OHIO LEGISLATIVE SERVICE COMMISSION

Russ Keller

Fiscal Note & Local Impact Statement

Bill: H.B. 178 of the 132nd G.A.

Status: As Introduced

Sponsor: Rep. DeVitis

Local Impact Statement Procedure Required: Yes

Subject: Authorize a rider enabling a utility to recover costs of zero-emissions nuclear credits from its customers

State and Local Fiscal Highlights

	FY 2018	FY 2019	FUTURE YEARS
Commercial Activity Tax Receipts Fund			
Revenues	Potential gain up to $0.7 million	Potential gain up to $0.7 million	Potential gain
Zero-Emissions Nuclear Resources Fund (custodial fund newly established by the bill)			
Revenues	Potential gain up to $280 million or more	Potential gain up to $286 million or more	Potential gain
Expenditures	Commensurate with actual revenue gain	Commensurate with actual revenue gain	Commensurate with actual revenue gain
Governmental customers in FirstEnergy service territories			
Expenditures	Potential increase up to $1.8 million or more	Potential increase up to $1.8 million or more	Potential increase equal to approximately 0.63% of ZEN credit costs

Note: The state fiscal year is July 1 through June 30. For example, FY 2016 is July 1, 2015 – June 30, 2016. For most local governments, the fiscal year is the calendar year. The school district fiscal year is July 1 through June 30.

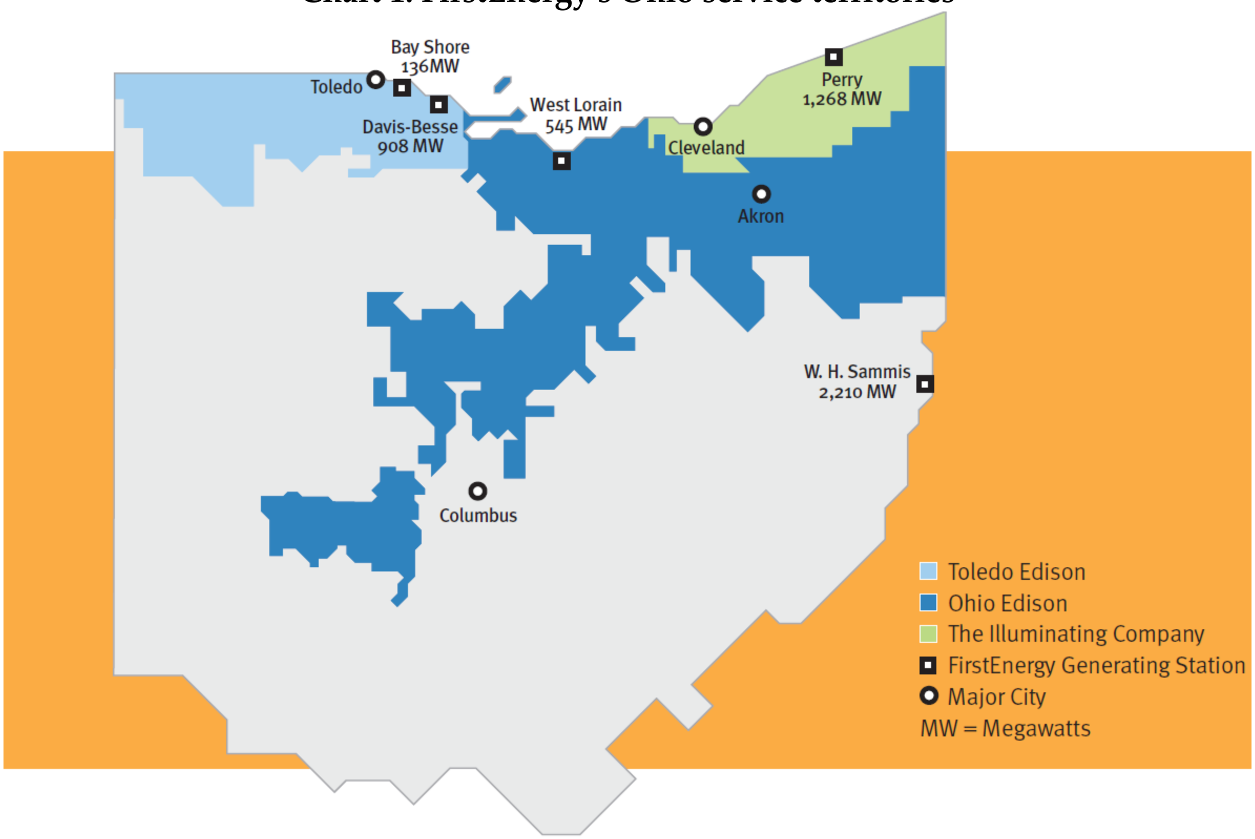
- The bill authorizes a nonbypassable rider imposed on all retail electric service customers that will increase electricity costs for governmental customers in the three FirstEnergy service territories by $1.8 million per year in FY 2018-FY 2019, and up to $33 million over the 16-year program period. Expenditures for governmental customers could increase by additional amounts if out-of-state nuclear power plants can recover costs through the rider.
- Depending on the taxpayer group under which FirstEnergy pays the Ohio Commercial Activity Tax (CAT), the CAT could receive up to $0.7 million per year and up to $13.7 million over the 16-year program period; any such revenue would benefit the GRF.
- The Public Utilities Commission of Ohio may incur additional expenditures for the newly assigned duties created by the bill. As of this writing, LSC is awaiting a response from PUCO regarding the marginal costs that may arise from H.B. 178.

- All proceeds from the sale of zero-emissions nuclear (ZEN) credits will be placed in a custodial fund newly established by the bill before being transferred to participating nuclear plant owners. Annually, up to $286 million could flow through the custodial fund during the FY 2018-FY 2019 biennium, and over the 16-year program period, fund activities could total $5.25 billion. If out-of-state nuclear power plants qualify for ZEN credits, money flowing through the custodial fund could total $8.82 billion. All interest earned by the fund must be credited to the GRF.

Detailed Fiscal Analysis

H.B. 178 creates the Zero-Emissions Nuclear (ZEN) resource program that requires certain electric distribution utilities to purchase ZEN credits and recover the purchase costs through a nonbypassable rider imposed on its retail electric service customers. ZEN credits are "attributes associated with one megawatt hour (MWh) of electricity generated by a ZEN resource."[1]

Chart 1. FirstEnergy's Ohio service territories



Source: https://www.firstenergycorp.com/economicdevelopment/site_location_services/ohio.html.
Notes: Per FirstEnergy website, "All data as of year end 2014. Reflects 885 MW of generation in Ohio that was deactivated April 15, 2015."

[1] R.C. 4928.75.

Ohio has two nuclear plants, both of which are operated by the FirstEnergy Nuclear Operating Company (FUNOC). The Perry nuclear plant is in Lake County, Ohio, and the Davis-Besse nuclear plant is in Ottawa County, Ohio. Although the two nuclear plants are in the respective service territories of the Cleveland Electric Illuminating (CEI) company and Toledo Edison (TE), ratepayers in the Ohio Edison (OE) service territory would pay the ZEN rider because the bill provides that, "All electric distribution utilities in the same holding company system shall participate jointly and shall allocate costs across all classes of each participating utility's customers."[2]

The bill establishes criteria by which an in-state or out-of-state nuclear plant may qualify as a ZEN resource eligible to recover costs from Ohio ratepayers for their ZEN credits. The Public Utilities Commission of Ohio (PUCO) is responsible for determining whether a nuclear plant satisfies the criteria. For a detailed description of the criteria (e.g., interconnection with the regional electric transmission system, environmental benefits to Ohio) as well as the contingencies that must be met to continue participating in the ZEN resource program, please refer to the LSC Bill Analysis.

Program timeline

The bill establishes a 16-year lifespan for the ZEN resource program. It begins on the bill's effective date, and is broken into eight consecutive two-year program periods, terminating on the last day of the eighth program period. Within 60 days of the bill's effective date, H.B. 178 requires a nonbypassable rider to be established enabling the participating utility to recover any and all direct and indirect costs for the purchase of ZEN credits.

The rider must be designed such that no retail electric service customer incurs more than a 5% increase in the customer's total retail electric service bill as compared to June 2015. If the cost of the ZEN credit exceeds the 5% limitation, the ratepayers will still be responsible for paying these excess costs, but on a deferred basis. The bill requires the utility to defer the uncollected revenues as a regulatory asset and recover the deferral plus carrying charges through a nonbypassable charge assessed over a twelve-month period.

Within seven days after the close of each quarter in a program period, the entity that owns or operates a nuclear power plant qualifying as a ZEN resource must transfer its ZEN credits to PUCO. The quantity of ZEN credits transferred to PUCO equals the amount of MWh generated by the participating nuclear plants during that quarter.

Within seven days of receiving the ZEN credits from the nuclear plant owner or operator, PUCO must notify the participating utility of the total amount of ZEN credits. The bill requires the utilities to purchase all ZEN credits held by PUCO, up to the maximum threshold specified in the bill. PUCO must deposit all payments for ZEN credits into the Zero-Emissions Nuclear Resources Fund, which is a custodial fund

[2] R.C. 4928.751.

newly created by the bill.[3] Within seven days of depositing the sale proceeds into the custodial fund, PUCO must pay each nuclear plant the revenue generated from its respective contribution of ZEN credits.

Costs to ratepayers

Governmental customers in the three FirstEnergy territories would incur higher electricity charges if the rider for ZEN credits is implemented. The costs charged to governmental customers would be applied in the same manner as all other ratepayers within CEI, OE, and TE service territories. LSC assumes that governmental costs will equal 0.63% of the total costs paid by all customers in the FirstEnergy service territories.[4]

The costs of the ZEN credits and the associated rider paid by ratepayers are subject to several contingencies. The bill requires PUCO to set the initial price of a ZEN credit equal to $17.00 per MWh, but PUCO must update the cost of the credit for inflation in successive years. Under current trends,[5] the two Ohio nuclear plants operated by FUNOC will likely qualify for ZEN credits over the 16-year program period. Table 1 illustrates the costs to ratepayers, of which governmental customers are estimated to bear 0.63% of the total (refer to columns four and five).[6] Over the course of a 16-year program period, ratepayers would be subject to $5.25 billion in charges, of which a portion may be deferred to a later date. The governmental customer class in the FirstEnergy service territory would pay $33 million of that total.

LSC cannot determine whether the Beaver Valley nuclear plant in Pennsylvania or American Electric Power's Donald C. Cook nuclear power plant in Michigan will qualify. The bill requires a nuclear plant outside of Ohio "to provide no less than the same level of environmental benefits to the state as nuclear energy resources located within the state." If the Pennsylvania nuclear plant qualifies, for example, ratepayers in the FirstEnergy territory would pay higher amounts, potentially 68% more per year.

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[3] Because the fund would not be in the state treasury, payments from the fund would not require appropriation by the General Assembly.

[4] Source: PUCO Case No. 16-0743-EL-POR. Appendix C-4 within FirstEnergy's Energy Efficiency and Peak Demand Reduction Plans for 2017-2019 shows 2015 sales to governmental customers were 334,692 MWh, which is 0.63% of the total sales, 53,248,148 MWh, in the three FirstEnergy territories within Ohio. Though the 0.63% figure presumably includes federal government facilities, most of the sales would be to state and local government facilities.

[5] Recent trends in nuclear plant generation for 2014-2016 sourced from Form EIA-923, "Power Plant Operations Report." Future projections are consistent with recent trends based on slide 39, "CES Generation Forecast (2016A-2018F)" from FirstEnergy's Q4 2016 FactBook, published February 21, 2017.

[6] The estimated costs in Table 1 are similar to those suggested by Charles Jones, the President and CEO of FirstEnergy, who stated on April 28, 2017, "Should Ohio move forward with approving the ZEN at its current rate and the plants run very reliably, that's worth about $300 million a year that would flow to those two nuclear units." Source: FirstEnergy Q1 2017 Results - Earnings Call Transcript, April 28, 2017, https://seekingalpha.com/article/4066881-firstenergy-fe-q1-2017-results-earnings-call-transcript.

Instead of incurring $5.25 billion in charges over a 16-year program period, ratepayers would instead owe $8.82 billion, of which the governmental customer class would be charged $55 million.

H.B. 178 sets a maximum threshold for ZEN credit purchases, but the limitation seems unlikely to be reached when recent trends in nuclear generation are compared against the recent trends in energy consumption within the FirstEnergy service territory. If generation from nuclear plants eligible for ZEN credits reached the maximum threshold permitted under H.B. 178, which is equal to one-third of the total end user consumption over the most recent two year period, FirstEnergy's ratepayers would be charged more than twice the amounts shown in Table 1. The maximum possible cost incurred over the 16-year program period would likely be $11.16 billion, of which governmental customers would incur $70 million in ZEN charges.

Table 1. Trend Scenario of Ohio-based ZEN Credit Purchases over Entire Program Period, Under H.B. 178

Program Period	Number of Ohio-based ZEN Credits to be Purchased	Cost per ZEN Credit	Cost of Ohio-based ZEN Credits to be Purchased, All Customers	Cost of Ohio ZEN Credits to be purchased, Government Customer Class
Year 1 – FY 2018	16,462,472	$17.00	$279,862,032	$1,759,077
Year 2 – FY 2019	16,516,679	$17.33	$286,234,046	$1,799,128
Year 3 – FY 2020	16,525,766	$17.74	$293,167,081	$1,842,706
Year 4 – FY 2021	16,436,466	$18.10	$297,500,033	$1,869,941
Year 5 – FY 2022	16,442,419	$18.49	$304,020,331	$1,910,924
Year 6 – FY 2023	16,558,979	$18.92	$313,295,879	$1,969,226
Year 7 – FY 2024	16,706,558	$19.36	$323,438,968	$2,032,980
Year 8 – FY 2025	16,815,285	$19.69	$331,092,952	$2,081,090
Year 9 – FY 2026	16,869,178	$19.90	$335,696,635	$2,110,026
Year 10 – FY 2027	16,929,337	$20.05	$339,433,215	$2,133,512
Year 11 – FY 2028	17,021,144	$20.24	$344,507,950	$2,165,410
Year 12 – FY 2029	17,021,144	$20.56	$349,954,716	$2,199,645
Year 13 – FY 2030	17,021,144	$20.89	$355,487,596	$2,234,422
Year 14 – FY 2031	17,021,144	$21.22	$361,107,954	$2,269,749
Year 15 – FY 2032	17,021,144	$21.55	$366,817,170	$2,305,635
Year 16 – FY 2033	17,021,144	$21.89	$372,616,651	$2,342,087
Total	**268 million MWh**	**n/a**	**$5.25 billion**	**$33 million**

Sources: Form EIA-860, "Annual Electric Generator Report," and Form EIA-923, "Power Plant Operations Report," IHS Markit April 2017 inflation forecast, PUCO Case No. 17-0913-EL-FOR

Out-of-state nuclear plants

FirstEnergy Nuclear Operating Company operates two nuclear units at its Beaver Valley Nuclear Power Station in Shippingport, Pennsylvania. American Electric Power's subsidiary, Indiana Michigan Power Company, operates the Donald C. Cook nuclear power plant, which is interconnected within the transmission system of PJM.[7] For the purposes of this analysis, LSC assumes neither plant will be able to recover costs of ZEN credits from Ohio ratepayers, however this is yet to be determined. This preliminary conclusion is based on comments made in the House Public Utilities Committee on April 25, 2017. In response to a question during witness testimony, Charles Jones, stated it is "highly unlikely an out-of-state resource would qualify" for the ZEN resource program, as proposed in the introduced bill.[8]

Other assessments regarding the Beaver Valley plant's potential for receiving revenues from ZEN credits were less categorical. During an April 28, 2017 earnings call, Charles Jones remarked, "the ZEN (proposed by H.B. 178) does not limit it to Ohio assets. Assets from outside of Ohio are eligible to apply, and then it would ultimately be, if the legislation's approved the way it is, up to the Public Utilities Commission as to whether or not they qualify."[9]

Public Utilities Commission of Ohio

PUCO will incur additional administrative and evaluation duties under H.B. 178, but LSC does not have an estimate of the bill's impact on PUCO agency expenditures. As of this writing, LSC is awaiting a response from PUCO regarding the marginal costs that may arise from H.B. 178.

The bill requires PUCO to adopt a procedure to determine where a nuclear energy resource satisfies the criteria in the bill. At minimum, the adopted procedure must provide the opportunity for comment and response. Once the ZEN resource is approved, PUCO must oversee the ratemaking aspect of the rider and any potential deferred costs. PUCO will also manage the quarterly payment process by which ZEN credits are purchased by electric distribution utilities.

H.B. 178 requires PUCO to evaluate the ZEN credit price during the sixth and eleventh years of the ZEN resource program. PUCO must discern whether the ZEN program is achieving the policy goals specified in the Revised Code and whether those policy goals are being met through other federal environmental laws, programs, rules or regulations, or through amendments to the federal tax code. Upon the conclusion of its evaluation, PUCO must report the results of its evaluation to the standing

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[7] One of the American Electric Power subsidiaries, AEP Ohio, is an electric distribution utility in Ohio, whereas another subsidiary, Indiana Michigan Power Company, operates the Cook nuclear plant within PJM's transmission system. LSC is unsure if this Michigan plant will qualify under R.C. 4928.754.

[8] Committee Chairman Seitz further remarked that offering the ZEN resource program solely to Ohio plants could violate the Commerce Clause of the U.S. Constitution. He echoed the comments of Charles Jones by stating that out-of-state power plants are unlikely to meet the eligibility criteria in the bill, in part, because the prevailing wind blows from west-to-east (the latter comment spoken in regard to the Pennsylvania plant).

[9] Source: FirstEnergy Q1 2017 Results – Earnings Call Transcript, April 28, 2017, https://seekingalpha.com/article/4066881-firstenergy-fe-q1-2017-results-earnings-call-transcript.

committees of both houses of the General Assembly that have primary jurisdiction regarding public utility legislation.

Commercial Activity Tax

The revenues collected by utilities from the ZEN resource rider will likely be subject to the Commercial Activity Tax (CAT). It is the custom of CEI, TE, and OE to recover the cost of the CAT from ratepayers. The electric tariff schedule for those three utility's standard service offers frequently contains a provision for riders that states, "The Ohio Commercial Activity Tax (CAT) rate as established in Section 5751.03 of the Ohio Revised Code shall be applied to the above charges according to the formula 1 / (1 - CAT)."

Applying the current CAT rate, 0.26%, to the fourth column in Table 1 yields CAT receipts of $0.7 million in FY 2018 and $0.7 million in FY 2019. Over the successive 14 years, the CAT would collect another $12.2 million. Under continuing law, the Commercial Activities Tax Receipts Fund (Fund 5GA0) consists of money arising from the CAT. The Department of Taxation's CAT Administration Fund receives the first 0.85% of the money credited to that fund to defray the costs incurred by the Department. Of the remaining money in Fund 5GA0, 75% must be credited to the GRF, 20% to the School District Tangible Property Tax Replacement Fund, and 5% to the Local Government Tangible Property Tax Replacement Fund.

Potentially, the CAT receipts could be twice as much, but that depends on FirstEnergy's status as a CAT taxpayer. If FirstEnergy is a consolidated elected taxpayer group, receipts received between members of the group may be excluded from the taxable gross receipts of the group. Therefore, if FUNOC receives ZEN credit revenues from CEI, OE, and TE via PUCO, they might not be taxable a second time. Under this scenario, LSC assumes PUCO does not take title of the ZEN proceeds while they are in the custodial fund. By not taking title of the ZEN proceeds, the transaction would be purely between the utility and the nuclear plant owner. On the other hand, if FirstEnergy is a combined taxpayer group for purposes of the CAT, it cannot exclude receipts between members of the group. LSC is unaware of FirstEnergy's taxpayer status for the purposes of the CAT.

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