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ENERGY

Uniform Methods Project (UMP: Methods for Determining EE Savings

Illinois Stakeholder Advisory Group - Policy Manual Sub-Committee

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UMP and the Illinois SAG Policy Manual Sub-Committee

The point of reviewing the UMP, and potentially adopting some of its standards and approaches, is to create a baseline for the Illinois Policy Manual that can be modified by the SAG going forward.

- The UMP has been vetted nationally and provides standard, flexible approaches to evaluation
- It appears other jurisdictions are reviewing the UMP at this time – it is not clear if other regions have adopted the UMP in any fashion (*but it is under review for specific application within those states or regions*)
  - Based upon detail from Dan Violette, Navigant and Elizabeth Titus, Senior Research and Evaluation Manager at NEEP
  - At this point, it is not clear if the UMP has been adopted by other states, but it is clear that numerous states and regions are reviewing the UMP for similar reasons being discussed at the Policy Manual Sub-Committee
- There are various approaches to consider in adopting portions of the UMP:
  - Use the UMP as a barometer to outline desired sections of an Illinois Policy Manual, or
  - Adopt specific chapters (sections) as a starting point for the Illinois Policy Manual - Once adopted, amend or specifically alter the language similar to the TRM process.

UMP Introduction

About the UMP (protocols):

- The individual protocols can be found at:

  http://energy.gov/eere/downloads/uniform-methods-project-methods-determining-energy-efficiency-savings-specific

- The methods represent generally accepted standard practices within the EM&V profession; however, they are not necessarily the *only* manner in which savings can be reliably determined.
- Program administrators and policymakers can adopt these methods knowing that: (1) they are consistent with commonly accepted practices and (2) they have been vetted by technical experts in the field of energy program evaluation.
- The goal for the UMP is to help establish a common basis for assessing and comparing the performance and effectiveness of energy efficiency policies and investments across programs, portfolios, and jurisdictions.
- These protocols *do not* provide stipulated values for energy savings or prescribe specific criteria for statistical confidence.

UMP Introduction

The UMP is developed by the National Renewable Energy Laboratory (NREL) – the DOE envisions the following specific goals for this project:

- The current UMP chapters (published by NREL in April 2013) provide a straightforward method for *evaluating gross energy savings* for each of the most common residential and commercial measures.
- The UMP *net savings evaluation* chapter is discussed below.
- The UMP is *not intended to alter or replace* the TRM.
- It offers guidelines that help strengthen the credibility of energy efficiency program savings calculations – drafted by experts from across the US.
- Provides clear, accessible, step-by-step protocols to determine savings for the most common energy efficiency measures.
- Supports consistency and transparency in how savings are calculated.
- Reduces the development and management costs of EM&V for energy efficiency programs offered by public utility commissions, utilities, and program administrators.
- Allows for comparison of savings across similar efficiency programs and measures in different jurisdictions.
- Increase the acceptance of reported energy savings by financial and regulatory communities.

UMP Table of Contents

The UMP includes 13 chapters:

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UMP – Estimating Net Savings

The UMP chapter on "Estimating Net Savings: Methods and Practices" is final and is expected to be "approved" in a month or two.

- This chapter presents approaches for assessing attribution and the net impacts of EE programs.
- The Estimating Net Savings Chapter focuses on the following:
  - Universality of the Net Impacts Challenge
  - Defining Gross and Net Savings for Practical Evaluation
  - Definition of Gross and Net Savings
  - Definitions of Factors Used in Net Savings Calculations
  - Uses of Net Savings Estimates in the EE Industry
  - The Net Savings Estimation Challenge—Establishing the Baseline
  - Methods for Net Savings Estimation
  - Randomized Controlled Trials and Quasi-Experimental Designs
  - Common Practice Baseline Approaches
  - Market Sales Data Analyses (Cross-Sectional Studies)
  - Top-Down Evaluations (Macroconsumption Models)
  - Structured Expert Judgment Approaches
  - Deemed and Stipulated Net-to-Gross Ratios
  - Historical Tracing (or Case Study) Method

UMP – Estimating Net Savings

The UMP chapter on "Estimating Net Savings" also focuses on *approaches to attribution* in addition to the net impacts of EE programs.

- Conclusions and Recommendations:
  - A central theme in this chapter is that all decisions have an implicit counterfactual scenario—what would have happened if the decision had not been made.
  - In the context of EE program investments, net savings are those that are attributable to the program.
  - In other words, they would not have occurred if the program had not been offered.
  - This chapter presents a number of approaches for assessing attribution and the net impacts of EE programs.
  - This section discusses issues affecting the choice of a net savings approach within an evaluation context.
- Key points with regard to attribution include:
  - If the evaluation can show a series of microsteps that lead from inputs to outcomes, causal attribution, for all practical purposes, is supported by this approach.
  - Statistics alone often do not constitute a complete attribution assessment. They often require context using supporting logic to enhance the validity of the statistical estimates

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