

Uniform Methods Project Talking Points

June 22, 2012

The following is a list of talking points for the Uniform Methods Project Steering Committee, technical advisory groups, and technical experts that drafted the protocols; the Uniform Methods Project team, and the U.S. Department of Energy (DOE) leadership team to use when preparing a presentation or answering questions about the project.

Description

Under the Uniform Methods Project, DOE is developing a framework and a set of protocols for determining the energy savings from energy efficiency measures and programs. The protocols provide a straightforward method for evaluating gross energy savings for the most common residential and commercial measures offered in ratepayer-funded programs in the United States. They represent a refinement of the body of knowledge supporting energy efficiency evaluation, measurement, and verification (EM&V) activities. They have been written by technical experts within the field and reviewed by industry experts.

- Each protocol provides a clear, accessible reference with step-by-step calculations for determining gross savings. The protocols also include:
 - A description of the measure and application conditions
 - An algorithm for estimating savings
 - An example of a typical program offering and alternative delivery strategies
 - Considerations for the measurement and verification process, including an International Performance Measurement and Verification Protocol (IPMVP) option
 - Data requirements for verification and recommended data collection methods
 - Recommended program evaluation elements
 - Fall-back options for lower-cost EM&V approaches.
- The protocols are being developed through collaboration with energy efficiency program administrators, stakeholders, and EM&V consultants—including firms that perform up to 70% of the energy efficiency evaluations in the United States.

Benefits

Adoption of the protocols is voluntary, but there are significant benefits for programs that adopt them.

Greater Consistency and Increased Credibility

- Uniform EM&V protocols increase the credibility and consistency of savings determinations for energy efficiency programs. It becomes easier and less costly for efficiency programs to quickly establish good EM&V practices because organizations no longer have to develop protocols from scratch. Increased consistency simplifies the comparison of savings resulting from similar programs in different jurisdictions. This supports the development of best practices for energy efficiency programs.

Increased Transparency

- Uniform EM&V protocols increase the transparency of savings determinations, which helps a number of stakeholders manage various types of uncertainties associated with energy efficiency programs. Examples include:
 - Helping utility-run programs manage regulatory uncertainty
 - Enabling resource planners to more clearly assess the validity of savings estimates, which allows energy efficiency to be treated on par with new generation in resource plans
 - Increasing investor confidence in energy savings determinations, which reduces the financial risk to underwriters.

Improved Energy Efficiency Programs

- Clearly identifying the parameters used in measuring and verifying the results of energy efficiency programs allows administrators to set EM&V data requirements early on, which improves alignment between implementation and evaluation.
- The protocols can also provide a basis for complying with energy efficiency resource standards.
- Improved EM&V practices further establish energy efficiency as a reliable and predictable energy resource.

Strengthened EM&V Industry

- Uniform protocols provide a good technical foundation for organizations or staffs that are either new to or expanding into EM&V.

Timeline

In summer 2012, the Uniform Methods Project Steering Committee will work with DOE to undertake a robust review of the first set of protocols by experts who represent all major energy efficiency stakeholders.

The first set of protocols addresses seven energy efficiency measures, including:

- Commercial lighting
- Commercial lighting controls
- Commercial unitary air conditioning
- Residential boilers and furnaces
- Residential lighting
- Residential refrigerator recycling
- Residential whole-house retrofits.

DOE plans to publish them before the end of 2012, including some cross-cutting issues such as sample and survey design. In 2013, DOE will develop a second set of protocols that includes additional energy efficiency measures.

Questions and Answers

Why can't DOE use existing EM&V procedures developed by U.S. energy efficiency programs or by international organizations for this effort?

- The protocols build on existing practices in regional, state, and utility energy efficiency programs; are fully documented; were developed through a well-vetted process; and are consistent with the standards of the IPMVP. In fact, they complement and support IPMVP by providing another level of detail for measuring and verifying savings from energy efficiency programs. DOE is also working with the American National Standards Institute (ANSI) to ensure compatibility with other international efforts, e.g. ISO 50001.

How does this work relate to existing technical reference manuals (TRMs)?

- Currently, there are multiple versions of the algorithms for savings calculations found in TRMs from different programs. This work will help standardize these algorithms. Furthermore, using consistent protocols will inform deemed values found in TRMs, making them more accurate.

Given that adoption of the protocols is voluntary, how will they develop into best practices for energy efficiency?

- These protocols represent a foundation for consistent savings determinations that individual programs will need to tailor in order to address local conditions such as consumer needs, differences among utilities, financial constraints, etc. Consistent EM&V protocols will allow program managers to turn their attention to larger challenges, such as the overall success of the underlying energy efficiency measures. Best practices develop out of these local experiences.

What are the options for smaller utilities with fewer resources available for EM&V?

- In the long run, the protocols will reduce EM&V costs for all energy efficiency programs. However, DOE recognizes that even the lower-cost options provided in the protocols may be impractical for small energy efficiency programs, especially those offered by small utilities. Where possible, smaller utilities may consider alternative cost-saving measures such as pooling of measurement and verification resources and jointly conducting evaluations of similar programs through local associations. This tactic has proven effective for small utilities in California, Michigan, and the Pacific Northwest. Alternatively, small utilities may consider either coordinating their measurement and verification activities with regional utilities or adopting the results of evaluations of similar programs implemented by investor-owned utilities.