



Good morning Commissioners. Thank you for your attention to this important set of decisions on EM&V protocols and for holding this public hearing. I'm Cynthia Adams, Chair and co-founder of the Virginia Energy Efficiency Council. The VAEEC is a nonprofit organization composed of a broad coalition of businesses, academics, local governments, utilities, and advocates in the energy efficiency industry, working to assess and support programs, innovation, best practices, and policies that advance energy efficiency in Virginia while providing a forum for stakeholder interaction.

Over the last six years the VAEEC has facilitated a number of substantive conversations with stakeholders in energy efficiency – with utilities, commission staff, state and local government, nonprofits, Fortune 500 businesses, and homeowners. In almost every conversation, the importance of verified performance data has come up because without it, energy efficiency is continually relegated to the realm of a faith-based energy resource – do you “believe in it”? To which I say, of course we believe in it – the state has passed legislation to support a voluntary goal for achieving 10% electricity savings, and the SCC has stated this goal is achievable through cost effective measures.

However, as an appointed member of the Governor's Executive Committee on Energy Efficiency, I regret to say that we're nowhere near achieving that goal, and we won't come close to reaching it based on approved programs and programs currently slated into our IOU's integrated resource plans. The VAEEC seeks to work with utilities and regulators to support a process that brings more energy efficiency program benefits to ratepayers. This is why we are here today.

The VAEEC convened a broadly representative coalition of stakeholders interested in submitting comments, and we worked with DMME and other partners on a Department of Energy State Energy Program grant to commission a paper from the well-known and respected Synapse Energy, a consulting firm that provides data driven analysis of the electric power sector for public interest and governmental organizations. Their “*Evaluation, Measurement, and Verification in Virginia*” (Attachment A) informs our recommendations and response.

Establishing a uniform EM&V protocol across utilities and their programs would contribute greatly to the quantification, validation, transparency, and level of confidence assignable to the quantitative impacts of EE measures and programs sponsored by regulated utilities in Virginia. We recommend the SCC consider a stakeholder process, similar to the successful one developed by Arkansas, to develop these protocols. Uniform EM&V protocols would provide certainty that results derived from M&V measures included would be accepted as accurate results by the SCC. They would also provide certainty for utilities about how lost revenue is calculated, to the extent that lost revenue is derived from efficiency programs with results measured using these M&V protocols.

An additional topic which should be explored in a stakeholder process is the creation or identification of a third party to review EM&V compliance. This review should not be duplicative of the utilities' own evaluations, nor a cost burden. The review by a third party EM&V consultant could concentrate on the utility's EM&V practices and reports assuring consistent execution with the “approved EM&V” plan and the specific EE program requirements.

With respect to EM&V protocols themselves, “enhanced EM&V” methods provide opportunities for utilities and regulators to gain program insights in near real-time, speeding up the evaluation process and reducing the

associated costs. Depending on the methodology and as explained in the Synapse report, enhanced EM&V does not require a smart meter or in home energy monitoring device to be effective. Enhanced EM&V can enable Virginia energy efficiency programs to develop a strong, data-driven footing from which to expand programs and offerings to customers. As documented in an ACEEE report on the topic of EM&V 2.0, enhanced EM&V that results in lower costs to ratepayers and shortens the program performance feedback cycle, will enable better long term program performance and greater customer satisfaction¹.

In addition, a statewide Cost/Benefit Test framework would benefit from enhanced EM&V as well. Enhanced EM&V increases the accuracy of the cost/benefit tests by quantifying more accurately one of the crucial test inputs: energy saved. Enhanced EM&V has particular potential for determining when energy is saved, therefore providing a much more accurate quantification of reduction in peak demand, as well as reduction in total energy consumption.

Enhanced EM&V or EM&V 2.0 can be especially useful in establishing deemed savings for creating or updating a state TRM. While automated EM&V tools measure savings at the meter, they also provide robust, local primary data sources for parties studying, *creating and calibrating deemed savings*. For example, we know in residential energy efficiency programs that when contractors perform an energy audit of the home, they make savings projections based on engineering algorithms for equipment upgrades, but those projections can vary significantly from actualized savings. However, if contractors “true up” their calculations by calibrating them to past energy usage via utility bills, the projections become much more accurate. So too can EM&V 2.0 provide us with a means to true up our deemed savings calculations for accuracy. Ideally, Virginia deemed savings referenced in cost/benefit tests and subsequent EM&V should be standardized to a single, local TRM. The Virginia Energy Efficiency Council recommends a stakeholder process for the adoption and/or potential development of a state TRM, overseen by an independent party and informed by results from past and current Virginia utility programs.

Finally, to respond to the SCC’s report, there are two comments with which we respectively take issue. First, energy efficiency is absolutely a dispatchable commodity in a demand response program, and an Enhanced EM&V approach can help us to better calculate benefits for that. And two, we want to clarify the definition of participant costs, as per the Synapse memo. Total program administrator costs include the costs to design, market, administer and evaluate the energy efficiency program, as well as any technical support, incentives, or rebates offered. It does not include any and all costs borne by the participant in the formula for levelized cost of saved energy.

In sum, developing a standard EM&V regime will provide consistency and transparency to evaluating utility programs. Developing a state TRM will provide the credible data we need to make accurate projections for screening utility programs. The VAEEC is especially sensitive to our stakeholders’ and members’ concerns about energy efficiency program cost and the impact that has on rates and regulatory approval. This is why we see EM&V 2.0 or enhanced EM&V as the affordable pathway that bridges deemed savings projections and measured savings outcomes.

The VAEEC will continue our work to engage and inform stakeholders on these issues, and to that end, we’ll hold a workshop on EM&V 2.0 in the September – October timeframe, to which the Commissioners and staff will be invited to attend. We hope that the Commission will hold further proceedings on these matters to support establishing a uniform protocol for EM&V, piloting an EM&V 2.0 approach, and creating a local TRM or augmenting an existing TRM with better, local data.

Thank you for your time.

Cynthia Adams, VAEEC Chair, July 12, 2016.

¹ Rogers, Ethan, et al. 2015. *How Information and Communications Technologies Will Change the Evaluation, Measurement, and Verification of Energy Efficiency Programs*. ACEEE. <http://aceee.org/research-report/ie1503>, pg 21