NATIONAL POLICY ACTIVITIES

This section of the EM&V Resource Library provides information about national EM&V policies, activities, and projects.

American Recovery and Reinvestment Act of 2009 - State Energy Program - The U.S. Department of Energy State Energy Program (SEP) will distribute \$3.1 billion to the states under the American Recovery and Reinvestment Act (ARRA) of 2009. The mission of the State Energy Program is to provide leadership to maximize the benefits of energy efficiency and renewable energy through communications and outreach activities, technology deployment, and accessing new partnerships and resources.

The U.S. Department of Energy has developed reporting requirements for SEP Recovery Act programs that include evaluation guidelines. The evaluation guidance addresses both administrative and management efforts and technical standards pertaining to the methods used to conduct program evaluations.

Please visit NEEP's Policy Outreach and Analysis website for more information about Energy Efficiency and Economic Recoverythrough the ARRA.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) - ASHRAE developed Guideline 14 to fill a need for a standard set of energy (and demand) savings calculation procedures. Guideline 14 is intended to provide a minimum acceptable level of performance in the measurement of energy and demand savings from energy management projects applied to residential, commercial or industrial buildings. Measurement can serve as the basis for commercial transactions between Energy Service Companies (ESCOs) and their customers, or other energy conservation providers that rely on energy savings as the basis for repayment of the costs of a retrofit. View a Summary of ASHRAE Guideline 14.

ASHRAE has adopted a new set of climate zones that were developed based on analysis of the 4775 NOAA weather sites and statistical analysis of regional information. The new climate zones are entirely set by county boundaries. The development of the climate zones is documented in ASHRAE papers identified in the above link.

Better Data Better Design (BDBD) Project - The BDBD project is a collaborative, cost-shared service offered by D&R International that focuses on collecting high quality empirical data to address energy efficiency challenges in the marketplace identified by utility and program administrator subscribers. The aim is to support the design of high-performing energy efficiency programs that realize more claimed energy savings. More information about the BDBD project is available here.

Clean and Efficient Energy Program (CEEP) for Public Power - CEEP's web platform encourages the sharing of experiences, best practices and educational resources among energy efficiency program managers at public power utilities. Stakeholders can learn about and discuss aspects of energy efficiency program design, implementation and evaluation, while making connections with peers and energy efficiency experts. The web platform includes a comprehensive resource library where users can access advice, how-to guidance, and case studies gathered from public and private sector leaders. CEEP, a nationwide initiative with a mission to promote and support the energy efficiency efforts of locally-owned utilities, is a partnership of the Alliance to Save Energy, the American Public Power Association, and the Large Public Power Council.

Efficiency Valuation Organization (EVO), International Performance Measurement and Verification Protocol -The IPMVP provides an overview of current best practice techniques available for verifying results of energy efficiency, water efficiency, and renewable energy projects in commercial and industrial facilities. Energy conservation measures covered in the protocol include fuel saving measures, water efficiency measures, load shifting and energy reductions through installation or retrofit of equipment, and/or modification of operating procedures. The 2012 edition of the IPMVP was released in January 2012.

Energy Information Agency - Residential Energy Consumption Survey (RECS) Data - Detailed data for housing unit size estimates from the 2009 Residential Energy Consumption Survey (RECS) include total and average square footage by selected home characteristics, including geography, housing type, and income level. This data series also includes separate estimates for heated and cooled square footage.

EIA is finalizing initial Consumption and Expenditures (C&E) estimates from the 2009 RECS. The first C&E data series, which will include summary totals and intensities, will be released shortly.

Federal Energy Management Program (FEMP) - FEMP has established standard procedures and guidelines for M&V for federal energy managers, procurement officials, and energy service providers. View the Measurement and Verification (M&V) Guidelines for Federal Energy Products, V3 and other FEMP guidelines and resources.

Federal Energy Regulatory Commission (FERC) - The Federal Energy Regulatory Commission is an independent agency that regulates the interstate transmission of natural gas, oil, and electricity. FERC also regulates natural gas and hydropower projects.

See the comments NEEP submitted on July 27, 2012 in response to FERC's NOPR to adopt the NAESB Wholesale M&V Standards by reference.

Institute for Electric Efficiency/The Edison Foundation - IEE is a program of the Edison Foundation, a 501(c)(3) charitable organization, and is governed by a Management Committee of electric industry executives. IEE's goals are to: advance energy-efficiency practices and demand response among electric utilities, promote the sharing of information, ideas, and experiences in energy efficiency and demand response in the power sector, and develop a resource base of effective business models, practices, and processes.

International Energy Agency - The International Energy Agency (IEA) is an autonomous organization which works to ensure reliable, affordable and clean energy for its 28 member countries and beyond.

Founded in response to the 1973/4 oil crisis, the IEA's initial role was to help countries coordinate a collective response to major disruptions in oil supply through the release of emergency oil stocks to the markets. While this continues to be a key aspect of its work, the IEA has evolved and expanded. It is at the heart of global dialogue on energy, providing authoritative and unbiased research, statistics, analysis and recommendations.

See IEA's 2011 report: Evaluating the Co-Benefits of Low-Income Energy Efficiency Programs.

National Action Plan for Energy Efficiency (NAPEE), now SEE Action Network - NAPEE is a private-public initiative that began in the fall of 2005 to create a sustainable, aggressive national commitment to energy efficiency through the collaborative efforts of gas and electric utilities, utility regulators, and other partner organizations. NAPEE's goal is to achieve all cost-effective energy efficiency by the year 2025. View the Model Energy Efficiency Program Impact Evaluation Guide, a resource of the National Action Plan for Energy Efficiency.

In early 2010, the NAPEE initiative evolved to be the State Energy Efficiency Action Network (SEE Action). SEE Action is led by US EPA and US DOE to help states achieve maximum cost effective energy efficiency improvements

in homes, offices, buildings and industry by 2020. Through the network, DOE, EPA and other member organizations assist states with their energy efficiency initiatives, including residential efficiency programs, financing solutions, and improving availability of energy usage information. The SEE Action Network drives energy efficiency by using a broad set of goals developed in the National Action Plan for Energy Efficiency, but will strive to reach these goals five years earlier than originally envisioned. View the SEE Action EM&V webpage.

The leadership group of the National Action Plan for Energy Efficiency has formed an EM&V Technical Work Group, made up of 21 EM&V experts and policy makers from across the country. Several studies have been conducted in support of this work group including:

- Survey of Current Energy Efficiency Program Evaluation Practices and Emerging Issues, conducted by Lawrence Berkeley National Laboratory, in collaboration with Itron and Schiller Consulting.
- Review of Evaluation, Measurement and Verification Approaches Used to Estimate the Load Impacts and Effectiveness of Energy Efficiency Programs, conducted by Lawrence Berkeley National Laboratory, in collaboration with Itron and Schiller Consulting.
- National Energy Efficiency Evaluation, Measurement and Verification (EM&V) Standard: Scoping Study of Issues and Implementation Requirements, conducted by Lawrence Berkeley National Laboratory, in collaboration with Itron and Schiller Consulting.
- EM&V of Residential Behavior-Based Energy Efficiency Programs: Issues and Recommendations, prepared by Annika Todd, Elizabeth Stuart, and Charles Goldman of Lawrence Berkeley National Laboratory, and Steven Schiller of Schiller Consulting, Inc., under contract to the U.S. Department of Energy.

National Association of Energy Service Companies (NAESCO) - NAESCO is a national trade association that has been promoting the benefits of the widespread use of energy efficiency for over 20 years. On behalf of its membership, NAESCO works to help open new markets for energy services by directly promoting the value of demand reduction to customers through seminars, workshops, training programs, publication of case studies and guidebooks, and the compilation and dissemination of aggregate industry data.

North American Energy Standards Board (NAESB) Demand Side Management and Energy Efficiency (DSM/EE) project - NAESB serves as an industry forum for the development and promotion of standards for wholesale and retail natural gas and electricity. NAESB has developed M&V standards for wholesale and retail demand response, and is now working to develop wholesale energy efficiency M&V standards and retail energy efficiency M&V model best practices (MBPs).

US Department of Energy: Office of Energy Efficiency and Renewable Energy (EERE) - The EERE maintains a program evaluation website that provides information about how program evaluations are designed and implemented and how evaluation professionals manage studies. The intended audience is program staff and managers who are responsible for planning, commissioning, managing, and utilizing program evaluation studies. View EERE evaluation resource documents.

- The US DOE recently published an updated guide, LED Luminaire Lifetime: Recommendations for Testing and Reporting. This guide was developed by a working group created by DOE and the Next Generation Lighting Industry Alliance.
- The EERE funded a study, A Survey of the U.S. ESCO Industry: Market Growth and Developments from 2008 to 2011, by Lawrence Berkeley National Laboratory, in collaboration with the National Association of Energy

Service Companies. The study found that ESCO industry revenues from energy services grew 7% per year between 2006 and 2008, with 2008 total industry revenues of \$4.1 billion, despite a downturn in the general economy. ESCOs project that revenues will increase by about 26% per year from 2009 to 2011, which LBNL used to develop an estimate of aggregate industry revenues of \$7.1-7.3 billion in 2011.

US Environmental Protection Agency: Calculating Energy Savings - This US EPA website includes information about types of EM&V, basic approaches to measuring impacts, planning and conducting an impact evaluation, and links to additional EM&V resources. The US EPA is also conducting a webinar series that covers a range of issues and challenges currently faced by commissions, energy offices, and other entities working to advance evaluation, measurement, and verification. It highlights key EM&V issues and challenges, and provides information on the resources available to help jurisdictions achieve their evaluation objectives.

See US EPA's 2012 energy efficiency/renewable energy (EE/RE) Roadmap Manual.