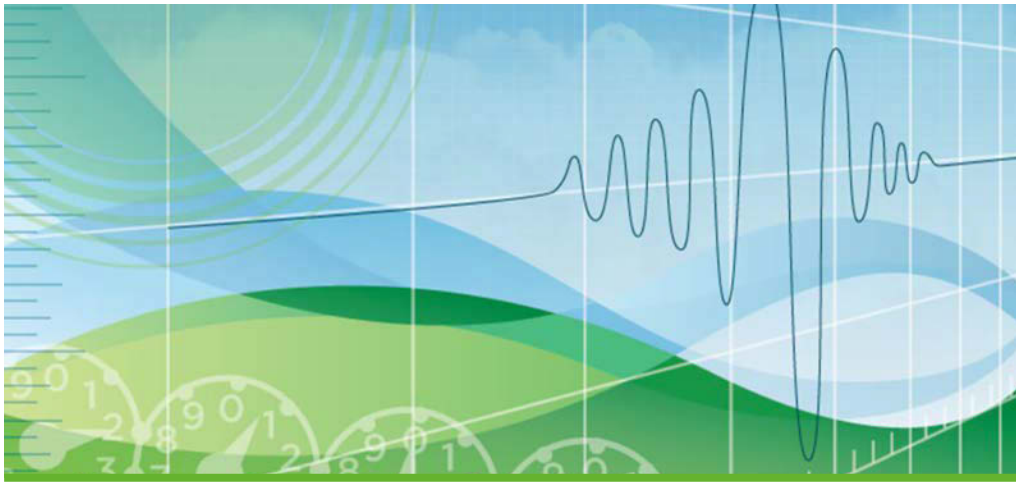
U.S. DEPARTMENT OF
ENERGY

Office of
ENERGY EFFICIENCY &
RENEWABLE ENERGY



UMP Reference Language—Examples

The Uniform Methods Project (UMP) and protocols provide a straightforward method for evaluating gross energy savings for residential, commercial, and industrial measures commonly offered in ratepayer-funded programs in the United States. These protocols, which can be easily incorporated into different types of work products, are increasingly being used to guide a consistent approach to energy efficiency program evaluation. This document provides example language for referencing the use of UMP protocols followed by examples of language that is currently in use, which helps the reader understand when and how the protocols are used and ensures consistent citation of relevant UMP protocols.

The UMP and corresponding protocols can be referred to in various documents, including evaluation reports, Request for Proposals (RFPs), submitted proposals, guidance documents, and Technical Reference Manuals (TRMs). Each type of document has a generic example of how one could reference UMP in that document, and several examples of how different authors have referenced UMP that type of document.

Evaluation Reports

1. Generic Text A: The evaluation methods supporting the results presented in this report are consistent with the following Uniform Methods Project protocols: [list relevant protocols by chapter and name, and provide citations to the sections that provided the needed guidance; document rationale for deviation from any proposed or relevant protocol].

2. Generic Text B: Choose one of the following responses depending on the evaluation's level of consistency with the UMP protocol:

    a. The evaluation methods follow the guidelines established in the UMP protocol [enter chapter number and name].

    b. The evaluation methods are consistent with the UMP protocol [enter chapter number and name].

    c. The evaluation methods are consistent with the UMP protocol [enter chapter number and name], with the following exceptions: [describe deviations from the protocol and reasons for deviation].

    d. The evaluation methods do not follow the UMP protocols in [enter chapter number and name] due to [explain reason for not using; e.g., "budget limitations that excluded primary data collection from the scope of work."].

3. Example—Dayton Power and Light 2014 Evaluation, Measurement, and Verification Report (Cadmus): *The 2014 ex ante methodology used the lumens equivalence method to determine the delta watts inputs for savings—a departure from the delta watts multiplier method used by the Ohio TRM and the 2013 ex ante savings. This method aligned with the approach recommended by the Uniform Methods Project (UMP) and reflected the method Cadmus used to determine adjusted gross savings in the current and previous evaluations.*

4. Example—Energy Trust of Oregon Final Report: Impact Evaluation of the 2013-2014 Existing Buildings Program (ADM): *ADM employed several key references used to guide this process. The most common references are the International Performance Measurement and Verification Protocols (IPMVP), the Uniform Methods Project (UMP), and ASHRAE Guideline 14 (Measurement of Energy, Demand and Water Savings).*

5. Example—Impact and Process Evaluation of 2016 (Prior Year 9) Ameren Illinois Company Appliance Recycling Program (Opinion Dynamics): *The program's NTGR, as calculated in PY6 from participant survey data, drew on the self-report approach methodology established in the Uniform Methods Project protocol for evaluation of appliance recycling programs and was consistent with the Illinois NTGR framework.*

Utility/Commission RFPs

1. Generic Text: The evaluation team should use the appropriate Uniform Methods Project (UMP) protocols for all applicable activities and analyses. Bidders may propose other methods, as long as the proposed methods method(s) follow the guidelines established in accepted industry sources such as the International Performance Measurement and Verification Protocols (IPMVP) or other sources approved by the program administrator or regulators. Bidders who wish to propose an alternative method are asked to provide the justification for their proposed method.

2. Example—2016-2017 Evaluation, Measurement, and Verification (EM&V) Services for Residential and Commercial/Industrial Energy Efficiency Programs (Puget Sound Energy): *Other work plan activities include, but are not limited to: … 13. Use of best-practice approaches appropriate to the topic area, with the plans informed by standard technical references such as the International Performance Measurement and Verification Protocol and Uniform Methods Project (several prior items in list).*

3. Example—RFP to Conduct Commercial & Industrial (C&I) Program Evaluation Projects and Related Research (Energize Connecticut): *The common documents for energy efficiency program evaluation that may be used include: Uniform Methods Project (UMP) for Determining Energy Efficiency Program Savings by the U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy (bulleted list continues with other sources).*

4. Example—Energy Efficiency Education for Schools Program (Duke Energy): *Unless otherwise recommended, the evaluation company should follow existing Uniform Methods Project (UMP) protocols for the evaluation of this program.*

5. Example—RFP VF11347RPK for Energy Efficiency and Demand Response (Salt River Project):

    a. *These evaluations should also align with industry best practices and accepted protocols for evaluation, measurement, and verification (EM&V) of utility-administered demand-side energy efficiency and load reduction programs [footnote: Protocols include the Department of Energy's Uniform Methods Project (UMP) and the International Performance Measurement and Verification Protocol (IPMVP)]*

    b. *Additional Details Regarding Personnel & Business Qualification: … Provide a detailed summary of your firm's direct involvement with and understanding of the Department of Energy's Uniform Methods Project, and the development of EM&V guidelines for the EPA's Clean Power Plan.*

6. Example—Request for Qualifications for Home Performance with ENERGY STAR with Complimentary Home Energy Check-Up Program Implementation Contractor (DESEU): *[Client] has identified the following goals that will guide this solicitation: … 2. Provide the level of tracking required for efficient program operations, including documenting key metrics such as greenhouse gas emissions, kWh and therm savings following Uniform Methods Project (UMP) guidelines and the Delaware TRM found at…*

Evaluation Proposals and Plans

1. Generic Text: The proposed evaluation methods are consistent with the methods established in the following Uniform Methods Project (UMP) protocols: *[list relevant protocol(s) by chapter and name; document rationale for deviation from any proposed or relevant protocol].*

2. Example—Southern California Edison—Proposal Requisition #144-081502: Residential Pilot Programs Analysis and Assessment (Cadmus): *The results [of commercial lighting programs for electric utilities] are calculated using best practices driven by industry standard sources such as applicable technical reference manuals and the DOE's Uniform Methods Project.*

3. Example—PacifiCorp Multiple State Low Income Evaluation Proposal DRAFT (Cadmus): *We have based our proposed approach for verifying savings on industry best practices in performance monitoring and verification. Our approach uses state-of-the-art data collection and analytic methods, consistent with those recommended in IPMVP and Uniform Methods Project (UMP) Protocols.*

4. Example—Dayton Power & Light 2015 Evaluation, Measurement, and Verification Plans (Cadmus): *Cadmus will calculate a revised delta watts ratio based on an updated baseline calculated with the in-store shelf stocking study results and following the approach outlined in the Uniform Methods Project (UMP).*

5. Example—Alliant Energy/Interstate Power and Light (Iowa) Evaluation, Measurement, and Verification Plan DRAFT (Cadmus): *The selected third-party EM&V contractor will be expected to develop a detailed EM&V plan tailored to IPL's program portfolio that relies on industry best practices and peer-reviewed methods, consistent with commonly accepted protocols such as those developed in the U.S. Department of Energy's Uniform Methods Project (UMP).*

Evaluation Guidance

1. Generic Text: M&V activities conducted for this measure [or program] must adhere to the methods described in the Uniform Methods Project (UMP), where applicable. Should the evaluator deviate from the UMP method, the evaluator must document the rationale for that decision.

2. Example—Evaluation, Measurement and Verification in Virginia (Clean Energy Solutions, Inc., Virginia Energy Efficiency Council, and Virginia Department of Mines, Minerals and Energy): *Common frameworks and protocols allow consistency, transparency, and streamlined processes, and should be adopted or developed across all areas discussed below. For example, DOE's Uniform Methods Project (UMP) for project-specific M&V approaches provides useful guidelines for program administrators and M&V practitioners. This resource is detailed in the M&V Approach section below.*

3. Example—Pennsylvania Act 129 Evaluation Framework: *These EM&V guidelines are based on the Uniform Methods Project (UMP) Protocols, which are consistent with the IPMVP Option C – Whole Facility for annual energy savings and coincident peak demand savings, respectively. The UMP recommends utilizing a billing analysis to estimate total savings when multiple measures and retrofits have been installed on site in order to capture the combined effects of the installed measures or when the measure is anticipated to yield substantial savings.*

4. Example—Evaluation, Measurement & Verification Guidance (NYS DPS): *A more detailed reference document that provides protocols for specific measures is the Uniform Methods Project. This Guide and Protocols have been produced with input from diverse nationwide teams of respected energy and evaluation program experts, including members from New York State. It is impractical and unnecessary for this Guidance to recreate a similar work product, rather these resources are provided as references to program administrators and evaluators as examples of generally accepted evaluation approaches to be considered in the conduct of their EM&V work.*

5. Example—2017 Gas Demand-Side Management Annual Conservation Plan (Avista Utilities): *Application of the principles of the International Performance Measurement and Verification Protocol serves as the guidelines for measurement and verification plans applied to Avista programs. Additionally, the recent compilation of EM&V protocols released under the U.S. Department of Energy's Uniform Methods Project will be considered and applied where possible to support consistency and credibility of the reported results.*

6. Example – 2015 Energy Efficiency Evaluation, Measurement and Verification Annual Plan (Avista Utilities): *For programs with a majority of savings or particular aspects of interest, such as a high level of uncertainty, impact evaluations will consist of detailed impact evaluations using protocols from the Uniform Methods Project, International Performance Measurement and Verification Protocol (IPMVP) and other industry-standard techniques for determining program-level impacts.*

7. Example—Draft Energy Efficiency Transition Implementation Plan 2017-2020 (Consolidated Edison Companies of New York): *All impact evaluation work will comply with evaluation guidelines and industry standards such as the 2012 State and Local Energy Efficiency Action Network ("SEE Action") Energy Efficiency Programs Impact Evaluation Guide and the Uniform Methods Project, as appropriate.*

Technical Reference Manuals (TRMs)

1. Example—Pennsylvania 2016 Technical Reference Manual: *The ISR is based on an installation rate "trajectory" and includes savings for all program bulbs that are believed to be installed within three years of purchase as established in the DOE Uniform Methods Project (UMP), Chapter 21: Residential Lighting Evaluation Protocol. February, 2015. This protocol estimates the three-year ISR based on a researched first year ISR. For the purposes of this TRM, a 79% first year ISR was used based on intercept surveys conducted in the PECO service territory (Navigant Consulting, Inc. "Final Annual Report to the Pennsylvania Public Utility Commission. Prepared for PECO. Program Year 5". November, 2014.) Using the UMP trajectory, a total of 93% of all bulbs are installed within three years of purchase…*

2. Example—Missouri Technical Reference Manual – 2017– Volume 1: Overview and User Guide: *The MO-TRM 2017 is built on best-practice approaches to TRM development, including the U.S. Department of Energy's Uniform Methods Project protocols, when relevant, and includes enhancements informed by experience in other jurisdictions when appropriate.*

Learn More

For more information about the UMP and to download the corresponding protocols, visit the website: ***https://www.energy.gov/eere/about-us/ump-home.***

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