

Energy Efficiency and Poverty in Virginia



VIRGINIA POVERTY LAW CENTER

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AFFORDABLE CLEAN ENERGY PROJECT



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VPLC



The statewide support center for legal aid in Virginia providing
ADVOCACY TRAINING LITIGATION
on the civil justice issues faced by
low-income Virginians



The Affordable Clean Energy Project (ACEP), an initiative of the Virginia Poverty Law Center (VPLC), gives a voice to low income Virginians in collaboration with other organizations on the impacts of energy costs, and expresses the need and potential for energy efficiency measures specific to low-income and underserved communities coping with current and rising energy utility costs.

A Fundamental Premise



Rates and Bills are not the same thing.

- There is a significant need to lower the energy bills of lower-income Virginians. Reducing consumption reduces utility bills, outside of changing the rate structure.
- The base rate makes up approximately 60% of the consumer's resulting electric bill. Freezing base rates was the subject of SB 1349 from the 2015 legislative session, the only portion of an electric bill that can be set lower regardless of consumption.
- The remaining 40% of a utility customer's bill is comprised of two costs. There are "riders" or fees that do not necessarily have to do with energy consumption by the rate-payer. The second is fuel rates and costs, which can increase based on consumption.
- Rate Adjustment Clause "riders" are added to the base rates to help defray the cost of meeting increased demand.
- Energy efficiency offers Virginia the potential to decrease demand through mitigating energy waste.
- For lower-income Virginians, tackling Energy Efficiency as a first line of defense, reduces consumption, and need for demand-based "riders" which can lower bills, as well as adds the other benefits of energy efficiency measures.

Energy Efficiency is a Win-Win Solution



- A least-cost energy source.
- A way for any consumer to reduce energy waste and thereby their utility bill costs. Using less energy costs less money.
 - Particularly helpful to those with lower incomes
 - Can reduce late bills and collection efforts costs
- Helps with more than just reducing energy waste costs¹:
 - Reduction in energy waste creates healthier, more comfortable living environments
 - Reduces the high energy demand that drives up energy prices, helping all Virginians
 - Can increase property values.
- A Zero carbon solution
- Investments in energy efficiency are good for local economies through work performed by local businesses.
- For every dollar invested in reducing energy waste, \$2.90 in benefits are realized.

Low-income Households



- 1 in 10 Virginians Live below the Federal Poverty Line (\$24,300/year for a family of four) (<http://vaperforms.virginia.gov/indicators/economy/poverty.php>)
- 66 percent of lower-income Virginians are renters – unable to make significant changes to prevent energy waste and lack of full control over utility costs.
- 12% or 385,000 units of Virginia’s Housing Stock is Affordable Multi-family housing
- 1 in 4 people, are burdened by combined rent and utilities that take more than 50% of their income, leaving little for all other costs of living. (US. Census 2013 Housing data and Harvard Report)
- High housing costs as a share of income for lower-income households fosters financial stress of covering everyday, regular bills, including utilities, food, and medical needs.

Utilities as a part of housing costs



- Median Housing costs for Households below poverty in Richmond is \$717, including rent and utilities. \$1568 for Northern Virginia/DC Metro Area. \$920 for Virginia as a whole. (Census Data)
- Households at or below 80% of Area Median Income pay more than twice that of median income households as a percentage of their income, three times as much as higher income households. (“Lifting the High Energy Burden in America’s Largest Cities Report” <http://aceee.org/research-report/u1602>)
- Seniors make up 20 percent of the low-income population. Their fixed incomes make them susceptible to even small shifts in utility costs.
- More than 1,700 people obtained housing and utility specific assistance by Commonwealth Catholic Charities in 2015, (Serving Richmond and Hampton Roads)
- Thousands of households, including veterans and those with disabilities received bill assistance through utility-funded programs over the last year.

Current Energy and Weatherization Programs Lower-Income Families Can Access:



- Low-Income Home Energy Assistance Program (LIHEAP)
- Department of Energy Weatherization Assistance Program
 - These two programs are both administered through DHCD in Virginia. Restrictions under the DOE grant WAP are also applied to the LIHEAP Program money.
 - LIHEAP in other states has more flexibility.
- Emergency/crisis Heating and Cooling Programs
 - Through Local Departments of Social Services and DHCD to address emergency heating or cooling needs
- Dominion Programs
 - EnergyShare – Bill assistance to households of low-income, veterans, and those with disabilities.
 - Income and Age Qualifying Home Improvement weatherization program
 - Home Energy Check-up, Heat Pump Tune-up, Heat Pump Replacement, Duct Sealing, and Appliance recycling. All Programs that will expire between December 2016 and February 2017
- AEP Program
 - Low-Income Weatherization Program (60% of state median income requirement)
 - Appliance recycling program, Home performance program, Efficient products program, manufactured housing Program, Online Energy Check-up, Residential Peak Reduction Program.
- Programs to help or encourage Energy Efficiency at the consumer level:
 - EnergySense
 - Smart Meters
 - Technology assisted devices

A Fundamental Premise Refresh



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Current Study on Utility Costs



Looking at the difference between utility costs among consumers.

Preliminary results indicate the following:

- Virginians' electric utility bills are high relative to other states, not because of our state-specific climate (ie, use of electricity for both heating and cooling periods), but rather the higher bills are due to:
 - Energy waste
 - State policy on energy and energy efficiency, or lack thereof
 - Other states with similar numbers of heating and cooling days with a similar spread of heating and cooling appliances, have lower average bills than Virginia.
- Claims that average bills are skewed higher because of larger homes in Northern Virginia, are not supported by the data.

Where Does Virginia Stand?

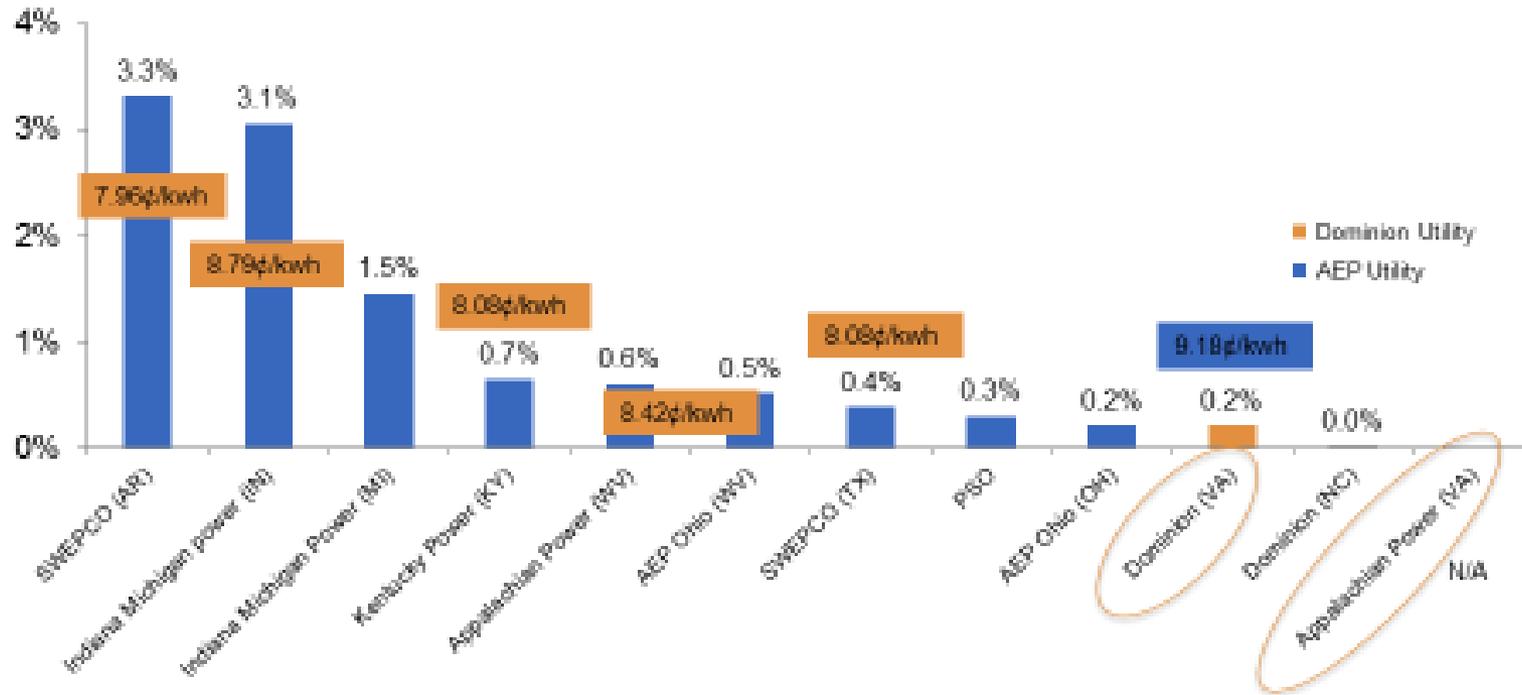


- Virginia ranks 33rd in overall Energy Efficiency efforts¹.
- Virginia's utility energy savings were some of the lowest in the country. Bloomberg Energy Finance rated Virginia as 50th out of 50 states in utility efficiency efforts based on an ACEEE analysis giving a negative score (-0.5 out of 20) for utility and public benefits programs and policies.
- Per Capita Spending on Energy Efficiency:
 - Arkansas ranks number 12 at \$25.55
 - North Carolina ranks number 31 at \$11.32
 - West Virginia ranks number 39 at \$6.72
 - Virginia ranks number 48 at \$0.01

Virginia Utilities Underinvesting in EE Relative to Sister Utilities At Expense to Ratepayers



EE Investment as % of Revenues



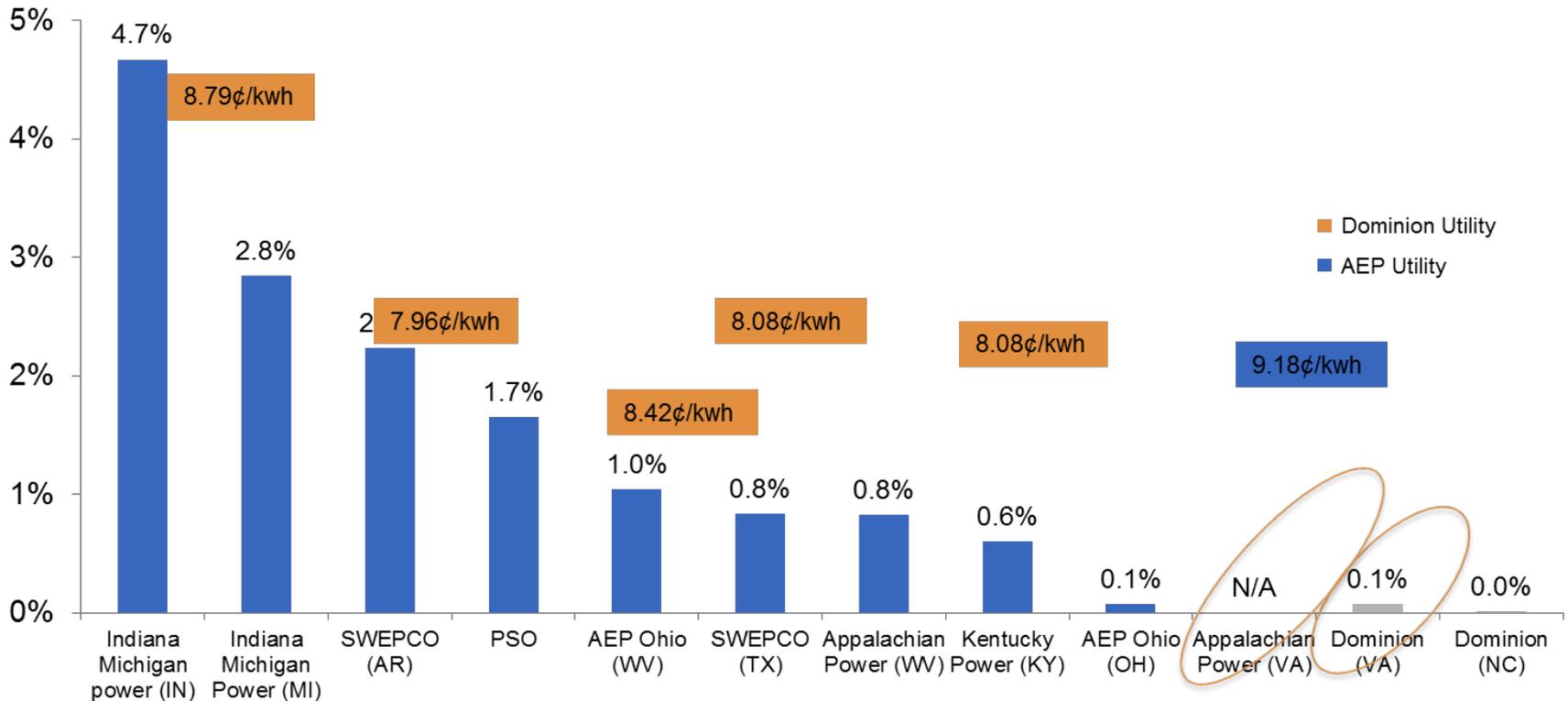
Source: EIA Form 861 (2013); Electric rates found on AEE Powersuite.

Note: Appalachian Power (VA) was not approved to run EE programs in 2013. An application to run a portfolio of EE programs is currently before the VA SCC (PUE-2014-00039)

EE Savings from Virginia Utilities Lag Behind Sister Utilities



EE Savings as % of Sales



Source: EIA Form 861 (2013); Electric rates found on AEE Powersuite.

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Scope of options from other states



- TN created EmPower for State owned and managed buildings, creating priorities to put in place very specific projects keeping the state working towards energy efficiency goals each year.
- AR - Extended and strengthened energy savings targets for utilities in the last several years.
- Decoupling Electric Utilities – Removing disincentives for reducing energy waste.
 - Removes volume of sales from efficiency or consumption sales.
 - A growing trend across the country. Virginia already does this for gas utilities.

Administrative Actions that can Make a Difference



- **Adjust Building Codes** - Current residential code is equivalent to 2009 standards.
- **Increasing flexibility of LIHEAP funds to allow coverage of more types of energy efficiency updates**
 - Removing LIHEAP from DOE restrictions can allow for greater cost savings measures installed at each residence.
 - Can increase a project's overall effectiveness
- **Residential and commercial energy use disclosure policies**
 - Effective in other states to spark behavioral changes
 - Low-cost
- **Direct DEQ to open a dialogue with Arkansas and Tennessee – leaders on Energy Efficiency in the South**

Administrative Actions Continued



- Synchronizing the GEC and Governor's 10% Energy Reduction goal with goals of the EO 57 Workgroup
 - Create an annual goal for energy efficiency savings towards the 10% overall goal.
 - Sector Goals – VA has the opportunity to be a leader in finding projects or items to work on in each sector of the economy or government, spreading impact further.
 - ✦ Multifamily housing stock
 - ✦ Lower-income housing stock
- Encourage Combined Heat and Power (CHP) opportunities
- Create more agency and state-level “Lead-by-Example” projects to save taxpayer investment, and encourage wider adoption of best practices through evidence of cost savings.

Thank You



For your interest (the good kind!)

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