



BEFORE THE VIRGINIA STATE CORPORATION COMMISSION

In the matter of adopting new Rules : Docket No. PUR-2017-00047
Governing the Evaluation, Measurement, :
and Verification of the Effects of Utility- :
Sponsored Demand-Side Management :
Programs :

COMMENTS OF AMERESCO, INC.; CREE, INC.; THE DOW CHEMICAL COMPANY; SCHNEIDER ELECTRIC; UNITED TECHNOLOGIES CORPORATION; THE NATIONAL ASSOCIATION OF ENERGY SERVICE COMPANIES (NAESCO); AND THE POLYISOCYANURATE INSULATION MANUFACTURERS ASSOCIATION (PIMA)

As a group of manufacturers and service providers with a significant Virginia footprint, we commend the Commission for its efforts to promulgate rules to evaluate, measure, and verify (EM&V) the impacts of utility demand-side management (DSM) programs.

As large employers and major energy consumers, we understand firsthand how energy policies affect the cost of doing business and a state’s economic competitiveness. Our businesses strongly support policies that advance energy efficiency and demand response because consumers and businesses benefit when we eliminate energy waste and reduce peak demand. Energy efficiency and demand response programs are the lowest-cost energy options available. By investing in these resources we can reduce total energy costs for all customers, mitigate the impact of fuel and electricity price increases, and build a more affordable, reliable electricity system for the businesses and people of the state.

A standardized and transparent EM&V protocol is critical for demonstrating and documenting the actual impact and value of energy efficiency investments and to inform future planning efforts. To be effective, EM&V policies must balance precision, accuracy, and cost-efficiency, while acknowledging the practical limits of data availability

and ensuring that requirements are not overly burdensome and costly to implement. EM&V policies should also be reasonably flexible and open to alternative methodologies where applicable in order to address the wide range of DSM programs in an effective and cost-efficient manner. With this in mind, our companies have identified four initial areas where the draft rules should be modified in order to achieve this appropriate balance.

Recommendation 1: Section 20VAC5-318-40 (C) should include an assessment of spillover in addition to free-ridership.

Regarding the net savings estimate set forth in the rules, for which the rules specify an adjustment for free ridership, the EM&V planning documents should include an assessment of spillover in addition to free-ridership, where appropriate and practically feasible. Spillover refers to savings due to additional energy-efficient equipment installed or actions taken by a customer that were influenced by the DSM program but without any financial incentives or technical assistance provided by the program to the customer. Accounting for free-ridership only may undercount the total net energy savings delivered by an energy efficiency program. As a result, the benefits of energy efficiency may be undervalued.

Suggested language addition:

“C. EM&V planning documents shall include measure-level estimates of kilowatt, kilowatt-hour, and dekatherm savings as appropriate. An estimate that has been adjusted for free-ridership **and spillover** as well as an estimate that has not been adjusted for free-ridership **and spillover** should be included as appropriate.

We also recommend that fundamental EM&V issues such as savings reporting on a net or gross savings basis, and the use of appropriate baselines, should be addressed as part of a stakeholder process, which we propose below.

Recommendation 2: Section 20VAC5-318-40 (F) data collection requirements should apply where feasible and practical.

There are many types of energy efficiency programs for which the collection of nameplate efficiency ratings and serial numbers of serviced or replaced equipment is not feasible. Examples include some small business and residential programs that rely on customers themselves to install energy efficiency improvements, such as lighting or smart thermostats.

Suggested language addition:

F. EM&V planning documents for DSM measures or programs shall include a description of the controls to be used by the utility to verify proper installation of the proposed measures and programs, as appropriate. Additionally, **as appropriate and practical, and for programs in which participating contractors and**

subcontractors install the measures, plans shall require the contractors and subcontractors that will be implementing the measures or programs to record details of serviced or replaced equipment, to include, at minimum:

Recommendation 3: Section 20VAC5-318-40 (G) should allow alternatives to the IPMVP protocols to evaluate programs or measures at the end-use or measure-specific level where appropriate.

Some energy efficiency programs or measures, such as mass-market or upstream programs that may address one end use, or that have a relatively small impact on total facility load, or that are focused on market-wide adoption rather than single-facility impacts may be more appropriately evaluated using alternative methodologies. Alternative methodologies are sometimes necessary either to provide accurate results or to keep EM&V costs manageable.

Suggested language addition:

G. Generally, EM&V planning proposals should comply with Options A, B, C, or D from the International Performance Measurement and Verification Protocol (March 2002). However, the commission recognizes that each utility has unique characteristics and new or modified DSM measures are constantly being developed. **In addition, some energy efficiency programs or measures are more appropriately evaluated using alternative methodologies that focus on relatively small impacts using end-use or measure-specific data, or on market-wide adoption rather than single-facility impacts (such as for upstream or mass-market programs).** As such, alternative methodologies may be considered with sufficient supporting documentation and explanation of appropriateness.

Recommendation 4: Section 20VAC5-318-50 (F) data collection requirements should apply where practical and where data is available.

There are some energy efficiency programs for which the data collection requirements outlined in Section 20VAC5-318-50 (F) are not feasible because savings by individual program participants are not tracked. Examples include some residential lighting and appliance/equipment programs.

Suggested language addition:

F. EM&V reports for any ongoing DSM measures or programs shall include a comparison of the measured annual measure or program savings estimates to the annual usage of an average customer in each rate schedule to which the measures or programs is being offered, **as practical and where the data is available.** A comparison to originally submitted estimated savings for the measures or programs shall also be provided, **as practical and where the data is available.** This will include a calculation of the expected savings as a percentage of the annual usage of the eligible average customer.

Our businesses would welcome further conversation on our suggestions or to address any questions that you may have. In addition to these technical comments on the EM&V rules, we support a stakeholder process around the EM&V rulemaking. For example, fundamental EM&V issues such as savings reporting on a net or gross savings basis, and the use of appropriate baselines, would be best addressed as part of a stakeholder process, with the opportunity for discussion. Such a process would offer a platform for stakeholders to converge on common ground and draw from existing efforts and experience at the utility, state, and regional level to ensure a successful EM&V program for the state.

Thank you for the opportunity to offer these comments.

Sincerely,

Ameresco, Inc.

Cree, Inc.

The Dow Chemical Company

Schneider Electric

United Technologies Corporation

The National Association of Energy Service Companies (NAESCO)

The Polyisocyanurate Insulation Manufacturers Association (PIMA)