the measure was entered into the database as qualified	6/23/2010
WECCBusinesses	Name	Business name	NA
WECCBusLookupContacts	Type	Type of contact	Consultant, Contractor
WECCBusLookupContacts	FirstName	Contact's first name	NA
WECCBusLookupContacts	LastName	Contact's last name	NA
WECCBusLookupContacts	CWorkPhone	Contact's work phone	NA
WECCCustomers	FirstName	Participant's first name	NA



Table	Field	Description	Examples
WECCCustomers	LastName	Participant's last name	NA
WECCCustomers, WECCMeasureMainTable	PKCustomerID	Unique customer ID	NA
WECCMeasureMainTable, WECCCustomersAddresses	CAddressID	Identifies location of installation	NA
WECCCustomersAddresses	StreetNumber, StreetDir, StreetName, Street Type, City, State, Zip	Address	NA
WECCCustomersAddresses	HPhoneNumber	Home phone number	NA
WECCCustomersAddresses	WPhoneNumber	Work phone number	NA
WECCCustomersAddresses	GCAccess, GCCity, GCCounty, GCLongitude, GCLatitude, EleServUtilityExpName, GasServUtilityExpName	Geocoded location data	NA
WECCCustomersAddresses	CountyFip5, CountyFip3, CensusBlock15, CensusTrack11, UrbanDistrict	Additional geocoded information	NA

Our review shows that most of these data are collected in a manner and format that is consistent with our evaluation plans. However, there are several inconsistencies, which are listed in Table 2-3, below.

**Table 2-3. Possible Data Fields with Inconsistencies**

Table	Field	Problem
WECCMeasures	Custom	All values are "0."
WECCMeasures	Deemed	All values are "0."
WECCMeasures	BusinessID	WPS bonus measures do not have BusinessID. We will link with a contractor based on MeasureType and MainID.

It may not be practical or necessary to correct all of these inconsistencies. For example, custom measures may be identified somewhere else in the WECCMeasures table. However, database documentation should clearly identify that these fields are inactive to prevent misuse during evaluation.

The program tracking database also contains numerous fields that are not pertinent to any of the evaluation tracks. These fields include internal codes used for look-ups, data entry, and accounting.



## 2.2 WISEERTS DATABASE

Focus plans to track WPS Business Programs Offerings (including Renewables) in the WISEerts database. The key tables in the database, for evaluation purposes, are:

- Measures. Detailed measure information
- SiteProject. Detailed project information
- SiteProjectContact. Contact information for each contact
- Customer. Detailed customer information
- MeasureLookup. A lookup table of measures and associated incentives in the database.

The Focus evaluation team primarily relies upon the fields described in Table 2-4 for its evaluations. Changes to the WISEerts database to accommodate WPS Territory-wide Offerings thus far have consisted of adding new tech codes to the database that allow tracking of WPS bonuses and measures unique to the WPS program.

**Table 2-4. WISEerts Field Descriptions**

Table	Field	Description	Examples
Measure	MeasureIdentity	Unique identifier for each measure	Unique ID
Customer, SiteProject	CustomerID	Unique identifier for each customer	Unique ID
SiteProject, Measure	SiteProjectID	Unique identifier for each project	Unique ID
Measure	PaymentApprovedDt	Date measure of "completion" (for reporting). Also used to determine measure status.	6/23/2010
Measure	RewardAmt	Incentive amount	200, 250
Measure	ImplementedUnitQty	Quantity of the measure installed	NA
Measure	ImplementedKWAMt	kW saved	NA
Measure	ImplementedKWHAMt	kWh saved	NA
Measure	ImplementedThermAMt	therms saved	NA
Measure, EnergyAdvisorLookup	EnergyAdvisorID	Links measure table to Energy Advisor table	NA
Measure, ProviderLookup	ProviderID	Links measure table to provider table	Unique ID
MeasureLookup	CustomPrescriptiveInd	Is it a custom incentive?	C, P, H
MeasureLookup	DeemedInd	Is it a deemed savings measure?	1,0
MeasureLookup	TechCode	Identifies a specific measure type and incentive level in the database	2.0506
MeasureLookup	MeasureDescTxt		
Measure	EnteredDt	Date the measure was entered into the database	6/23/2010
Measure	ChannelInd	Channel	Lighting, Rotary
SiteProject	SectorCd	Sector	A, C, I, S
SiteProject	NewConstructionInd	New Construction	Y, N

2. Reviewed Tracking Systems...



Table	Field	Description	Examples
Customer	CustomerNam	Customer name	NA
SiteProjectContact	ContactTypeID	Type of contact	Primary, Secondary
SiteProjectContact	ContactNam	Contact's first name	NA
SiteProjectContact	ContactWorkPhoneTxt	Contact's work phone	NA
SiteProjectContact	WorksForCompanyNam	Contact's Company name	NA
SiteProject	SrvcAddrTxt, SrvcAddrCityNam, SrvcAddrStCd, SrvcAddrZip	Identifies location of installation	NA
CustomerDoc	FileDescTxt	Uploaded files relating to Customer (.pdf, .xls, .doc)	NA
CustomerNote	NoteDescTxt	Notes relating to program/Customer communications	NA

For many of the WPS Business, Renewable, and Cross-portfolio offerings, WECC manually identifies the measures in WISeerts associated with a particular WPS program and records the MeasureIdentity, SiteProjectID, CustomerNam, TechCode, MeasureDescription, and savings fields in Excel spreadsheets with a standard format. They maintain one spreadsheet per program in a single excel file referred to as the "WPS TW Business Programs Data Tracker."



### **3. RESIDENTIAL PROGRAM OFFERINGS**

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The residential data assessment is presented in two sections. The cross-residential assessment details the key fields that are critical to the evaluation across all residential programs. This section is followed by the global residential data assessment that details, at a program level, how the tracking system identifies that program and its related measures, savings values, and incentives.

There are three programs that are either cancelled or not currently active: Air Sealing for Multi-family Buildings, Bundled Measures for Multi-family Buildings, and Heating & Cooling Early Retirement. These programs are included in this assessment as placeholders. Heating Equipment Bonus

#### **3.1 HEATING EQUIPMENT BONUS**

##### **3.1.1 Program description**

The Heating Equipment Bonus program is largely an enhancement of the Focus Efficient Heating & Cooling (EHC) program. The program provides bonus incentives for WPS participants for purchasing high efficiency furnaces with electronically commutated motors (ECMs) and high efficiency modulating gas boilers. The program leverages intensive outreach with local HVAC contractors and distributors who will be the main method for raising homeowner awareness of the program. This program is currently the only program on track to meet and potentially exceed its energy and demand impact targets.

##### **3.1.2 Program status**

The Heating Equipment Bonus program is currently the most active offering of the WPS Territory-wide residential programs. Marketing presentations and program staff trainings continue in the WPS territory. As of the May 2010 monthly report<sup>10</sup>, 206 boilers and 2,058 furnaces have been installed through the program since the start of the year with an estimated net savings of 132.95 kW, 577,873 kWh, and 88,538 therms. This program is on track to meet its savings and participation targets.

##### **3.1.3 Planned evaluation activities**

The stated objective of the program is to increase market share. Therefore, as part of the Track 1 evaluation, we will compare the market share of high efficiency ECM furnaces in the WPS territory to the market share of high efficiency ECM furnaces outside of WPS territory. This analysis will be conducted at the county level.

In addition to the Track 1 evaluation, we will conduct 10–20 in-depth interviews with participating HVAC contractors. The objective of these interviews will be to assess the effectiveness of the program contractor outreach, capture feedback about the program effectiveness, and understand the vendors' views on the dynamics of the marketplace.

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<sup>10</sup> Wisconsin Energy Conservation Corporation. *Focus on Energy, Wisconsin Public Service Programs, Monthly Performance Report, May 2010*. June 21, 2010.



We will also be conducting telephone surveys with a sample of participants in the WPS program and a sample of participants in the Focus program. The sample will be screened for those participants that also received SEEARP funds. This screening will either happen pre-interview using database records or during the call. By comparing results from both groups, we will be able to measure the WPS program effects.

**3.1.4 Data tracking method**

The Heating Equipment Bonus program is operated by WECC, whose staff collects all project and customer data. That data is then entered into the program-tracking database. For this program, no new fields were created specifically for the WPS initiative.

Currently, the tracking database identifies Heating Equipment Bonus measures as “WPS Heating Equipment Bonus” in MeasureType field of the WECCMeasures table. These records contain the incentive value (in RewardAmount) and are linked to the actual measure via MainID and MeasureDescription. As of this review, these measures are being identified in this manner clearly and consistently in the tracking database.

**3.1.5 Information needed to support evaluation activities**

In order to compare market share data between the WPS territory and the rest of the state, we will need access to the FACTS data tracked by Energy Center of Wisconsin (ECW). In addition, the participant database should track county of residence and the efficiency level of the rebated equipment. Table 3-1 lists the critical data needs for the Heating Equipment Bonus evaluation.

**Table 3-1. Heating Equipment Bonus Data Needs**

<b>Data Needed</b>	<b>Purpose of Data</b>	<b>Field Currently in WECC Database<sup>11</sup></b>	<b>Data is Sufficiently Captured within Database</b>
Heating equipment efficiency level	Does the unit installed have an ECM?	WECCMeasures.MeasureKind	Yes
County of residence	Was the unit installed in WPS territory?	WECCCustomersAddresses.GCCounty, .EleServUtilityExpName, .GasServUtilityExpName	Yes
Participant contact information	Participant interviews	WECCCustomers.FirstName, .LastName WECCCustomersAddresses.StreetNumber, .StreetName, .StreetType, .City, .State, .Zip, .HPhoneNumber	Yes

<sup>11</sup> Database fields are identified via the tablename and the fieldname in the following format: TableName.FieldName. Additional fields that exist within the same table are preceded with a “.”.



Data Needed	Purpose of Data	Field Currently in WECC Database <sup>11</sup>	Data is Sufficiently Captured within Database
Contractor contact information	Market effects interviews	WECCBusinesses.Name WECCBusLookupContacts.FirstName, .LastName, .CWorkPhone	Yes <sup>12</sup>

### 3.2 HOME PERFORMANCE WITH ENERGY STAR INCREASED INCENTIVES

#### 3.2.1 Program description

The Home Performance with ENERGY STAR program (HPWES) works with a network of independent consultants who help customers increase energy efficiency, comfort, safety, and durability of their homes. The consultant first completes a comprehensive evaluation of a home’s insulation, air leakage, mechanical equipment, moisture and ventilation, combustion safety, and carbon monoxide. HPWES provides cash rewards to the homeowner and the consultant to encourage the homeowners to have the evaluation and to install recommended measures. In the territory-wide program, both the level of outreach and the reward amounts are increased including an additional cash-back reward of \$250 and reduced interest-rate financing. However, to be eligible for the increased rewards, customers must complete three recommended insulation, air sealing, and/or combustion safety measures within six months of the initial assessment.

#### 3.2.2 Program status

In 2010, 29 homeowners have applied for HPWES Increased Incentives. Outreach to trade allies continues in the WPS territory. In the first six months, the program has achieved an estimated net savings of 6.97 kW, 14,149 kWh, and 12,404 therms, but is not on track to meet its savings targets.

#### 3.2.3 Planned evaluation activities

As part of our Track 1 analysis, we plan to compare several metrics between the WPS and Focus territories to assess what effect, if any, the increased incentives and outreach are having on program participation rates and per project savings. These comparisons include:

- The percentage of eligible homes that receive an HPWES energy audit
- The average length of time between HPWES audit and measure installation
- The percentage of participants who receive an HPWES audit that install at least one recommended measure
- The average number of HPWES measures installed per participating home
- Percentage of recommended measures that are installed

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<sup>12</sup> A small percentage of businesses were missing phone numbers.



- The ratio of energy savings of installed measures to energy savings of recommended measures
- The average HPWES energy savings per participating home
- The average HPWES energy savings per eligible home<sup>13</sup>.

In addition, we intend to conduct interviews with a sample of WPS and Focus participants regarding their participation in the programs and the effect the program design had on their decisions to conduct the evaluation and install the recommended measures. The sample of Focus participants will act as a comparison group for the WPS participants.

We will also conduct in-depth telephone interviews with participating consultants and contractors. These interviews will assess what effect the enhanced program design has had on their business, including level of activity and marketing changes.

#### 3.2.4 Data tracking method

The HPWES program is operated by WECC using subcontracted consultants that implement the program audits. The consultants enter project and customer data into the program-tracking database in coordination with WECC staff. For this program, though new measures with increased savings have been added to the database, no new fields were created specifically for the WPS initiative.

Currently, the tracking database identifies measures that received an increased incentive as "WPS HP Bonus" in the MeasureDescription field of the WECCMeasures table. These bonuses can be linked to the specific end-use (e.g., insulation, air sealing) via MainID and MeasureType or the specific technology via MainID and MeasureKind. As of this review, these measures are being identified in this manner clearly and consistently in the tracking database.

#### 3.2.5 Information needed to support evaluation activities

In order to identify what effect the enhanced program design is having on a project-by-project basis, the program needs to track recommended measures, installed measures, and the savings for those measures. The program should also track audit and installation dates to assess the lag between the two program stages. Per WECC feedback, these data are being tracked via an online form.

In addition, to compare the level of participation between the WPS and Focus territories, we will need county-level counts of the number of eligible homes. The evaluation team expects to estimate this number using census data as available. As there may be differences in the type of housing (seasonal, owner-occupied, etc.) and fuel available in the two territories, including additional housing and fuel characteristics in our analysis will allow us to address any systematic effect they may have on program participation and per-project savings. Table 3-2 lists the critical data needs for the HPWES program evaluation.

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<sup>13</sup> "Eligible homes" in the WPS territory are homes that have natural gas or electric services from WPS. "Eligible homes" in the Focus territory are homes that have gas or electric service from one of the participating utilities aside from WPS.





**Table 3-2. Home Performance with ENERGY STAR Data Needs**

<b>Data Needed</b>	<b>Purpose of Data</b>	<b>Field Currently in WECC Database</b>	<b>Data is Sufficiently Captured within Database</b>
List of measures recommended from energy audit	Determine the percent of installed to recommended measures	WECCMeasureMainTable.ProgramName, ACESMeasures.Status, .MeasureDescription, .MeasureKind, .ProposedDate	Yes
List of recommended measures that were installed	Determine the percent of installed to recommended measures	WECCMeasures.MeasureDescription	Yes
Date when home received energy audit	Determine length of time between audit and installation	WECCMeasures.DateEntered, .MeasureDescription	Yes
Date when installation of recommended measures was completed	Determine length of time between audit and installation	WECCMeasures.DateEntered, .MeasureDescription	Yes
Estimated energy savings per recommended measure	Savings comparison	ACESMeasures.ProposedkWh, .ProposedkW, .ProposedTherms	Yes
Energy audit consultant contact information	Consultant interviews	WECCBusinesses.Name WECCBusLookupContacts.Type, FirstName, .LastName, .CWorkPhone	Yes <sup>14</sup>
Homeowner contact information	Participant interviews	WECCCustomers.FirstName, .LastName WECCCustomersAddress.StreetNumber, .StreetName, .StreetType, .City, .State, .Zip, .HPhoneNumber	Yes

### 3.3 RENTAL HOUSING ENERGY EVALUATION PROGRAM

#### 3.3.1 Program description

The Rental Housing Energy Evaluation Program (RHEEP) combines the building shell measures offered by Home Performance with ENERGY STAR and the prescriptive measures offered through the Apartment and Condo Efficiency Services (ACES). Currently, the program is operating in the WPS territory only in the communities of Stevens Point, Green Bay, and Oshkosh. Eligible buildings in Stevens Point include buildings with two to three units and can

<sup>14</sup> A small percentage of the businesses were missing phone numbers.



be owner-occupied or tenant-occupied. Eligible buildings in Green Bay and Oshkosh include buildings with two to three units that are tenant-occupied. Energy saving opportunities are initially identified in a no-cost walk-through audit (Track 1). The audit will:

- Identify potential opportunities to increase the efficiency of each unit
- Identify equipment that could be upgraded or serviced
- Provide incentive forms for the equipment (water heaters, furnace, boilers, etc.)
- Identify solutions to other building problems such as ice dams, window condensation, drafts, and mold
- Include direct installation of CFLs in fixtures, low volume/high pressure showerheads, and faucet aerators
- Inform the owner about Focus offerings.

After the audit, there are two tiers of available measures: Track I prescriptive and Track II HPWES building shell measures.

Participants are then encouraged to have a home energy assessment (Track 2), at a price that has been reduced by \$75, to identify additional energy saving opportunities. Bonus incentives are offered if they take actions recommended in the assessment.

Landlords completing all insulation, combustion safety, and air sealing recommendations within six months of the initial consultant assessment will be eligible for incentives ranging from \$2 to \$250 if only the walk-through review is completed, and up to \$400 if the full evaluation is completed, for measures such as lighting, water heater, and new equipment. Rewards are dependent on the building's needs and recommendations from the evaluation.

### **3.3.2 Program status**

RHEEP has just recently expanded to Green Bay and Oshkosh and has been operating in Stevens Point where the program has 60 participating units. Marketing and outreach activities continue in those communities. Year to date, the program has achieved an estimated net savings of 0.14 kW, 5,844 kWh, and 2,221 therms. The program is not on track to meet its savings targets.

### **3.3.3 Planned evaluation activities**

We will conduct interviews with participants who receive a walk-through audit to better understand the barriers to adoption of measures and continuing on with the program.

### **3.3.4 Data tracking method**

The RHEEP program is operated by WECC using WECC staff (energy auditors) that implement the program audits. The energy auditors collect project and customer data that is entered into the program-tracking database in coordination with WECC staff. For this program, no new fields were created specifically for the WPS communities.

Currently, the tracking database identifies measures installed by RHEEP participants as "RHEEP," "RHEEP-DI," "Whole Building Existing-RHP," or "Whole Building Existing-RHPDI"



in the WECCMeasures tables in the MeasureType field. As the RHEEP program only operates in selected communities, WPS RHEEP participants will be selected based on the community in which they participated (currently Stevens Point, Green Bay, and Oshkosh).

### 3.3.5 Information needed to support evaluation activities

In order to compare per-unit savings both in and out of the WPS territory, our Track 1 analysis will need savings data for the measures installed (either directly or rebated) and the number of units per project. Currently, these data are not being entered into the program tracking database. In addition, to assess program effectiveness, the tier level of participants and the number and type of measures installed should be tracked. Table 3-3 lists the data needs for the RHEEP program.

**Table 3-3. Rental Housing Energy Evaluation Program Data Needs**

Data Needed	Purpose of Data	Field Currently in WECC Database	Data is Sufficiently Captured within Database
Installed measures	Compare number of measures installed	WECCMeasures.MeasureKind	Yes
Measure savings data	Compare per unit savings	WECCMeasures.KWSaved, .KWHSaved, .thermSaved	Yes
Tier level	Compare level of participation	WECCMeasures.MeasureKind	Yes
Direct install measures installed	Compare number of measures installed	WECCMeasures.MeasureKind, .MeasureType	Yes
Consultant/Energy Advisor	Participant interviews	WECCBusinesses.Name WECCBusLookupContacts.Type, FirstName, .LastName, .CWorkPhone	Yes <sup>15</sup>
Number of units per project	Compare per unit savings	WECCCustomersAddresses.NumOfUnits	No
Participant contact information	Participant interviews	WECCCustomers.FirstName, .LastName WECCCustomersAddress.StreetNumber, .StreetName, .StreetType, .City, .State, .Zip, .HPhoneNumber	Yes
Recommended measures	Participant interviews	WECCMeasureMainTable.ProgramName, ACESMeasures.Status, .MeasureDescription, .MeasureKind, .ProposedDate	Yes

<sup>15</sup> A small percentage of businesses were missing phone numbers.



### **3.4 AIR SEALING FOR MULTI-FAMILY BUILDINGS**

#### **3.4.1 Program description**

The Air Sealing program will offer three different mechanisms to incentivize the owners/decision-makers of multi-family buildings to improve air-sealing for their buildings: (1) prescriptive, (2) testing, and (3) performance (natural gas buildings only). The prescriptive option will offer prescriptive rewards for a checklist of air-sealing items. The testing option will provide a reward based on pre- and post-tests of the building. Finally, the reward for the performance option is determined by analysis of pre- and post-utility bills over the heating season.

#### **3.4.2 Program status**

As of the May report, there were no 2010 participants in the Air Sealing program. Marketing efforts continue to both trade allies and building owners.

#### **3.4.3 Planned evaluation activities**

To assess the effectiveness of the Air Sealing program, we will compare the per unit savings of multi-family participants that receive air sealing measures through the WPS program with those that receive air measures outside in the Focus ACES program.

In addition, we will conduct telephone interviews to assess the uptake of the three different incentive levels and identify barriers to participation.

#### **3.4.4 Data tracking method**

As of this report, there have been no participants in the Air Sealing for Multi-family Buildings program. Therefore, we cannot assess how data are being tracked and entered into the database. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

Data for this program will be collected by Franklin Energy staff, the implementation subcontractor for WECC. Once collected, the data will be entered into the program-tracking database by WECC staff.

#### **3.4.5 Information needed to support evaluation activities**

In order to determine savings associated with air sealing measures, measures must be identified as being part of the prescriptive, testing, or performance offering. Also, in order to normalize the comparison across projects, the number of units per project must be tracked.

Table 3-4 lists the data needs for the Air Sealing program. Since there have been no participants in the Air Sealing program in 2010, we cannot assess how data are being captured for this program or which offering method is being implemented at specific projects. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.



Table 3-4. Air Sealing for Multi-family Buildings Data Needs

Data Needed	Purpose of Data	Field Currently in WECC Database <sup>16</sup>	Data is Sufficiently Captured within Database
Offering method (prescriptive vs. testing vs. performance)	Compare relative effectiveness of different methods	Unknown	Unknown
Measure installed	Compare savings at the measure-level	WECCMeasures.MeasureKind	Unknown
Savings per measure	Determine per unit savings	WECCMeasures.KWSaved, .KWHSaved, .thermSaved	Unknown
Participant contact information	Conduct participant interviews	WECCCustomers.FirstName, .LastName WECCCustomersAddress.StreetNumber, .StreetName, .StreetType, .City, .State, .Zip, .HPhoneNumber	Unknown
Number of units per project	Determine per unit savings	WECCCustomersAddresses.NumOfUnits	Unknown

### 3.5 HEATING & COOLING EARLY RETIREMENT

#### 3.5.1 Program description

This program utilizes other Focus programs to identify working heating and cooling equipment that is inefficient and encourage homeowners via incentives to replace that equipment within a specified period.

#### 3.5.2 Program status

Per conversations with program implementers on June 22, 2010, the Heating & Cooling Early Retirement program has been canceled as a result of early program research. There are no planned evaluation activities for this program.

### 3.6 BUNDLED MEASURES FOR EXISTING MULTI-FAMILY BUILDINGS

#### 3.6.1 Program description

The objective of the Bundled Measures program is to determine if a "bundled measures" approach is more efficient than single measures with respect to customer acceptance, program delivery efficiency, and increased savings per project. Bundles of prescriptive measures are intended to promote more comprehensive implementation of measures

<sup>16</sup> We assume that measure descriptions, savings values, contact information, and number of units will be stored in fields currently in use for other programs.



throughout a property by offering higher incentive levels than are offered for individual measures.

### **3.6.2 Program status**

As of the May performance report, there were no 2010 participants in the Bundled Measures program. Marketing activities continue and Focus staff have been contacted about several projects that are planning on participating in the program.

### **3.6.3 Planned evaluation activities**

To assess the effectiveness of the bundled measure rebates, we will compare the per unit savings of multi-family participants that receive bundled measures and of multi-family participants that receive incentives for single measures.

There is no primary data collection planned for this program.

### **3.6.4 Data tracking method**

As of this report, there have been no participants in the Bundled Measure program. Therefore, we cannot assess how data are being tracked and entered into the database. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

Data for this program will be collected by Franklin Energy staff, the implementation subcontractor for WECC. Once collected, the data will be entered into the program-tracking database by WECC staff.

### **3.6.5 Information needed to support evaluation activities**

In order to determine savings associated with bundled measures, measures must be identified as being part of a bundle and if so, at what level. The measures included in the bundle should be identified at the specific technology level. This will allow for a more accurate comparison to the measures installed through the ACES program than if the bundled measures were grouped into end-use categories (e.g., HVAC). Also, in order to normalize the comparison across projects, the number of units per project must be tracked.

Table 3-5 lists the data needs for the Bundled Measures program. Since there have been no participants in the Bundled Measure program, we cannot assess how data are being captured for this program or how measures are being identified as being part of a bundle. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.



**Table 3-5. Bundled Measures for Existing Multi-family Buildings**

<b>Data Needed</b>	<b>Purpose of Data</b>	<b>Field Currently in WECC Database<sup>17</sup></b>	<b>Data is Sufficiently Captured within Database</b>
Bundle level	Identify bundled measures. Compare effectiveness of different levels	Unknown	Unknown
Savings per measure	Determine per unit savings	WECCMeasures.KWSaved, .KWHSaved, .thermSaved	Unknown
Number of units per project	Determine per unit savings	WECCCustomersAddresses.NumOfUnits	Unknown

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<sup>17</sup> We assume that savings values and number of units will be stored in fields currently in use for other programs.



## **4. BUSINESS PROGRAMS OFFERINGS**

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This section presents the global data assessment for the WPS Territory-wide Business Programs offerings. The three Business programs are:

- No-cost Small Industrial Assessments
- Multi-Project Bonus
- Building Permit Lead Generation.

For each offering, we provide a brief program description, the current status of the offering, and a high-level overview of the program's data tracking method.

### **4.1 NO-COST SMALL INDUSTRIAL ASSESSMENTS**

#### **4.1.1 Program description**

This offering makes comprehensive energy assessments available to small industrial customers. The program targets small to medium-sized customers in target areas for participation. Customers in the target areas are invited to informational meetings that are followed up by the on-site assessments. Standard Focus financial incentives and the WPS Multi-project bonus are available for equipment installation.

#### **4.1.2 Program status**

This is the most active Business Programs offering. Informational meetings have been held in Wausau, Oshkosh, Green Bay, Rhinelander, and Stevens Point. A July meeting is planned for Manitowoc. Including the May event in Rhinelander, the 110 assessment reports completed so far include recommendations for more than 1.3 MW, 5.4 million kWh, and 315,000 therms. According to the May 2010 monthly performance report, these customers are actively pursuing projects that represent 291 kW, 897,809 kWh, and 17,159 therms.

#### **4.1.3 Data tracking method**

The installed measures resulting from the no-cost site assessments are tracked in WISEerts as regular Focus measures. WECC reviews the measures installed each month and manually identifies measures installed by customers who received a no-cost site assessment. WECC tracks these measures in the *WPS TW BP Data Tracker* Excel file.

In addition to installed savings, WECC maintains lists of the RSVPs received for the informational meetings. These include customer contact information. The Excel spreadsheets detail general measure recommendations made to the customer from the site assessments, roughly estimate the potential energy savings of each recommendation and identify the associated informational meeting community (i.e. thus far, Wausau, Oshkosh, Green Bay, Rhinelander, or Stevens Point). WECC maintains separate recommendation spreadsheets for each energy advisor. WECC does not maintain lists of meeting attendees.





## **4.2 MULTI-PROJECT BONUS**

### **4.2.1 Program description**

The Multi-Project Bonus offering was added to the portfolio in April. This offering provides customers with a bonus incentive for the implementation of multiple energy efficiency and/or renewable projects at the same site within six months.

### **4.2.2 Program status**

Promotions for this program have not yet resulted in installed projects. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

### **4.2.3 Data tracking method**

In WISEerts, the program tracks this bonus as a separate measure that does not have savings associated with it. WECC manually identifies the Focus measures in WISEerts with savings that the customer has received the WPS bonus for and tracks these measures in the *WPS TW BP Data Tracker* Excel file.

## **4.3 BUILDING PERMIT LEAD GENERATION**

### **4.3.1 Program description**

Focus has identified a source for building permit information for new construction lead generation. The statewide New Construction program does not have the capacity to address this information source. Through this offering Focus would identify customers and projects based on building permit applications. These applicants would be contacted to offer technical assistance, information on project economics, and financial incentives to include energy efficiency in the planned construction.

### **4.3.2 Program status**

The database of building permit leads is under development. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

### **4.3.3 Data tracking method**

WECC plans to track the customers and sites from the database that they contact and review the measures installed through Focus each month to manually identify measures installed by contacted customers. WECC plans to track these measures in the *WPS TW BP Data Tracker* Excel file.



## **5. RENEWABLE PROGRAM OFFERINGS**

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This section presents the global data assessment for the WPS Territory-wide Renewables offerings. The three Renewables Programs are:

- Large Project Grants
- Nonprofit Match
- Commercial Solar Space-heating.

For each offering, we provide a brief program description, the current status of the offering, and a high-level overview of the program's data tracking method.

### **5.1 LARGE PROJECT GRANTS**

#### **5.1.1 Program description**

Focus will offer funding to large renewable energy projects currently outside the scope of the Focus on Energy. The program states that, "Such an initiative would serve to test the potential of this market segment." This effort may include large solar electric, solar water-heating, wind, or bioenergy (biogas farm/industrial/municipal digesters, biomass combustion, landfill gas), or hydro-electric projects.

#### **5.1.2 Program status**

The program had no completed projects at the time of this report. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

#### **5.1.3 Data tracking method**

The program will track these projects in WISeerts, using tech codes unique to the WPS offering. There is no additional tracking associated with this offering.

### **5.2 NONPROFIT MATCH**

#### **5.2.1 Program description**

Focus will provide a match of the existing grant offerings to nonprofit organizations for the installation of eligible Focus renewable energy technologies. These technologies include solar electric, solar water heating, wind under 100 kW, and biomass combustion. The non-profit match will allow up to 70 percent of the cost of the installation to be paid by the combined Focus and WPS incentives. The WPS program offers a 100 percent match of the standard Focus incentive for solar and wind and 50 percent match for biomass combustion. Nonprofits include all organizations that are exempt from federal income taxes and tax incentives.

#### **5.2.2 Program status**

As of May, the nonprofit match program has installed one solar electric system and has both solar electric and solar thermal systems in process.



### **5.2.3 Data tracking method**

The Focus tracking databases track the installed measure as an installed Focus measure. The WPS bonus is tracked in the Focus databases as a separate measure that does not have savings associated with it.

The WECC Measures database, which tracked all Focus Renewables activity prior to January 1, 2010, does not track nonprofit status for the Focus Renewables Program, limiting the evaluation's ability to conduct comparative historical research.

## **5.3 COMMERCIAL SOLAR SPACE-HEATING**

### **5.3.1 Program description**

This offering provides incentives for a feasibility study and installation of two types of solar space heating technologies for which the statewide program does not provide incentives (solar air collectors for make-up air heating and for building reheat in the summer).

Per conversations with program implementers, the Commercial Solar Space-heating program has not generated significant interest in eligible customers and the program is likely to be discontinued. Therefore, we did not review the program's data tracking.

### **5.3.2 Program status**

The program has not generated significant interest to date and has no completed projects. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

### **5.3.3 Data tracking method**

The program will track these projects in WISEerts, using tech codes unique to the WPS offering. There is no additional tracking associated with this offering.



## **6. CROSS-PORTFOLIO INITIATIVES**

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This section presents the global data assessment for the Cross-portfolio WPS Territory-wide offerings. The three Cross-portfolio programs are:

- Farm Multi-project Bonus
- Affinity Groups/Social Networking
- Opportunity Grant.

For each offering, we provide a brief program description, the current status of the offering, and a high-level overview of the program's data tracking method.

### **6.1 FARM MULTI-PROJECT BONUS**

#### **6.1.1 Program description**

Energy advisors promote traditional agriculture sector energy efficiency measures, residential measures, and renewable technologies with on-site assessments and additional bonus incentives for bundled projects.

#### **6.1.2 Program status**

This program has commenced. However, no savings have been reported. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

#### **6.1.3 Data tracking method**

WECC currently tracks the data collected in the on-site assessments, including customer contact information and recommended measures in a detailed Excel spreadsheet with one row per customer. Recorded recommendations are general (e.g., replace fans) and savings estimates are not included.

Savings associated with the assessments and bonuses offered by this program are tracked in the Focus on Energy databases. Customers who take advantage of the WPS bonus offer submit a coupon for the bonus that indicates the measures the customer installed through Focus. WECC then manually identifies these measures in WISEerts and the WECC Measures database and records the appropriate Customer and Measure IDs, measure details and savings in an Excel spreadsheet. Measures installed as a result of the audit (no bonus) must be manually identified by comparing the list of participants to Focus tracking data.

### **6.2 AFFINITY GROUPS/SOCIAL NETWORKING**

#### **6.2.1 Program description**

This offering promotes the program through affinity marketing and social networking. The affinity marketing approach enlists nonprofit groups to serve as outreach partners for Focus on Energy in return for a donation based on the energy savings of projects they influenced. These "influenced" projects would still receive Focus on Energy incentives for qualifying



measures that could be donated to the nonprofit organization. The social networking approach encourages small businesses and residential customers to pool their energy savings. This “friends and family” network would receive bonus incentives in addition to standard individual technology incentives. The theory is that the group would create additional energy savings by increasing the size of the “friends and family” network. The social networking approach also offers a simple referral method. Vendors selling the qualifying equipment would not be eligible for the referral fee.

### **6.2.2 Program status**

This offering remains on hold. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

### **6.2.3 Data tracking method**

This offering continues remains in the development stage. In its current design, installed measures influenced by this offering would be tracked in the Focus on Energy databases. WECC tentatively plans to identify these measures through a separate form submitted with the Focus measure application, but the program is not yet far enough along for more detailed tracking information to be available.

## **6.3 OPPORTUNITY GRANT**

### **6.3.1 Program description**

This offering provides customers and vendors the competitive opportunity to request Focus support for projects currently outside the program offerings. This program is split between Residential offerings and Business offerings. For the sake of simplicity, the program is included under Cross-portfolio initiatives.

### **6.3.2 Program status**

Contracts have been drafted for two grant recipients. The review of data tracking methods for this initiative will be updated once significant program activity has occurred.

### **6.3.3 Data tracking method**

WECC staff indicate that PDFs and Excel spreadsheets containing vendor recommendations will be uploaded to WISEerts as part of the customer history. WECC has set up an Excel spreadsheet to track installed measures in WISEerts that have resulted from this offering. A separate document will track the customer contact information of the customers that the program vendor works with.



## **7. CONCLUSIONS AND RECOMMENDATIONS**

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Based on the assessments presented within this report, we provide the following conclusions. These conclusions are followed by recommendations for tracking and documentation.

### **7.1 CONCLUSIONS**

Many of the WPS Territory-wide Offerings are in their infancy and it is unclear whether some of them will continue to be offered. Therefore, this data assessment is based on limited data points in many cases or is simply a review of the program tracking system with WECC staff.

The data assessment for Residential Program Offerings was more straightforward, given that participation data exists for the majority of these programs. We found that WECC is sufficiently capturing WPS Territory-wide residential program data where programs are currently active. Critical fields are reasonably complete with little missing data. We did, however, identify data inconsistencies, or outliers, that must be reviewed and discussed with program managers throughout evaluation activities.

Focus has added fields to capture residential data for both the Focus and WPS Territory-wide initiatives. Specifically, Home Performance with ENERGY STAR is now capturing recommended measures as well as measures installed. The evaluation will review the accuracy of the recommended measures listed in the tracking system and document the benefits of capturing this information.

For the Business, Renewable, and Cross-portfolio Offerings, the evaluation team found that savings data are manually transferred from program tracking databases into a separate tracking system to calculate savings. This manual process increases administrative burden and creates increased opportunity for error.

We found that Focus tracking systems do *not* capture whether a business customer is a nonprofit. The Track 1 evaluation of the nonprofit matching grant for renewable energy system requires this information.

The evaluation team did not identify any data issues that would impede completing Track 1 evaluation for the residential sector. WECC is capturing the necessary information in their databases. At this stage in the evaluation, it appears that Track 1 research activities are feasible for the Residential Offerings. As we continue our efforts, we will become more familiar with any issues that may affect the viability of this evaluation.

The evaluation team found little data associated with the Business, Renewable, and Cross-portfolio WPS Territory-wide activities. We will make decisions about the sufficiency of tracking efforts in our ability to complete the Track 1 efforts for Business and Renewable Program decisions no later than July 30. Following this decision, we will work the PSCW and WECC to decide on potential Track 2 and Track 3 activities.

### **7.2 RECOMMENDATIONS**

The following is an initial list of program tracking recommendations for the Residential, Business, Renewable, and Cross-portfolio Offerings. These recommendations are based on



our current understanding of the WPS Territory-wide Offerings and may change as the programs launch or mature.

### 7.3 OVERALL RECOMMENDATION

**Resolve issues associated with crediting savings where WPS programs overlap.** The WPS Territory-wide portfolio includes programs that guide customers to participate in other WPS Territory-wide programs that offer incentives. Potentially, both WPS programs could claim these savings. The current tracking system relies on manual updates to multiple spreadsheets that track the savings from each program and does not have automatic safeguards to prevent double counting of savings. Adding fields to the Focus databases for the WPS programs (as discussed below) or tracking all WPS territory-wide measures in a single spreadsheet would prevent double counting of savings.

### 7.4 RESIDENTIAL PROGRAM TRACKING RECOMMENDATIONS

**Update the residential tracking system documentation to explain the status and use of data fields.** The evaluation team refers to and relies on the thorough documentation WECC provides for the residential program tracking system. However, it is not always clear whether the fields are used and how they are being used for each program. The evaluation recommends that fields that are not being actively maintained be clearly listed as “inactive” within the documentation. An example is the Custom and Deemed fields in the WECCMeasures database. Additionally, it would be useful for WECC to provide within the documentation clear definitions of the fields and how they are used (e.g., should the field capture different types of information for different programs, should the data be updated and captured in the documentation).

**For multi-family programs, WECC should track the number of units per project, bundled measures, and air sealing offering track.** Including the number of units in each project will allow for any project level comparative analysis to be normalized for project size. While this field currently exists, it does not appear to be populated with data. In addition, as participation in the Bundled Measures offering increases, at the measure level, clearly indicate if that technology was part of a bundled measure incentive. Similarly, as participation in the Air Sealing program increases, clearly indicate which offering method (prescriptive, testing, or performance) was used to rebate that measure.

### 7.5 BUSINESS, RENEWABLE, AND CROSS-PORTFOLIO PROGRAMS TRACKING RECOMMENDATIONS

**Develop documentation on the files and fields used to track WPS Business, Renewable and Cross-portfolio program initiatives.** Currently, no documentation exists for the WPS program initiatives and how the program is capturing the data. We recognize that the programs are in development and that data tracking system needs will change as the programs develop. It is good practice to document how data is captured as systems are developed so that as programs change historical data is maintained and interpreted correctly.

**Automate manual processes as much as possible.** Current tracking of WPS Territory-wide Business, Renewable, and Cross-portfolio programs relies upon manually checking customer names from a list of WPS participants against installed measures in the Focus. Measures associated with the affinity groups, opportunity grant, and nonprofit match programs can likely be identified and flagged as they are entered into the databases.



**Add fields to both Focus databases that would aid in tracking the WPS programs.** The evaluation recommends adding two new fields to the measure tables of each of the Focus databases:

- WPS Program field populated with the name of the program that the measure is associated with
- WPS Bonus field populated with the measure ID of the bonus for each of the measures associated with that measure.

The first field would allow direct generation of WPS territory-wide reports, reducing the opportunities for errors created when manually transferring data into Excel files. This field also has the potential to eliminate potential double counting of savings. The second field links the bonus records to their associated measures.<sup>18</sup>

**Use the comments fields in both Focus databases to flag WPS related records (only if it is not possible to add fields to the database).** A less desirable alternative to additional fields in the existing database is to use the comments fields associated with each measure to flag WPS Territory-wide records. This alternative does not facilitate automatic report generation. WECC has indicated that they are looking into implementing this approach by:

- Adding standard text to the comments fields of Focus measures associated with the WPS programs
- Adding the measure ID of any WPS bonus measure to the comments field of installed measures associated with that bonus
- Adding the measure ID of installed measures associated with a bonus to that bonus measure's comments field (to allow for confirmation).

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<sup>18</sup> Bonus records in WISEerts contain incentive amounts, but no savings. The savings associated with the bonus are tracked in separate installed measure records.