



THE OHIO STATE UNIVERSITY

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

Testimony Before
The Public Utilities Committee of the Ohio Senate

Senator Bill Beagle, Chair

Senate Bill 155
Opposition Testimony
Of
Edward [Ned] Hill, Ph.D.
Professor of Public Affairs and City & Regional Planning
John Glenn College of Public Affairs
The Ohio Manufacturing Institute
The Ohio State University

January 10, 2018

The findings, conclusions, and recommendations expressed in this testimony are mine alone and do not represent the views of The Ohio State University, the John Glenn College of Public Affairs, or the Ohio Manufacturing Institute

Chairman Beagle and members of the Public Utilities Committee, thank you for providing me with an opportunity to testify against Substitute Senate Bill 155, version 5, (SB 155) and its likely effects on the state and regional market for electric generation.¹

My name is Edward (Ned) Hill. I am a Professor of Public Affairs and City and Regional Planning at The Ohio State University's John Glenn College of Public Affairs and a member of The Ohio State University's Ohio Manufacturing Institute. Today's testimony is mine alone and does not represent the views of The Ohio State University, the John Glenn College of Public Affairs, or the Ohio Manufacturing Institute.

I am an economist and have worked on economic development policies in general, and on issues that affect Ohio's manufacturing sector in particular, for nearly thirty years. Additionally, I have been actively engaged in research on Ohio's electricity markets over the past four years, both in testimony before the Public Utilities Commission of Ohio (PUCO) and the Ohio Legislature and in research supported by the Northeast Ohio Public Energy Council (NOPEC). I have also actively participated in research relating to Ohio's natural gas resources since 2011.

I could title this testimony "*Here we go again.*" What the committee has before it is another attempt to subsidize uneconomic legacy electric generation resources owned by Ohio's Investor-Owned Utilities (IOUs). It is a naked attempt to distort a regulated, competitive, market for generating electricity that is working for Ohioans and their employers. This bill is yet another round in a regulatory and legislative game of whack-a-mole as IOUs seek public subsidies to offset losses generated by their (or an affiliate's) nuclear and coal-fired power plants. The IOUs are, therefore, determined to

¹ *Substitute Senate Bill 155, (I_132_1316-5)*, Ohio Senate, Public Utilities Committee.

manipulate state government and the Public Utilities Commission of Ohio to claw out of electricity users what they could not earn in the marketplace.

My involvement in issues relating to preserving Ohio's competitive electric generation market began when I contacted The Ohio Manufacturers' Association in 2014 and asked to testify before the PUCO on their behalf after reading about FirstEnergy seeking subsidies through mandatory Power Purchase Agreements (PPA) in Cleveland's *Plain Dealer*.²

As an economist, I view the attempts of Ohio's IOUs to *re-monopolize* the electric generation industry through regulation and legislation and *re-balkanize* an efficient and reliable regional generation market managed by PJM Interconnect to be against the best interests of the people of the state of Ohio and harmful to the state's economic development. The goal of re-monopolization is to raise prices above competitively determined levels, thereby allowing the IOUs to keep uncompetitive, high-cost, generating assets on their books and not realize financial losses. This is the primary cost of the subsidies you are being asked to consider. Re-balkanization of the generating markets is then a necessary outcome from pursuing a policy of purchasing over-priced Ohio-generated power first, or subsidizing the purchase of expensive Ohio power. Balkanization then triggers a secondary cost: reduced system reliability.

SB 155 is no different in intent from previous efforts to rescue the investments IOUs have in uneconomic power plants that they have put before the PUCO and Legislature. This bill is unique, however, in its specifics. SB 155 is based on a false

² Funk, John. August 5, 2014. "FirstEnergy Corp. looking to rate payers to support its struggling unregulated power." *Cleveland Plain Dealer*. Retrieved from: http://www.cleveland.com/business/index.ssf/2014/08/firstenergy_corp_looking_to_ra.html

premise and ignores payments made by the Department of Energy of the United States to compensate the IOUs for the termination of the electricity contracts used to supply the Piketon Nuclear processing facility when it was operational almost two decades ago.

If enacted, SB 155 along with the PUCO's related decisions will damage the wholesale electric markets, while establishing a horrible precedent of the Legislature supporting failed business investments and compensating companies with customer dollars for business decisions that went badly wrong. SB 155, along with the actions of the PUCO concerning OVEC, is lemon socialism. The government is compensating private companies for money-losing business decisions.

The bill before you does not stand alone. December, 2017 marked the fourth-year anniversary of attempts by Ohio's IOUs to get the public to subsidize on-going losses at the OVEC plants.

1. December 2013: AEP requested recovery of OVEC losses through a non-bypassable rider,
2. May 2014: Duke Energy requested recovery of OVEC losses through a non-bypassable rider,
3. August 2014: FirstEnergy, on behalf of its affiliate, requested recovery of losses from OVEC, Sammis, and Davis-Besse through non-bypassable riders,
4. October 2014: AEP requested recovery of OVEC and other affiliate-owned power plants through a non-bypassable rider, and

5. The PUCO has approved non-bypassable riders for AEP, and Dayton Power and Light to subsidize portions of the losses associated with OVEC.³ Duke Energy is currently before the PUCO with its tin cup raised in “follow me and you come too” ratemaking.

In the testimony that follows I examine the cost of the subsidies already approved by the PUCO and those contained in SB 155, explain why they are likely to be underestimated, discuss the meaningless cap on charges that is included in the legislation, and then discuss the misleading premise for SB 155.

It is important to keep in mind that the two public policy goals of competitive wholesale energy markets. They are *to provide reliable power at the lowest cost to consumers*. As former Federal Energy Regulatory Commissioner Tony Clark wrote in his July 2017 white paper: “For many, a ‘freer market’ was never the end goal. The market was a tool. Affordable power was the goal but many state public policy makers no longer see that as the only goal ... (Electricity generating markets) were never designed for job creation, tax preservation, politically popular generation, or anything other than reliable, affordable electricity.”⁴

The electricity generating market is working in Ohio and benefiting consumers and employers. There is no economic rationale for introducing subsidies into the electricity market; they amount to nothing more than corporate welfare.

³ AEP’s customers began making payments in their January 2017 bill statements and is in effect until May 31, 2024. Dayton Power and Light collects from November 1, 2017 until December 31, 2023 under its Electric Security Plan of October 20, 2017.

⁴ Clark, Tony. July 2017. Regulation and Markets: Ideas for Solving the Identity Crisis. Wilkson Baker Knauer, p. 3. Retrieved from [http://www.wbklaw.com/uploads/file/Articles-%20News/2017%20articles%20publications/Market%20Identity%20Crisis%20Final%20\(7-14-17\).pdf](http://www.wbklaw.com/uploads/file/Articles-%20News/2017%20articles%20publications/Market%20Identity%20Crisis%20Final%20(7-14-17).pdf). Clark’s quote is also reported in: Staff Report to the Secretary of Energy on Electricity Markets and Regulation. U.S. Department of Energy, note n, page 10. Retrieved from: <https://energy.gov/downloads/download-staff-report-secretary-electricity-markets-and-reliability>

**The claims of the IOUs before the legislature are really demands of U-O-Us
The real cost of the OVEC bailout**

The Legislative Services Commission [LSC] released its estimate of the cost of the bailout of OVEC by Ohio's electricity users to the Ohio Senate on October 30, 2017, stating that "*Potentially, \$76.8 million in net impacts could be recovered annually from ratepayers for the 14-year period, 2017 to 2030. ... Actual recovery ...depends on the operating expenses, fixed costs, and borrowing costs of the two OVEC plants.*"⁵ The LSC's October *Fiscal Note & Local Impact Statement* recognized that costs to consumers will increase if additional power is produced via OVEC's contractual commitments.

What is stunning in the Fiscal Note are the data on just how poorly OVEC performed in the competitive electricity generating markets in 2016. The LSC documents that the average charge for power generated by OVEC to its member companies was \$59.10 per MWh and that the "likely revenue" that these same companies earn from the sale of this same voltage in the wholesale market is \$36.33. If SB 155 and the PUCO's approved subsidies were in place in 2016, electricity users in the footprints of these EDUs would have paid an additional \$22.77 per MWh to offset OVEC's losses. The cost of OVEC-generated electricity was 38.5 percent higher than competitively-generated power. The subsidies would have been a breathtaking 38.5 percent.

The data contained in the LSC's Fiscal Note is based on deliveries of 3,375,000 MWh of electricity to Ohio's EDUs at a time when the OVEC plants generated about

⁵ Ohio Legislative Service Commission. October 30, 2017. Fiscal Note and Impact Statement, S.B. 155 of the 132nd G.A. (L_132_1316-5), p. 4.

one-third less power than predicted in a 2011 Federal Energy Regulatory Commission (FERC) filing and the combined production from OVEC's Ohio and Indiana power plants was at 47.5 percent of capacity.^{6,7}

There is nothing in the language of SB 155 that limits either the amount of electricity that Ohio-based EDU's can sell into PJM Interconnect's wholesale power market at a loss, thereby triggering subsidy payments, or the total amount of subsidy that the IOUs can earn from Ohio ratepayers to cover additional losses. I will speak to this point later in my testimony. However, before doing so I present my estimate of the cost of the subsidy based on the data contained in the Legislative Service Commission's Fiscal Note to this committee.

Total costs over 14 and 24 years

The legislation covers 14 years, from the beginning of 2017 to 2030, making the estimated cost to Ohioans, their places of work, and their governments a minimum of \$1.1 billion (\$76.8 million/year x 14 years), not including interest that will be due on deferred costs. However, SB 155 calls for the Legislature to determine if an extension of the 2017 to 2030 time-period is in the public's interest and provides no end date for the extension. The original bill had an end date in 2040, corresponding to the end of the joint operating agreements between the owners of OVEC. Adding another 10 years to the subsidy of OVEC to reach 2040 turns the accumulated subsidy payments into \$1.8 billion (\$76.8 million/year x 24 years), not including interest on deferred costs.

⁶ Ibid, Table 2, p.4.

⁷ OVEC's reported capacity is 2,390,000 MWh with the Ohio-located Kryger Creek complex accounting for 45.4 percent of the total. Kryger Creek ran at 52 percent of its capacity in 2016 and Indiana-located Clifty Creek ran at 44 percent of its capacity. The percentage of combined capacity was calculated by multiplying each plant's proportion of combined production capacity by the percent of plant capacity that was used in 2016: $([.454 \times .52] + [.546 \times .44]) = .476$, or 47.6% of combined operating capacity.

What are these payments worth in present value terms?

Present value costs over 14 and 24 years

A present value calculation takes a stream of payments that will be made into the future, discounts the payments by an interest rate—which is the time value of money, and adds the resulting annual values together. The resulting dollar figure is the value of a lump sum payment made in the first year that is equal in value to a stream of annual payments to an investor. In the case of this legislation, the present value would be the lump sum of money paid to the utilities in 2017 instead of making annual payments. Critical to the calculation is the interest rate, or the time value of money, that is used. I am using 10.38% because this is the rate of return used by the LSC in its May 31, 2017 Fiscal Note on Senate Bill 155 regarding OVEC recovery.⁸

The minimum present value of this stream of payments to the IOUs over 14 years from this bill and riders approved by the PUCO, which is the minimum time period covered in the bill, is **\$554.6 million**. If the term is extended until the operating agreement ends in 2040, which is likely, the minimum present value of the payments is **\$671.2 million**.

I acknowledge that the subsidy in SB 155 and the riders approved by the PUCO are not actually taxes. They are legislative and regulatory mandates that saddle electricity users with increased payments to the IOUs. These are payments imposed by the Legislature and the PUCO; they cannot be avoided by the customer and they are enforced by the rule of law. That looks like a *de facto* tax to me.

⁸ Ohio Legislative Service Commission. May 31, 2017. *Fiscal Note and Local Impact Statement S.B. 155*, p. 3. LSC noted that they used 10.38% as this was the rate of return approved by the PUCO in PUCO Case No. 14-1693-EL-RDR for AEP (the largest shareholder of OVEC) regarding AEP's PPA rider and OVEC recovery.

Assume for a moment that the subsidies were actually an expenditure voted on by the Legislature. How many on this committee would endorse adding a line item in the budget for a direct payment to three of the state's IOUs of a half billion dollars that is supported by a one-time tax payment?

Four factors that will drive up the cost of the OVEC bailout

The LSC's estimate of the subsidy payments triggered by SB 155 is likely low due to four factors that are part of the bill: deferred costs, uncertain costs, a perverse incentive to increase the production of electricity from the OVEC power plants, and market distortions. There are no data available that allow for a numerical estimate to be made.

Deferred costs

LSC's October 30, 2017 Fiscal Note to the Senate stated that the "bill enables three utilities to *recover* (emphasis mine) net impact up to \$483,034 or more in future years until December 31, 2030. ... Beginning in 2031, no new charges could be billed to customers, but previously incurred charges (or credits) could continue if they were deferred by PUCO as a regulatory asset (or liability)."⁹

Deferred costs are embedded in the definition of net impact. *Net impact* is defined as "retail recovery of prudently incurred costs ... less any revenues realized from offering a contractual commitment [of generated electricity] ... into the wholesale [electricity] markets."¹⁰ *Prudently incurred costs* include "*deferred costs*."¹¹

⁹ Ohio Legislative Service Commission. October 30, 2017. Fiscal Note and Local Impact Statement, SB 155, p. 1.

¹⁰ See *Substitute Senate Bill 155*, (I_132_1316-5), lines 408-412.

¹¹ *Ibid*, lines 399-407.

The bill states that net impacts will be created by selling “all [generated electric] output ... into the wholesale market.”¹² The electric power that Ohio-based IOUs are committed to purchasing from OVEC will not be used to supply the Standard Service Offer (SSO) in their Ohio service territories. Instead, the power is sold into the wholesale market by the IOU, which records a profit or loss from the sales.¹³ The profits, if there are any, are to be credited to customers¹⁴ and the losses are passed on to customers through the “automatic recovery” mechanism, which is a non-bypassable rider.¹⁵ Note that the LSC forecasts losses. The IOUs would not be before you if OVEC was either making money or was expected to do so in the face of competition from natural gas-fired power plants.

Deferred costs will also be created from the monthly caps placed on the non-bypassable payments of households and businesses. The PUCO is charged with determining a monthly rate for the non-bypassable riders that recovers any “net impact”¹⁶ that includes any “deferrals or credits,”¹⁷ as long as the monthly charge does not “exceed two dollars and fifty cents per customer per month for residential customers and two thousand five hundred dollars per customer per month for all other customers.”¹⁸ The PUCO is instructed to defer the uncollected net impact and treat it as a “regulatory asset or liability” that can be collected as future caps allow.¹⁹

The accumulated deferred costs and interest payments come due in 2030 when

¹² Ibid, lines 408-414.

¹³ Ibid, lines 524-537.

¹⁴ Ibid, lines 413-414.

¹⁵ Ibid, lines 520; 571-574.

¹⁶ Ibid, line 1038.

¹⁷ Ibid, line 1040.

¹⁸ Ibid, line 1041-1043.

¹⁹ Ibid, lines 1046-1051.

the provisions of the bill could sunset, subject to final reconciliation.²⁰ But then again, the process could continue. Lines 1056 to 1059 compel the PUCO to conduct an inquiry in 2029 to determine if this arrangement should roll forward into the future and report its findings to the General Assembly. The way the meaning of deferred costs evolves in SB 155 has three implications for any cost estimates. First, the LSC's estimates are an understated minimum because deferred costs and the potential for associated accumulated interest payments are not considered. Second, there is every reason to expect that the real term of the subsidy to OVEC's Ohio-located owners will continue to 2040. Third, SB 155 creates an asset for the IOUs in terms of accumulated deferrals. The Legislature should consider the present value of the subsidy that is associated with this bill to be a *minimum* of one-half billion dollars in present value terms, or a *minimum* of \$1.1 billion in accumulate payments over 14 years.

Uncertain costs

The costs that are uncertain in the LSC estimate are the associated costs of maintaining the OVEC facilities and the capital investments that will be needed over the next 13 to 23 years. OVEC is moving to integrate its power production into PJM Interconnect's regional distribution system. The trade publication *RTO Insider* reports on the expectation that OVEC will have to upgrade its transmission lines to directly connect to the PJM grid, and concern over the subsidies flowing into OVEC from its Ohio-based IOU participants.²¹

²⁰ Ibid, lines 1052-1055.

²¹ Heidorn, Rich. October 30, 2017. "Unanswered Questions force Special PJM Session on OVEC Integration." *RTO Insider*. Retrieved from www.rtoindiser.com/pjm-ohio-valley-electric-cor-ovec-78910

Perverse Incentives

There is a perverse incentive in this bill for OVEC to produce more power even though it is an expensive producer. The OVEC plants are operating around 50 percent of capacity and the electricity that they sell requires a 34 percent subsidy above the wholesale market price. Sales into PJM will in all likelihood cover OVEC's incremental, or variable, costs of producing power and any revenue above this marginal cost will help pay down OVEC's fixed costs.

We also know that in a capital-intense production facility, such as a power plant, average total costs drop as production moves closer to capacity. Therefore, OVEC's members have an incentive to nudge production closer to capacity to offset fixed costs. The underlying subsidies that come from SB 155 act as an incentive to increase loss-making production and help drive down the associated fixed costs. There appears to be incentive to expand production in the face of losses. The power that is sold into the wholesale electricity market by the Ohio IOUs will be at the wholesale market price and most likely sold at a loss. But, the losses are all covered by the SB 155's subsidy scheme. This produces an incentive to maximize loss-making production and maximize the resulting subsidy. There is no cap in the Bill on the amount of electricity that Ohio's utilities can sell into the wholesale market from the two OVEC power plants and the two plants are operating far below their capacity. The Bill instructs the Ohio IOUs to "bid all output from the national security generation resource into the wholesale market",²² and that "electric security plans shall include provisions for recovery, through a non-bypassable rate mechanism, of all national security generation resource net impacts",²³

²² Ibid, lines 532-533.

²³ Ibid, lines 779-784.

and it orders the PUCO to “approve automatic cost recovery of all national security generation resource net impacts consistent with the prudence review...”²⁴

Market Distortion

The essence of a competitive market is that expensive loss-making suppliers close and their capacity withdrawn from the market. Under SB 155 this will not occur. To make something that is bad worse, the Bill has language that will encourage the operators to expand production to increase their returns from the two plants. The IOUs share two goals. The first is to use the power of either the PUCO or the Ohio Legislature to mandate the purchase of expensive existing Ohio and Indiana power and to ensure that competitive market forces do not force them to write down the asset-value of their generating assets, protecting their stock values, or to close the OVEC plants. The second is to upend, circumvent, and destroy the competitive electric generation market managed by PJM Interconnect Interconnect.

In response to the similar Bill pending before the House (HB 239), Kerry Stroup, PJM Interconnect Interconnect’s Manager of Regulatory and Legislative Affairs, informed the Legislature:

“The recovery of OVEC-related costs that House Bill 239 authorizes would enable the Ohio investor-owned utilities with OVEC shares to offer bids into the wholesale market at prices that do not reflect actual costs.

Generation resources that do not need to rely on the wholesale market to recover all of their costs are incentivized to submit lower-than-cost offers.

Such offers depress wholesale market prices for other competitive

²⁴ Ibid, lines 893-898.

generation owners in Ohio and throughout the PJM region, potentially crowding out merchant competition that relies on its market revenues alone to support investment. In the longer term, this price suppression threatens system reliability. This also results in higher power costs for retail consumers in Ohio and the PJM region by displacing more efficient, lower cost generation resources.”²⁵

Competitive markets work by having the cheapest sources of electric power being purchased first and the most expensive sources of power being purchased last – or rationed out of the market. Competitive markets work by having new, more cost effective, sources of investment displace older, less efficient, more expensive technologies. SB 155 (and HB 239) will not allow the electric generation market to determine when the OVEC plants will close, or when Ohioans will stop paying for them. Instead, they will remain open until 2030 or more likely until 2040, when the operating agreement between OVEC’s partners ends. The bill works against efficient, reliable, energy markets and will be a disincentive for adding new generation capacity into the market and will serve as a disincentive to invest in Ohio.

How Many Times Do Ohio’s Electricity Users Have to Pay?

SB 155 begins with a false premise. The OVEC plants are not a national security resource. They were established as one, but that use expired when the U.S. Department of Energy shifted nuclear processing from Piketon Ohio to a plant in Kentucky. Additionally, the U.S. Department of Energy paid OVEC’s member utilities

²⁵ Letter from Kerry Stroup, PJM Interconnect’s Manager of Regulatory and Legislative Affairs, to Chairman Cupp submitted on October 3, 2017. Retrieved on October 14, 2017 at <http://www.ohiohouse.gov/committee/public-utilities>

\$97.5 million to terminate their contracts in 2003. Why are Ohio's electricity users being asked to pay again?

There was sufficient warning that Piketon was going to terminate as a customer and there was sufficient time for OVEC and its owners to adjust to the realities of their business:

- In September 2000, the Department of Energy notified OVEC that its power purchase agreement was canceled.
- In May 2001, the Piketon plant ceased its defense operations.
- The power agreement between Piketon and OVEC ceased in 2003.
- In 2006, the status of the Piketon plant shifted from "cold-standby" to "cold-shutdown."
- In May 2011, the power agreement between Piketon and OVEC was amended to make OVEC's entire generating capacity available to other customers of OVEC.

The owners of OVEC bet on coal as the lowest cost fuel source for electricity production. Their actions, or lack of action, revealed a hedged bet: they would win if coal remained the cheapest fuel source, and they expected to win if they were wrong because they could pass on all of their losses to their members that were still regulated and use the argument of equal treatment to bailout their deregulated owners. A perfect bet: heads I win; tails I still win, just not quite as much. That, my friends, is Lemon Socialism.