



CITIZENS UTILITY BOARD OF OHIO

Proponent Testimony by Tom Bullock on House Bill 389 Executive Director, Citizens Utility Board of Ohio House Public Utilities Committee October 27, 2021

Chairman Hoops, Vice-Chair Ray, Ranking Member Smith, and members of the House Public Utilities Committee, thank you for the opportunity to submit proponent testimony on House Bill 389 (HB 389), a bill to help utility customers save energy and money by encouraging electric distribution utilities (EDUs) to develop voluntary portfolios of energy savings programs. My name is Tom Bullock, and I am executive director of the Citizens Utility Board of Ohio (CUB Ohio).

CUB Ohio is a consumer organization working on behalf of residential and small business utility customers. We are a nonpartisan nonprofit with membership across the state, and we work for cheaper bills, reliable service, transparency, consumer rights, and clean, healthy energy.

We delivered proponent testimony on behalf of HB 389 to this on September 29, and today we continue to recommend the consumer benefits of the proposal.

To explain how energy efficiency works and why incentive programs are effective and needed, it's helpful to review some background.

Do markets work on their own? Survey data on baseline consumer adoption of energy efficiency

Utility energy efficiency programs are generally the result of a detailed design process to determine whether a small “nudge” (usually in the form of an incentive payment) would be a cost-effective approach to convincing consumers to invest in energy efficient measures that are often more expensive up-front but in the long run will save money for them and the whole utility system. That approach involves, as the very first step, a data-driven study to determine whether consumers are buying energy efficiency measures on their own or whether market adoption rates show consumers are leaving savings on the table.

Although Ohio utilities have not gone through this program process for several years due to the suspension of energy efficiency programs under HB 6, in the past they have used it effectively to identify cost-effective savings opportunities. For example, in AEP's last energy efficiency plan, the company surveyed residential energy usage as of 2016 and found significant percentages of inefficient technologies for space heating and cooling, lighting, and food refrigeration. At that time, only 2% of lighting in residential homes was LED (with the majority of market share going to incandescent or CFL bulbs), and only 41% of refrigerators and 28% of standalone freezers were efficient “Energy Star” models. Almost 40% of central air conditioners and a full two-thirds of room air conditioners were inefficient. All of these represent savings opportunities where targeted incentives could help consumers identify when it makes sense to get rid of an old, energy-wasting appliance or light and replace it with better technology.¹

¹ PUCO Case No. 16-574-EL-POR, AEP Energy Efficiency/Peak Demand Reduction Action Plan (June 15, 2016), Vol. 2, Appendix A, EE/PDR Potential Study, at A-8 to A-12, <https://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=1a7764f7-cb9f-4a51-8fd5-3e52f0407079>.

A similar study by Dayton Power & Light in 2017 found only a tiny proportion of homes had “smart” Wi-Fi thermostats – less than 10% of single family homes and none of the multifamily units surveyed – and the company’s plan therefore targeted smart thermostats as an area where utility incentives could promote market development in an area of innovative, emerging technology.²

More recent assessments from other jurisdictions show there is still plenty of room for utility programs to support consumers in identifying and affording energy-saving technologies. Commonwealth Edison, a major Illinois utility, conducted a study of baseline consumer purchases and efficiency potential that determined almost no purchases of “smart” advanced power strips, which are important to reducing energy waste from small electronic devices that are becoming a larger proportion of home energy use. This finding was part of a broader assessment of “naturally-occurring market adoption” of efficient technologies, which showed that baseline market adoption would also capture only a small proportion of cost-effective energy savings available to consumers in sectors like HVAC, appliances, and hot water heating.³

On the national level, U.S. Environmental Protection Agency data regarding the purchase of Energy Star products shows that in 2020, only 2% of consumer purchases of electric water heaters – a growing product category – were efficient models.⁴

In all of these cases, consumers are not always buying the most cost-effective, efficient option, either because the technology is new and unfamiliar or because the up-front cost is too high even if the purchase would result in long-term savings.

CUB Ohio is focused on looking hard at the facts about whether utility energy efficiency programs can actually help reduce costs for residential and small business consumers. These facts show they can.

Why are energy efficiency programs effective?: Reviewing myths and realities

Myth: Energy waste reduction programs are unnecessary because Ohioans will conserve energy on their own.

Reality: Without the programs that would be authorized by HB 389, Ohioans will waste energy unnecessarily and leave cost-effective energy savings on the table. Years of robust evaluation of efficiency programs across the nation, including in Ohio, have shown that such programs deliver added value for customers by giving them a “nudge” to adopt cost-effective energy efficiency measures that they *otherwise would not implement*. For example,

² PUCO Case No. 17-1398-EL-POR, Dayton Power & Light 2018-2020 Portfolio Plan, Appendix A, Energy Efficiency Potential Assessment (June 15, 2017) , App. A, Fig. 41, <https://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=cbb8db40-0f90-44e2-91ca-88c8963bd232>.

³ Commonwealth Edison Energy Efficiency Potential Study: A Comprehensive Assessment of 2021-2030 Net Economic Opportunities at 20, https://ilsag.s3.amazonaws.com/ComEd-2021-2030-Potential-Study-Final-Report-rev1_Aug-2020.pdf.

⁴ ENERGY STAR Unit Shipment and Market Penetration Report Calendar Year 2020 Summary at 6, https://www.energystar.gov/sites/default/files/asset/document/2020%20USD%20Summary%20Report_Lighting%20%20EVSE%20Update.pdf.

appliance recycling programs have provided small incentives and pick-up service for families to get rid of that old, second refrigerator that might be sitting in a garage or basement without getting much use while still consuming hundreds of kilowatt-hours of electricity per month. Similarly, HVAC rebates can help encourage homeowners to choose more efficient, Energy Star-certified heating and cooling equipment that will save them money in the long run, when they might otherwise opt for a less efficient model with a lower upfront cost. In a highly complex and technical field like energy, tailored utility programs can help point consumers toward the best cost-saving opportunities that they otherwise might not arrive at on their own. And HB 389's robust provisions regarding achieving savings above state and federal baselines, as well as auditing savings after the fact, will ensure that utilities only get credit for the real-life impacts of their programs beyond a "business as usual" scenario.⁵

Reducing energy waste through smart policy can have big benefits. In the most recent PJM wholesale market capacity auction, energy efficiency resources contributed almost 5,000 MW – as much as two or more power plants – to meeting the region's energy needs at least cost.⁶ Most of that represents commercial and industrial energy efficiency measures, since it's more difficult to aggregate small residential efficiency improvements at the scale necessary to participate directly in the wholesale market. But utility conservation programs can similarly promote residential and small business efficiency measures that deliver significant, additive system savings at a low cost – such as AEP's 2019 efficiency programs, which reduced energy use by 85 MW and 560 MWh on an annual basis, at a levelized cost of just 3.2 cents per kWh.⁷

Myth: Energy waste reduction programs provide large profits to utilities without benefiting consumers.

Reality: Targeted incentives can help ensure that utilities are providing well-designed and well-run programs. Of course, the requirement for PUCO approval of proposed programs is designed to kick off that process by providing an avenue for Commission staff and stakeholders to provide review and input and help the Commission sort the bad apples from the good ones. The Northwest Ohio Aggregation Coalition has itself participated successfully in this process on occasion, intervening in a 2016 Columbia Gas proceeding regarding its conservation programs to advocate for a shift of program funding toward a smart thermostat rebate program. The Commission considered this input and directed Columbia Gas to make that funding shift if its other efficiency programs were not delivering the level of savings that the utility had projected.⁸

⁵ Proposed sections 4928.6639(D)(2), (E)(2); 4928.6660.

⁶ PJM 2022/2023 RPM Base Residual Auction Results at 2, <https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2022-2023/2022-2023-base-residual-auction-report.ashx>.

⁷ Case No. 20-1042-EL-EEC, AEP Ohio 2019 Portfolio Status Report of the Energy Efficiency and Peak Demand Response Programs at 9, 12, <http://dis.puc.state.oh.us/TiffToPDF/A1001001A20E15B05738I01699.pdf>.

⁸ PUCO Case Nos. 16-1309-GA-UNC *et al.*, Opinion and Order (Dec. 21, 2016) at 36-37, available at <http://dis.puc.state.oh.us/TiffToPDF/A1001001A16L21B42940H02444.pdf>.

The limited incentive payments authorized in HB 389 are designed to keep that initial momentum going through the program implementation process, by avoiding a “cost-plus” approach in favor of one that rewards utilities for actually running programs efficiently after they are approved. HB 389 includes important safeguards to keep such incentives from becoming disproportionate to customer benefits, by capping the potential incentive amount far lower than has been awarded in the past and by providing for a robust program evaluation process to ensure customer savings actually materialize. This is an important element of an overall legislative framework designed to encourage utilities to voluntarily propose and implement energy-saving programs for customers that would otherwise not be available.

Myth: Energy efficiency programs force customers to pay for their neighbors’ conservation measures without getting anything in return.

Reality: Under HB 389, all utility customers will have a regular, well-publicized opportunity to opt out of paying for energy waste reduction programs if they’ve concluded they have nothing to gain from participating. If you’ve decided you don’t want to pay for your neighbor’s efficiency measures, you won’t have to.

If anything, the HB 389 opt-out provisions are a great deal for those who don’t participate in energy waste reduction programs. All of a utility’s customers are part of the same electrical grid and energy market. That means when high demand and high usage lead to high prices, everyone pays those prices regardless of how efficient they are in their own homes. It’s the same as how we all pay higher gas prices when travel peaks over Labor Day weekend, even if we’re just staying around town. Conversely, when your neighbor’s usage goes down – especially at peak times of grid stress – that puts downward pressure on your energy costs too. So if you’ve opted out of paying for energy waste reduction programs, and those programs reduce energy usage and energy prices for everyone, you’ll be getting some of the benefit even without paying for it.

Myth: HB 389 would prevent energy efficiency programs from taking advantage of competitive forces to deliver the best value to customers.

Reality: Although HB 389 would allow utilities to propose energy efficiency programs that provide net benefits for their customers, it is the competitive marketplace that would ultimately deliver those benefits as efficiently as possible. When the PUCO approves a utility energy efficiency program, the utility bids out the work of running the program to a third party vendor in a competitive process. In addition, programs are generally open to all manufacturers of qualifying technologies and providers of eligible services, allowing a customer to shop among competitors and select the product or service provider that offers the best bang for their buck.

The fact is, if you look at what’s actually available in the competitive marketplace today for residential customers, it doesn’t often include the type of broad energy management assistance that utility energy waste reduction programs can provide. There are HVAC

contractors trying to help customers maintain comfort temperatures at home and retail suppliers trying to make sure they have the energy they need to power their household as a reasonable price, but a one-stop shop for reducing energy waste based on the best information and most advanced technologies is something that we just don't see being offered to many Ohioans. HB 389 will allow Ohio electric utilities to find those gaps and propose programs to help fill them cost-effectively.

Thank you for the opportunity to provide proponent testimony on behalf of HB 389. I am happy to answer your questions.