

The Public Benefits of EmPOWER Maryland

In 2008, the Maryland General Assembly enacted the EmPOWER Maryland bill. Nine years later, the record is clear: EmPOWER Maryland has saved customers more than \$4 billion on their electricity bills, helped keep the lights on and avoid expensive new generation and transmission, and created thousands of Maryland jobs.

The first phase of EmPOWER Maryland aimed to reduce per capita electricity usage 10% and peak electricity demand 15% by 2015. A Maryland Public Service Commission report submitted to the General Assembly in 2015 concluded that state utilities achieved 99% of the per capita consumption goal and 100% of the peak demand reduction goal outlined in the law.

Energy efficiency programs authorized under EmPOWER Maryland are offered through the state's five largest electric utilities: Potomac Edison, Baltimore Gas and Electric, Potomac Electric Power Co., Delmarva Power & Light, and Southern Maryland Electric Cooperative. The programs offered by these utilities help homeowners and businesses save energy by offering incentives and technical assistance for adding insulation, sealing air leaks, and installing more efficient appliances, as well as facilitating the installation of efficient commercial lighting and other improvements at industrial facilities.

EmPOWER Maryland has Saved Billions

- The PSC documented \$4.39 billion¹ in savings in total customer bills over the life of energy efficiency improvements made between 2008 and 2015.
- Every dollar spent on energy efficiency measures produces \$1.82 in benefits. This benefit-cost ratio can be attributed to lower wholesale prices for energy, savings from reduced demand for electricity production, and reduced need to build new power plants and power lines.

EmPOWER Maryland Has Helped Keep the Lights On and Enhance Grid Reliability

• More than 2 gigawatts³ (GW) of capacity have been saved thanks to utility demand response programs. That's equivalent to two 1,000 megawatt (MW) power plants.

¹ The Maryland Public Service Commission, "The EmPOWER Maryland Energy Efficiency Act Standard Report of 2016," April 2016, at p.3, available at http://www.psc.state.md.us/wp-content/uploads/2016-EmPOWER-Maryland-Energy-Efficiency-Act-Standard-Report.pdf, accessed January 26, 2017

² *Ibid*, at p.4

³ *Ibid*, at p.5

 EmPOWER Maryland's demand response programs have also enhanced the reliability of the electric grid. According to PJM, the regional grid operator, these programs were able to to mitigate multiple power emergencies during the "Polar Vortex" experienced in January 2014.⁴

Energy Efficiency Costs Less than Buying More Electricity

- The least expensive energy is the energy that's not needed. The PSC found that the lifecycle cost for energy efficiency programs is 2.6 cents per kilowatt-hour (kWh) saved, compared to 6.2 cents to 9.3 cents per kWh for standard offer service.⁵
- Energy efficiency also avoids the need for transmission, distribution and other charges.

EmPOWER Maryland Has Created Thousands of Maryland Jobs

 US DOE's 2017 Energy Employment Report found 67,000 Maryland workers⁶ are currently engaged full time or part time on energy efficiency. This includes workers in traditional and high efficiency HVAC, followed by renewable heating and cooling, community action programs such as low-income weatherization, and Home Performance contractors.

EmPOWER Maryland Has Helped Low-Income Households Save Money

EmPOWER Maryland's two limited-income programs have served more than 22,000 participants⁷ since 2009 and produced cumulative energy savings of more than 1.1 million megawatt-hours (MWh).⁸

About Advanced Energy Economy Institute

The Advanced Energy Economy Institute is a nonprofit educational and charitable organization whose mission is to raise awareness of the public benefits and opportunities of advanced energy.

⁴ PJM, "Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events," May 8, 2014, p.38, available at <a href="http://www.pjm.com/~/media/library/reports-notices/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx, accessed by January 26, 2017).

⁵ Maryland Public Service Commission Order, April 2016, at p.19

⁶ U.S. Department of Energy, "2017 U.S. Energy and Employment Report," January 2017, available at

https://energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report%20State%20Charts%202_0.pdf, accessed on January 26, 2017

⁷ American Council for an Energy-Efficiency Economy, "Maryland Benefits: Examining the Results of EmPOWER Maryland through 2015," January 2017, available at http://aceee.org/research-report/u1701, Page 15, accessed on January 30, 2017

⁸ *Ibid*, at p.15