

Sub. House Bill 114

Reforming Ohio's Electric Portfolio Mandates

Senate Energy and Natural Resources Committee

**Prepared Statement of Kevin Murray
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Chairman Balderson, Ranking Member O'Brien, Members of the Senate Energy and Natural Resources Committee, I am Kevin Murray. I am here today in my capacity as Executive Director for the Industrial Energy Users-Ohio ("IEU-Ohio"). IEU-Ohio is a trade association that was created more than 25 years ago to help Ohio businesses address issues affecting the price and availability of energy. I have included a list of IEU-Ohio's members in Appendix A, attached to my testimony.

The purpose of my testimony is to express general support for Sub. House Bill 114 ("HB 114") as it has been presented to the Committee by Representative Blessing. HB 114 has an impressive number of co-sponsors from both sides of the aisle. I offer my observations on the legislation as someone who has worked on behalf of customers to address the reliability and affordability of energy for over 25 years. I was involved in energy issues when the state of Ohio, regrettably, made arbitrary portfolio mandates and their hidden taxes part of Ohio law. If you want to know how much the mandates are currently costing customers each month, IEU-Ohio's mandate cost calculator (<http://www.ieu-ohio.org/mandate-cost-calculator.aspx>) may be helpful.



Origin of Ohio's Mandates – A Brief History

In 2008 and as a subordinate part of Amended Substitute Senate Bill 221 (“SB 221”), supply-side and demand-side mandates were made part of Ohio law. There was no analysis to consider their effect on reliability or the affordability of electricity. The mandates were sold based on future predictions of energy scarcity plus high and volatile prices. The considerable cost of the mandates was hidden in electric bills.

At customers' expense, Ohio's electricity portfolio mandates pick winners and losers based on expectations that existed in 2007 and 2008. And the expectations that existed in 2007 and early 2008, when Ohio adopted electricity supply-side and demand-side mandates, are very different than today's realities. They are also very different than reasonable expectations about the future.

For example, the 2008 vintage mandates assumed, among other things, that: (1) our domestic natural gas supply would soon be depleted, leaving us increasingly dependent on imported liquefied natural gas; (2) we would not realize the energy price and reliability benefits that are currently flowing from our abundant domestic shale resources; and (3) an overheated economy would continue rather than be stunningly “corrected” by the Great Recession. None – not one – of these assumptions would be regarded as credible if advanced today to support adoption of the 2008 mandates.

In the face of this undisputed mismatch between SB 221's expectations and reality, the General Assembly enacted Substitute Senate Bill 310 (“SB 310”). SB 310 called a two-year time-out in the escalation of the annual mandate compliance “benchmarks.” During this “time-out,” the mandates were evaluated through a study committee process that produced a report and recommendations.

SB 310 also contained counting or compliance measurement provisions that mostly corrected problems created at the Public Utilities Commission of Ohio (“PUCO”) during the implementation of SB 221.

And, SB 310 gave the largest electric users the right to opt out of the cost and benefits of the energy efficiency and peak demand reduction mandates through a streamlined process.

The alternative to these reforms would have been for the General Assembly to ignore reality and continue a system that forces most¹ Ohio electric consumers to pay higher and higher electric bills for the benefit of stakeholders who profit from parasitic technologies which intermittently show up for work.

As indicated above, SB 310 created a 13-member Energy Mandates Study Committee to study Ohio's mandates and issue a report and recommendations by September 30, 2015. SB 310 also stated "... that the General Assembly intends to enact legislation in the future, after taking into account the recommendations of the Energy Mandates Study Committee, that will reduce the renewable energy resource, EE and PDR mandates."² The Energy Mandates Study Committee issued a report and recommendations on September 30, 2015.

In September 2016, the Ohio Business Roundtable ("OBR") issued a report called Improving Ohio Energy Competitiveness. The OBR and its CEO-led Energy Steering Committee³ engaged in a year-long effort to improve Ohio's energy competitiveness by comprehensively addressing all aspects of oil, gas and electric power. The recommendations were supported by a comprehensive fact-base, including benchmarking, scenario modeling and detailed analysis. The OBR offered its recommendations to identify "... actions we believe Ohio business leaders,

¹ Ohio's mandates force the electric customers of Ohio's investor-owned electric distribution companies and Competitive Retail Electric Service ("CRES") providers to purchase and pay for the things that the mandates identify as "winners." These mandates do not reach the electric customers of Ohio's electric cooperatives or Ohio's municipal electric utilities.

² SB 310 Bill Summary, available at: <http://www.lsc.ohio.gov/analyses130/s0310-rh-130.pdf>.

³ The CEO-led Energy Steering Committee included Gary R. Heminger, Chairman, President and CEO, Marathon Petroleum Corporation; Nicholas K. Akins, President and CEO, American Electric Power; Charles E. Jones, President and CEO, FirstEnergy Corp.; Robert H. Schottenstein, Chairman, CEO and President, M/I Homes; Michael H. Thaman, Chairman and CEO, Owens Corning; Ward J. Timken, Jr., Chairman, CEO and President, TimkenSteel; and John Warner, Senior Partner, McKinsey & Company.

policymakers and stakeholders must take to move our state forward in the energy space.”⁴ Among other things, the OBR report stated:

The growing share of renewables in Ohio’s power generation mix, today and tomorrow, offers the state an opportunity to capture a larger market share of renewable development and manufacturing. But if legislation or mandates forced greater adoption of renewables, power prices would rise. Retail power prices are projected to increase regardless of renewable mandates, but mandates would increase prices more dramatically.

To combat rising power prices and ensure that Ohio remains competitive, the state should phase out mandates”.⁵

As the two-year time-out clock was ticking, the General Assembly passed Substitute House Bill 554 (“HB 554”). Much of what is in HB 114 was included in HB 554. The Governor,⁶ however, vetoed HB 554 and, as a result, the annual escalation in the mandates’ compliance requirements and the compliance costs loaded into customers’ electric bills have resumed. This is why the **large and small industrial and commercial customers** that are members of IEU-Ohio have, through IEU-Ohio, continued to meet with you and urge you to enact incremental reforms. And, based on our review of HB 114, we ask that you favorably consider this bill as soon as reasonably possible.

⁴ The OBR report at 2. The OBR report is attached (Appendix B).

⁵ The OBR report at 24.

⁶ Prior to the Governor’s veto of HB 554, the Governor’s office distributed information indicating that the unfrozen compliance requirements for the renewable mandate had already been achieved. See Appendix C. Among other things, the Governor’s veto message stated “Sub. HB 554 risks undermining ... progress by taking away some of those energy generation options, particularly the very options most prized by the companies poised to create many jobs in Ohio in the coming years, such as high technology firms.” See <http://www.governor.ohio.gov/Portals/0/pdf/Kasich%20Announces%20Actions%20On%20Three%20Bills.pdf?ver=2016-12-27-153214-673>. As explained in Appendix D, the Nation’s leading high-tech and retail businesses have jointly urged states to adopt the “customer choice” model to encourage high-tech and retail businesses to invest in their states. As explained below, the Advanced Energy Economy has also urged policy makers to empower customers with “choice” if they want to create a framework that will bring advanced technologies forward. **Ohio put its “customer choice” structure in place almost two decades ago. It allows companies like Amazon and Google to use “renewable” resources to satisfy 100% of their electricity demand. Amazon and Google have no such right in Kentucky, West Virginia, Indiana, Michigan or most other states.**

Expanding the Streamlined Opt-Out

As discussed above, SB 310 gave Ohio's largest electricity users the right to get out of the way of Ohio's energy efficiency and peak demand reduction mandates. For most of the state, this right did not go into effect until January 1, 2017. During the SB 310 process, IEU-Ohio pushed to extend the streamlined opt-out right to most of Ohio's businesses by making this right available to all "mercantile customers" (a defined term in R.C. 4928.01). This expansion was not included in SB 310 because some utilities asserted that a flash-cut expansion to include all mercantile customers would have, at that time, created administrative problems with regard to mandate compliance plans that were then in process. Since then we have continued to urge you to expand the streamlined opt-out to include all mercantile customers and the Energy Mandates Study Committee Report agreed that this change should be made effective January 1, 2019.

The current version of HB 114 expands the streamlined opt-out to make it available to all mercantile customers effective January 1, 2019. This lag in the effective date will allow ample time for the expansion to be folded into compliance plans.

The streamlined opt-out mechanism requires an adjustment in the energy efficiency and peak demand reduction compliance baselines so that the compliance obligation associated with the opt-out customers' kilowatt-hours ("kWh") or kilowatt ("kW") demand is not shifted to other customers. Below I offer a highly simplified illustration of how this works. In the illustration, I focus on the energy efficiency mandate but the process is exactly the same in the case of the peak demand reduction mandate.

Assumptions

- Assume an Ohio electric distribution utility (“EDU”) has two customers (a residential customer that uses 10,000 kWh per year plus a mercantile customer that uses 1,000,000 kWh per year) and, accordingly, an energy efficiency mandate compliance baseline of 1,010,000 kWh.
- Assume that the energy efficiency compliance benchmark for a particular compliance year is five percent (5%) of the compliance baseline and that the total kWh of energy efficiency required is 50,500 kWh ($.05 \times 1,010,000$) if the mercantile customer does not opt out using the streamlined opt-out provision.
- Assume that the mercantile customer elects to opt out using the streamlined process effective at the beginning of the particular compliance year.

Based on the above assumptions, and the compliance baseline adjustment that is **required by current law** whenever a streamlined opt-out becomes effective, the compliance baseline for the compliance year after the effective date of the streamlined opt-out is reduced to 10,000 kWh and the energy efficiency compliance quantity is similarly reduced to 500 kWh. The net effect of this mandatory baseline adjustment is to produce a compliance obligation that is based on the kWh usage of the remaining customers.

In addition to the mandatory compliance baseline adjustment that occurs with a streamlined opt-out, the compliance plan process at the PUCO has resulted in a separation of the overall compliance effort into two buckets. One bucket is for residential customers and the other bucket is for mercantile customers. Maintaining this current compliance plan separation also protects against cost and compliance obligation shifting as between residential and mercantile customers.

2017 and Counting

Like HB 554, HB 114 includes provisions that will recognize the energy efficiency and peak demand reduction opportunities that are available in the water, wastewater, generating plant heat rate improvement⁷ areas and, more broadly, when there are reductions in “energy intensity.”⁸

In the past, stakeholders who have urged Ohio to retain and expand its portfolio mandates have, ironically, objected to recognizing these areas for purposes of measuring compliance with the demand side (energy efficiency and peak demand reduction) mandates. These objections are designed to blind the General Assembly to things that are commonly recognized as providing meaningful efficiency opportunities. If these commonly recognized opportunities are ignored in Ohio’s law, the General Assembly will increase the cost of compliance that is paid by Ohio’s electricity consumers.

Below is an illustration of the relationship between electricity usage and water delivery and treatment functions.⁹

⁷ One of the building blocks of the so-called Clean Power Plan calls for improving the efficiency, as measured by net unit heat rate, of coal-fired electric generating plants. See <https://www.bv.com/Home/news/solutions/energy/coal-plant-heat-rate-improvements-for-clean-power-plan>.

⁸ The definition of “energy intensity” is codified in R.C. 4928.6610 as follows: “‘Energy intensity’ means the amount of energy, from electricity, used or consumed per unit of production.” This definition might also apply to “energy productivity” which is the ratio of output divided by energy input and is useful for purposes of understanding the energy efficiency potential of an industry, sector or an economy.

⁹ This illustration was used in conjunction with the Federal Energy Star programs and was prepared for a presentation involving the Salt River Project.

The Cost to Treat and Deliver Water

Getting it home:

Component	Energy Requirements
Pumping	5.41 kWh / 1000 gal
Water Treatment	

6.47 kWh / 1000 gal

Taking it away:

Waste Water Transport	.4 kWh / 1000 gal
Waste Water Treatment	4.15 kWh / 1000 gal

4.55 kWh / 1000 gal

11 kWh are required to treat and deliver 1000 gallons of water to your home. This is the same as the energy needed to power a 100 watt light bulb for 4 hours per day for a month.

In 2016, Advanced Energy Economy (“AEE”) issued a paper (*This is Advanced Energy*).¹⁰ At page 49 of this paper, you will find a discussion about the importance of recognizing the connection between energy and water systems (“Any assessment of advanced energy would be incomplete without also considering the important

¹⁰ The AEE paper is available via the Internet at <http://info.aee.net/this-is-advanced-energy>. In the early part of this paper (beginning at page 1) you see AEE’s recognition of the importance of giving customers more choices (rather than forcing them to “march up mandate mountain”).

- **Empower customers with unprecedented choice and control** – Advances in energy technology have not just changed the supply of electricity. They are also transforming the way businesses and individuals obtain and use energy. From technologies providing on-site energy to tools and technologies that control energy demand and increase energy efficiency to new options for personal mobility and the transport of goods and services, advanced energy is giving consumers and businesses the same choice and control over their energy use that they have come to expect in other sectors of the economy.
- **Increase competition in the energy marketplace** – More choice means more competition, as advanced energy technologies increase the options available to utilities, grid operators, businesses, households, and individuals with regard to energy production, delivery, and consumption. Working together even as they compete in the marketplace, these technologies are already transforming the energy system of yesterday into an increasingly diverse, dynamic, responsive, and flexible system.

See also *Energy Down the Drain: The Hidden Costs of California’s Water Supply*, Natural Resources Defense Council, August 30, 2004 available at <https://www.nrdc.org/resources/energy-down-drain-hidden-costs-californias-water-supply> and *The Connections Between Our Energy and Water Use*, Union of Concerned Scientists, at http://www.ucsusa.org/clean-energy/energy-water-use/energy-and-water#.WM_td2YzUok.

connections between our energy and water systems.”) The discussion covers both the water production and delivery cycles as well as the waste treatment cycle. The paper acknowledges (at page 49) that “[t]otal energy use related to water use is significant, equating to an estimated 3% to 3.5% of total U.S. electricity consumption, not including energy consumed by the end use of water, such as water heating, which brings the figure up to as high as 13%.”

If Ohio is going to continue requiring or encouraging, at consumers’ expense, compliance with energy efficiency and peak demand reduction mandates, it is important to recognize legitimate efficiency and peak demand reduction strategies when it comes time to measure compliance. Leaving legitimate options off the list means that the slope of the mountain gets steeper and customers pay more for the march.

I urge your favorable consideration of the counting provisions in HB 114.

Attached to my testimony, I have included materials and information that may be useful as you consider HB 114 and other energy-related proposals that may come your way.

- Appendix A** IEU-Ohio’s Member Companies
- Appendix B** Ohio Business Roundtable Report: Improving Ohio Energy Competitiveness (September 2016)
- Appendix C** Renewable Energy Resource and Energy Efficiency Benchmarks (Governor’s Office Chart)
- Appendix D** Options for Customers to Act on Their Portfolio Preferences
- Appendix E** State of Market Report for PJM, Volume 1 (March 9, 2017)
- Appendix F** Boondoggle: How Ontario’s pursuit of renewable energy broke the province’s electricity system, Terence Corcoran, Financial Post, October 6, 2016

Thank you for your service and your attention. If you have any questions, I will do my best to provide answers.

IEU-OHIO'S MEMBER COMPANIES

Abbott Nutrition	John Carroll University
Airgas, Inc.	Kent Elastomer Products, Inc.
AMAC Enterprises, Inc.	Kent State University
American Greetings Corporation	Kraton Polymers U.S. LLC
American Manufacturing Inc.	Landmark Plastic Corporation
Anheuser-Busch Companies, Inc.	Lincoln Electric Company
Appvion, Inc.	Marathon Petroleum Company
Area Aggregates, LLC	Mar-Bal Incorporated
ASHTA Chemicals Inc.	McGean-Rohco, Inc.
Ashtabula Rubber Co.	Mercury Plastics, Inc.
Aurora Plastics, Inc.	MetalTek International
Automation Plastics Corporation	MICA
Avalon Precision Casting Company, LLC	Miceli Dairy Products, Inc.
Avon Lake Regional Water	Milliron Iron & Metal, Inc.
Barberton Steel Industries	Mondeléz International
Bescast, Inc.	Neff-Perkins Company
Burton Rubber Processing	Norman Noble, Inc.
BWX Technologies, Inc.	Ohio Star Forge Co.
ClarkDietrich Building Systems	P.H. Glatfelter Co.
Cleveland Cavaliers	Paulo Products Company
Cleveland Indians	Plastipak Packaging Inc.
Cleveland Museum of Natural History	Pressure Technology, Inc.
Cobra Plastics, Inc.	Quaker City Castings
Component Repair Technologies, Inc.	Quintus Landlord LLC
Cristal USA Inc.	Rothenbuhler Cheesemakers, Inc.
DRS Industries Inc.	RTS Companies, Inc.
Duramax Marine, LLC	Saint Gobain Companies
Energizer Manufacturing, Inc.	Sajar Plastics, LLC
Eramet Marietta Inc.	Salem-Republic Rubber Company
Falcon Foundry Company	Sauder Woodworking Co.
Federal Metal Company, The	Tate & Lyle Americas, Inc.
Ferriot, Inc.	TimkenSteel Corporation
Flambeau, Inc.	Toledo Refining Company, LLC
Glen-Gery Corporation	Tri-Cast Ltd.
Globe Metallurgical, Inc.	Trilogy Plastics
GoldKey Processing, Inc.	U. S. Steel Seamless Tubular Operations, LLC
Independent Franchises DBA McDonald's	U.S. Casting Company, Inc.
Iten Industries	University of Akron
J.H. Routh Packing Company	USG Corporation
Jack Thistledown Racino	Vallourec Star
Jacobson Manufacturing LLC	Viking Forge Corporation
Jet Rubber Company	Welded Tubes, Inc.