

**Sierra Club Ohio Chapter Opposition to HB 6**

**Testimony of Ned Ford, Ohio Chapter Conservation Chair**

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Our written comments will identify most of the major flaws in HB 6. These are serious and numerous. Our greatest concern is the harm that would be done if HB 6 is passed, by disrupting Ohio’s existing efficiency standards.

Although HB 6 purports to allow efficiency programs to proceed on a voluntary basis the termination of the existing programs and introduction of a voluntary standard will inject a host of uncertainties and obstacles into the smooth function of the programs today. Continuity is a part of the value produced by these programs. HB 6 was proposed without reference to any clear understanding of what the Ohio efficiency programs achieve, or how they operate.

We would welcome an opportunity to explore a more flexible approach to efficiency, but that cannot be done in the context of this legislation. If HB 6 is passed we expect to see a severe faltering in Ohio’s efficiency programs, the savings they produce and the carbon reduction they produce.

Proponents of HB 6 have often claimed that the Ohio nuclear plants are the source of 90% of Ohio’s clean energy. This is untrue. Ohio’s efficiency programs produce more than 10% of Ohio’s carbon reductions, and if existing law is left intact, the efficiency programs will cut more carbon after 2021 than the nuclear plants provide.

More to the point, Ohio and the rest of the nation must eliminate all fossil fuel use. Now that it is cheaper to replace fossil and nuclear generation with efficiency, wind and solar, there is no economic barrier to solving climate change. Ohio’s recent expansion of natural gas generation has also cut more carbon than the nuclear plants. We have to replace the natural gas generation as well, but it all starts with a proper understanding of the actual performance of the resources in question.

Ohio’s efficiency programs cost $183.9 million in 2018, and caused savings of $2.2 billion. Those savings have not been realized yet, but they are the average retail value in Ohio multiplied by the MWh savings created by the installed efficiency products and processes over a span of time that averages about 12 years. Some of the installed equipment will last 20 years or more, but the average is 12 years.

Each utility is required by Ohio law to retain an independent evaluator who produces an annual report on the efficiency program operations. These reports are filed every year with the PUCO and are clear evidence of the care that is used to produce these programs, and the value that they provide.

My written testimony includes live links to the 2018 filings in the PUCO case records which include these reports, which range from about 400 to 600 pages, and which have been filed every year since 2010, on May 15th of the year following the report period.

2018 is the first year that the Ohio utilities which conduct efficiency programs under the 2008 law have provided uniform reporting. My testimony identifies the pages and values reported (below). We have had program costs and first year savings since 2010. It is possible to identify the full value of these programs with this data alone. This means that the value created by these programs is not a surprise to those who have sought the knowledge in the past.

But the $2.2 billion savings and $183.9 million cost is simple addition of the values provided in the PUCO reports identified below. We hope the new reporting format will improve understanding of the importance of Ohio’s efficiency programs.

According to the values reported every year Ohio’s efficiency programs have cost $1.490 billion over ten years, and have installed hardware that will save approximately $9.8 billion by the time the installed equipment wears out.

This is not the complete story. It is especially unfortunate that we are in need of a swift education about the function of the Ohio efficiency programs in the context of a bill which draws attention in so many other directions.

There are other costs recovered by these programs. The values which have been testified to by other parties are a mix of additional recovery called “shared savings”, meaning that they are amounts which are determined as a function of verified net savings, and other costs which are part of a subsidy program which is exempted from termination by the language in HB 6.

Efficiency saves money two ways. The customer who participates in an efficiency program typically pays three quarters of the cost of the measure while the utility pays one quarter. The customer saves all of the energy savings – the entire savings of $2.2 billion will flow to the customers who participated in programs in 2018.

Energy efficiency also produces “capacity savings”. This is the terminology used to describe the effect of a 7 watt LED that replaces a 60 watt incandescent, or a 13 watt compact fluorescent bulb, thereby eliminating the need for 53 or 6 watts of capacity at all times, especially when electricity demand is peaking. Capacity savings are discounted for residential purposes because homeowners are not likely to be using their lights during the day. Commercial and industrial lighting are responsible for 60% of total savings and those lights are invariably operating during the summer days when peak demand occurs. Air conditioning equipment that is efficient gets higher values for peak avoidance as well.

Capacity savings are taken seriously by the PJM market. Ohio utilities bid their capacity savings into the PJM forward capacity market and are paid tens of millions of dollars for doing so. These payments are also not accounted for in the costs we are discussing here. That is less important than simply acknowledging that capacity savings are real and valuable, as we discuss further.

Elimination of 6 watts of capacity is insignificant, but Ohio’s utility efficiency programs have produced cumulative savings over the last decade amounting to more than $1.8 billion worth of new natural gas plants. By avoiding capacity, we also avoid the need for new transmission and distribution equipment, which roughly doubles the value of the avoided capacity. The value is increased as well by avoiding reserve margin. In PJM, reserve margin requirements are 18%.

Assigning a precise value to avoided capacity due to efficiency programs is subjective. The point to bear in mind is that capacity savings from efficiency are larger than program costs, and they flow to all customers, regardless of whether they participate in the programs. Several years ago, some critics of efficiency programs brought a witness to Ohio who testified that these capacity savings flow to other states in the PJM grid. This is true. What the witness neglected to acknowledge is that the states surrounding Ohio also have efficiency programs, and their capacity savings flow to Ohio.

Avoided capacity provides more value than the total cost of the programs, and ensures that non-participants in the programs benefit more than their share of the program costs.

This is further emphasized by the existence of some extremely large subsidies to industrial customers here in Ohio. These customers have opted out of the efficiency program costs, but receive tens of millions of dollars in payments from other customers because of the assumed value of their willingness to interrupt their consumption during peak times. Either those customers are providing real value worth approximately $200 million per year, and the efficiency program savings are worth many times as much, or the efficiency programs are not providing benefits to other customers and neither are the special arrangements that benefit these industrial customers.

The costs of these industrial special arrangements are included in the $4.31 in alleged savings due to eliminating the efficiency and renewables programs, but they are exempted from being terminated in the current language of the bill. The actual cost of these arrangements varies from year to year and it is easier to identify the $200 million per year average cost than to identify specifics for any company or any year. The costs are divided about evenly between FirstEnergy customers and AEP customers.

The effect of the industrial opt-out created for these and other large industrial customers is to allow them to benefit from the savings created by other customers, and not have to bear their fair share of the cost.

The testimony by some of these industrial companies in favor of HB 6 is illogical unless the effect of these special arrangements is understood. They have opted out of the efficiency program costs and they do not pay for the programs. They also do not buy power from the nuclear plants because they pay much less for power than other customers. The only rational reason for their support of this legislation is to enhance the utilities’ willingness to support the existing subsidies they receive.

When Ohio’s efficiency standards were passed in 2008 the law included, and still includes a requirement that efficiency programs pass an economic test used widely through the United States called the Total Resources Cost test. This test is designed to require that an efficiency measure or program which passes it must provide economic benefits to all customers. It does so and all of the $1.5 billion spent on efficiency programs in Ohio under this law from 2009 to 2018 have produced healthy margins of savings.

**2018 Reports on Ohio Efficiency programs:**

Search the internet for PUCO DIS (this is the PUCO Docketing Information Service). Enter the case numbers below (must include the dash) in the search box in the upper right hand corner of the page, or follow the links below:

**FirstEnergy:** 19-1020-EL-EEC (Filed 5/15/2019)

<https://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=19-1020-EL-EEC>

FirstEnergy’s 2018 Efficiency and Peak Demand savings, program costs and lifetime savings are all reported on page 4 of Appendix C in the filing.

**AEP – Ohio Power:** 19-1099-EL-EEC (Filed 5/14/2019)

<https://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=19-1099-EL-EEC>

AEP’s 2018 Efficiency and Peak Demand savings and program costs are reported on page 12 of the initial filing (Table 8, which is on the 14th page of the PDF document).

AEP’s lifetime savings are reported on page 328 of Appendix M – S (the fourth part of the filing).

**Duke Ohio:** 19-621-EL-EEC (Filed 3/29/2019)

<https://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=19-0621-EL-EEC>

Duke energy and capacity savings are on page 10 of Part 1 of the filing.

Duke lifetime energy savings are reported in Appendix L, which is on page

85 of Part 3 of the filing.

Duke’s program costs are in the rider filing 19-622 at page 36 of the pdf,

at the lowest line under Column S. The link to the Rider filing is:

<https://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=19-622&x=0&y=0>

**Dayton Power & Light:** 19-775-EL-POR (Filed 5/15/2019)

<https://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=19-0775-EL-POR>

DP&L’s 2018 EE and PRD savings are on Page 11 of the pdf file.

DP&L’s 2018 EE program costs are on page 15 of the pdf file.

DP&L’s lifetime energy savings are reported on page 123 of the pdf file.

**HB 6 Hurts Ohio’s Renewable Development**

HB 6 terminates Ohio’s Renewable Portfolio Standard. In 2017, the most recent year for which the PUCO has reported the RPS performance, the standard cost $39 million. Approximately a half billion dollars has been invested in Ohio every year since 2011 as a result of the Renewable Portfolio Standard. It is a subsidy, but it acts more like a vote of confidence which gains the trust of investors who are eager to build new cost-effective renewables.

HB 6 provides a new subsidy to six solar projects totaling 1,020 MW’s. These projects will cause approximately a half billion dollars in new investment in Ohio. The subsidy provided in HB 6 is $9.00 per MWh, which amounts to approximately twice as much per MWh as the current RPS would provide.

So HB 6 is excessive support for six projects, and then HB 6 provides no path forward for future development of solar, and nothing at all for wind development. Wind and solar prices are low enough that they do not need subsidy, but the existence of the REC market is a demonstration of good faith that helps investors decide to fund wind and solar projects in Ohio.

Ohio’s current wind resource is 818 MW’s. In 2013, before the wind setback law was changed, Ohio had 424 MW’s of wind, and approximately 1100 MW’s of wind proposals were past the Ohio Power Siting Board. Since 2014 no new wind has been proposed for Ohio. Ohio’s wind setback provision is the harshest wind setback law in the United States and it has prevented the development of an industry which can provide billions of dollars and tens of thousands of new jobs to Ohioans.

Of those proposed 1100 MW’s of wind, approximately 400 MW’s have been built since 2014. These, and the 700 MW’s of remaining permitted wind projects, were proposed and permitted in three years from 2011 to 2013. The cost of wind power has plunged since 2014, and Ohio would experience a much larger interest in wind if developers were welcomed, as opposed to being met with changing circumstances, uncertainty and hostility.

Communities should be permitted to decide whether or not to welcome wind development, but the proposed petition process in HB 6 is onerous and will likely facilitate disruption of community interests by individuals who lack a balanced perspective. The potential for this is especially clear when we note the strong support for additional wind development in the communities which already have experience with wind in Ohio.

Similarly, the entire 1290 MW’s of proposed solar in Ohio (in addition to the 1020 MW’s identified as qualifying for subsidy under HB 6 there are 270 MW’s of additional solar projects that have applied for OPSB permits, but have not yet been granted them were proposed and permitted in 2017 and 2018.

Ohio is on the verge of a massive economic boom in wind and solar development.

HB 6, far from promoting any reasonable development of a path for Ohio to move forward, confuses the market, discourages investment for no purpose, and disregards the largest shifts in price relationships that are affecting the electricity markets.

**HB 6 Provides Subsidies to Failing Nuclear and Coal Plants:**

HB 6 provides $150 million per year to two aging and failing nuclear plants. It provides another amount of money which is not limited by the proposed law, but might be in the neighborhood of $83 million per year, to bail out two coal plants, one of which is not even in Ohio. HB 6 taxes will raise approximately $174 million after 2020, until 2024 when the second tax will raise the total annual cost to perhaps 257 million. The amount of the second tax is left to the discretion of the PUCO, and the language of the bill places the very large part of the tax burden on commercial customers.

The amount of tax revenue raised by the nuclear tax is $137.4 million in 2020, and $197 million in 2021 through 2026. This is based on applying the tax rates in HB 6 to 2018 electric sales.

**The Tax Rates are Inequitably Concentrated on Commercial Customers:**

The full cost of the HB 6 nuclear tax is $1.03 per MWh for residential customers, $2.07 per MWh for commercial customers and $0.95 per MWh for industrial customers. This is especially illogical given that the purpose of the tax is to support generation resources which are allegedly valuable because they produce a lot of power. It is also illogical because the only customer group which has expressed support for HB 6 is the industrial customer group.

**The Tax Rates are Regressive:**

Both taxes impose a flat fee on residential customers which is a regressive tax that costs customers who are careful to use less electricity far more, proportional to customers who use large amounts.

The taxes would not be just if they were distributed across all customers on a per MWh basis, but they would be more just than they are as proposed.

**The Coal Plants Have No National Security Role:**

Although HB 6 describes the coal plants as National Security Generation Resources there is no relationship between these plants and the Federal government or any form of military activity or purpose. The U.S. Department of Energy terminated its relationship with these plants in 2003.

HB 6 appears to extend subsidy to these coal plants beyond the terms of existing settlements. However it does not extend the terms of the settlements, which were negotiated in good faith with additional benefits to parties and the public. In other words it benefits the owners of the plants at the expense of the customers, and provides no legitimate benefit in exchange.

**HB 6 is Hastily Conceived and Deeply Flawed:**

The legislation you are considering has not had a hearing in the Ohio House of Representatives. The original HB 6 was radically altered a number of times, but the final version which is very different from any previous version was introduced 18 hours before the House Floor vote. No one who testified in the final hours before the bill had time to read the new text carefully, least of all the lawmakers who approved it.

The atmosphere of urgency which surrounds this legislation is contrived. There was plenty of time to develop a clear argument in favor of a subsidy, if such a clear argument existed. The coal plants were clearly added as a bribe to the other three Ohio utilities. It seems to have worked.

The alleged savings produced by terminating the efficiency and renewables standards are fictitious. This bill is a large tax, and an unfairly distributed tax, and provides no value to Ohio citizens and businesses.

Nothing in this proposed legislation speaks well for Ohio. The nuclear plants have been expensive luxuries since they first raised Northern Ohio electric rates by almost 25% to spend decades in the top 20 most expensive utilities in the nation, collecting more than a billion dollars per year above the cost of electricity at the other three Ohio utilities. They claimed “stranded investment” costs in 2000 when Ohio deregulated, and received another billion dollars per year for fourteen more years.

We need this legislation to go away. But we also need to reinforce the confidence of lawmakers who are truly interested in good policy for Ohio, that there are important and exciting changes coming. Ohio can sit on the sidelines and let other states earn the many billions of dollars and reap the employment and the clean energy benefits. But why should we? We deserve to regain our role as a top manufacturing state for wind and solar equipment, which we lost as a result of the 2014 attack on efficiency, wind and solar.