

Utility-Sector Energy Efficiency Performance in the Commonwealth of Virginia

Electric utilities play a critical role in delivering energy efficiency programs to customers, but simultaneous support from state regulators is fundamental to driving these investments. In a recent ACEEE ranking of the 51 largest US electric utilities on energy efficiency programs and policies, Dominion Energy ranked 50th, scoring 5.5 points out of a possible 50.¹ Both a stronger portfolio of programs and well-balanced state policies could incentivize energy efficiency and deliver deeper energy savings to all Virginians.

ELECTRIC EFFICIENCY PROGRAM PERFORMANCE (0.5 OUT OF 25 POINTS)

Energy and demand savings are the ultimate goal of energy efficiency portfolios and are strong indicators of a utility's energy efficiency performance. As depicted in the table below, Dominion's efficiency program spending and savings were among the lowest reported by large electric utilities.

Energy efficiency program performance metrics (2015)	Dominion	National Average
Net energy savings (as a % of retail sales)	0.11%	0.89%
Program spending (as a % of total revenue)	0.46%	2.70%
Low-income savings (kWh per residential customer)	0.36	5.29
Low-income spending (as a % of total efficiency program funds)	Not reported	8.93%

ENERGY EFFICIENCY-RELATED REGULATORY POLICIES (2.5 OUT OF 10 POINTS)

States can drive high energy savings from utilities by offering strong regulatory support and developing policy goals. Key mechanisms to support expanded efficiency include energy efficiency targets, comprehensive evaluation, measurement, and verification (EM&V) processes, and alternative utility business models. By enacting these regulatory mechanisms, the Virginia State Corporation Commission (SCC) can work with Dominion to expand its efficiency program offerings for customers.

Energy efficiency goals. State- or utility-established energy savings targets are an important part of achieving high levels of energy savings. In 2015 Dominion fell short of its goal to reduce total electric sales by 0.17%, a goal far lower than the average goal of 0.77% for large electric utilities nationally. The Commonwealth has a goal to reduce retail electric sales 10% by 2020. However there are no regulatory or statutory requirements for energy efficiency, the process is not currently subject to independent review. In addition to setting specific targets, Dominion could also better evaluate energy efficiency as a low-cost supply-side resource in its integrated resource planning process.

Program evaluation. To more effectively measure efficiency program performance, states and utilities can engage independent parties to oversee EM&V protocols. Although Dominion does engage a contractor to conduct EM&V, there is not currently independent review of the process. The SCC recently issued new guidelines on EM&V, but they do not require independent evaluation.

Utility business model. Adjustments to the utility business model, like decoupling and performance incentives, are essential to address the economic disincentives facing utilities when energy efficiency programs lead customers to use less electricity. Virginia does not allow electric utilities to decouple their profits from sales, nor does it offer electric utilities performance incentives for meeting efficiency program goals. The SCC could open a docket to consider performance incentives for investor-owned utilities as a driver for reaching program targets. Many states have also used full revenue decoupling to remove the disincentive to invest in electric efficiency programs.

PROGRAM DIVERSITY AND EMERGING AREAS (2.5 OUT OF 15 POINTS)

The breadth and types of energy efficiency programs indicate utility energy efficiency capability and performance. In recent years the SCC has denied many of Dominion's proposed cost-effective efficiency programs, limiting its ability to save customers money. In 2015 Dominion offered four out of 22 possible programs for residential and commercial customers, compared to a national average of 11. Dominion customers would benefit from a wider variety of energy efficiency programs, which the utility could facilitate by offering pilot programs to test new program models and emerging efficiency technologies.

Low-income programs. Low-income customers particularly stand to benefit from reduced monthly utility bills due to energy efficiency measures. In addition to the four efficiency programs mentioned above, Dominion offered several options for low-income customers. As depicted in the table above, Dominion's 2015 savings from low-income energy efficiency programs were far below the national average. However Dominion also runs an unregulated program for low-income and vulnerable populations called EnergyShare. In 2016 the utility budgeted \$10.1 million for weatherization, education, and outreach efforts under this program.²

Energy data access. These services expand customer access to energy usage data and empower them to better manage consumption. Utilities use advanced metering infrastructure (AMI), or smart meters, to model energy usage patterns and provide feedback to customers about their electricity usage. In 2015, 15% of Dominion's residential customers had smart meters, compared to the national average of 41%. Dominion offered regular residential energy data to metered customers through a Green Button program, but its commercial customers would also benefit from automated benchmarking services.

Electric vehicles. Utilities play a valuable role in promoting the adoption of electric vehicles, which are more energy efficient than conventional gasoline-powered vehicles, even when accounting for power generation and distribution losses. Dominion offers online educational materials on electric vehicles, but it does not offer rates to encourage customers to charge electric vehicles at optimal times.

Highlights and Opportunities

Dominion and the Commonwealth of Virginia have several opportunities to expand energy and cost savings for businesses and residents. The state legislature could make its voluntary 10% energy savings target mandatory to send a clear signal to market actors about the importance of energy efficiency. The SCC could approve more of Dominion's proposed programs to expand efficiency measures available to Virginians and use the National Standard Practice Manual to more accurately measure all costs and benefits of efficiency programs.³ The SCC could also require independent oversight of Dominion's EM&V processes and establish a stakeholder EM&V working group, as recommended by many Virginia stakeholders during a recent public comment process. This would improve efficiency program data, bring transparency to EM&V decision-making, and help regulators ensure prudent use of ratepayer dollars. In turn, Dominion could develop robust energy efficiency programs across customer classes and offer pilot programs that encourage the adoption of emerging efficiency technologies. The utility could extend low-income efficiency programs, either directly within its efficiency program portfolio or through EnergyShare – an expanded offering for low-income customers. Dominion could also establish savings goals that align with the state's 10% target. Implementing these strategies will deepen energy and bill savings for all Virginians.

Notes

¹ aceee.org/research-report/u1707

² www.dominionenergy.com/library/domcom/pdfs/community/energyspecial-edition-report-090116.pdf?la=en

³ nationalefficiencyscreening.org/national-standard-practice-manual/