OHIO LEGISLATIVE SERVICE COMMISSION

Russ Keller

Fiscal Note & Local Impact Statement

Bill: H.B. 381 of the 132nd G.A. **Status:** As Introduced

Sponsor: Rep. DeVitis **Local Impact Statement Procedure Required:** Yes

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

State & Local Fiscal Highlights

	FY 2019	FY 2020	FUTURE YEARS
Commercial Activity Tax Receipts Fund			
Revenues	Potential gain up to $0.2 million	Potential gain up to $0.5 million	Potential gain
Public Utilities Fund (Fund 5F60)			
Expenditures	$330,000	$275,000	Potential increase
Zero-Emissions Nuclear Resources Fund (custodial fund newly established by the bill)			
Revenues	Potential gain up to $89 million or more	Potential gain up to $178 million or more	Potential gain up to $178 million annually through CY 2030
Expenditures	Increase commensurate with actual revenue gain	Increase commensurate with actual revenue gain	Increase commensurate with actual revenue gain
Governmental customers in FirstEnergy service territories			
Expenditures	Potential increase up to $0.5 million or more	Potential increase up to $1.1 million or more	Potential increase equal to approximately 0.63% of ZEN credit costs annually through CY 2030

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.

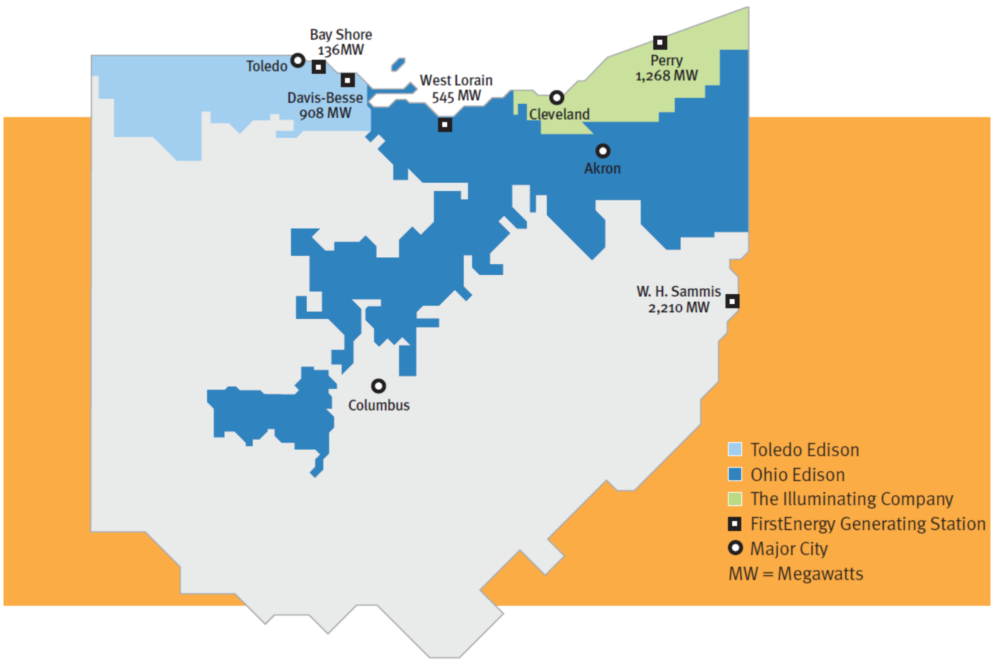
- The bill authorizes a nonbypassable rider imposed on all retail electric service customers that will increase electricity costs for governmental customers in the three FirstEnergy service territories by $1.1 million per year beginning in FY 2019, and up to $13.4 million over the 12-year program period. Expenditures for governmental customers could increase incrementally if out-of-state nuclear power plants can recover costs through the rider in tandem with both Ohio-based plants.
- Depending on the taxpayer group under which FirstEnergy pays the Ohio Commercial Activity Tax (CAT), the CAT could receive up to $0.5 million per year and up to $5.6 million over the 12-year program period; any such revenue would benefit the GRF.

- The Public Utilities Commission of Ohio informed LSC that it will incur additional expenditures for the newly assigned duties created by the bill. The agency reported that it would spend $330,000 in the first year and $275,000 in the second year to implement and maintain the policies enacted by the bill.
- 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. Approximately $178 million (annualized) could flow through the custodial fund beginning in FY 2019, and over the 12-year program period, fund activities could total $2.13 billion or more. If out-of-state nuclear power plants qualify in tandem with both Ohio-based plants for ZEN credits, money flowing through the custodial fund could increase incrementally, subject to the customer rate caps specified in the bill. All interest earned by the fund must be credited to the GRF.
- LSC assumes the rider would become effective January 1, 2019, so the amounts in the above table for FY 2019 are prorated for this six-month period. Amounts for FY 2020 and future years are annual amounts.

Detailed Fiscal Analysis

H.B. 381 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 zero-emissions nuclear resource."[1]

FirstEnergy's Ohio Service Territories



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

Ohio has two nuclear plants, both of which are operated by the FirstEnergy Nuclear Operating Company (FENOC). 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 revenue collection across all classes of each participating utility's customers."[2]

[1] R.C. 4928.75.

[2] R.C. 4928.751.

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 permits the ZEN resource program to continue until its termination date on December 31, 2030. It begins on the bill's effective date, and is broken into consecutive two-year program periods, subject to the termination date. Within 60 days of the bill's effective date, H.B. 381 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. For purposes of this Fiscal Note, LSC assumes the ZEN rider would be established January 1, 2019.

The bill specifies that residential customers must pay $2.50 per month, whereas nonresidential customers pay the lesser of $3,500 per month or 5% of the customer's total bill. If the cost of the ZEN credit exceeds the 5% limitation, the bill does not state whether ratepayers will still be responsible for paying these excess costs on a deferred basis. The bill does not require the utility to defer the uncollected revenues as a regulatory asset and recover the deferred charges, so LSC assumes PUCO would not grant such a deferral to the utilities.

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 number 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. If the total revenues collected are less for that period than the total amount to be collected, the participating utility is not responsible for or required to transfer any amounts in excess of those collected from its nonbypassable rider.

PUCO must deposit all payments for ZEN credits into the Zero-Emissions Nuclear Resources Fund, which is a custodial fund 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.

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

Costs to ratepayers

Governmental customers in the three FirstEnergy territories would incur higher electricity charges if the rider for ZEN credits is implemented. 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 at the outset of successive program periods. Recent proceedings of the United States Bankruptcy Court suggest FirstEnergy's nuclear plants will close, which would imply that there would be no ZEN credits and no fiscal effect from the bill.[5] If the plants do not shut down, recent trends suggest the two Ohio nuclear plants operated by FENOC will likely qualify for ZEN credits until the ZEN program terminates on December 31, 2030.[6]

Table 1 illustrates the costs to ratepayers, of which governmental customers are estimated to bear 0.63% of the total (refer to columns five and six).[7] The H.B. 381 rate caps prove significant as Table 1 shows that an uncapped ZEN charge would cost ratepayers $3.77 billion over a 12-year term ending December 31, 2030. Instead the bill would limit amounts paid by FirstEnergy customers to about $2.13 billion, which is akin to a 43% reduction over the duration of the ZEN rider. Governmental customers are a small fraction of the ratepayer base, and this customer class would pay approximately $13.4 million of the $2.13 billion total.

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[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] First Energy Solutions Corporation notified the Nuclear Regulatory Commission and regional transmission organization PJM that it decided to cease operations and deactivate nuclear plants in Ohio and Pennsylvania. FENOC is targeting a shutdown date of June 1, 2020 for Davis-Besse and June 1, 2021 for the Perry Nuclear Plant.

[6] 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.

[7] The estimated costs for an uncapped rider 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.

These estimates are predicated on PUCO's decisions regarding rate design. The cost recovery method assumed in this analysis is similar to the defunct "Retail Rate Stability Rider (Rider RRS)" originally proposed by FirstEnergy in 2014 as part of its fourth electric security plan. PUCO approved Rider RRS on March 31, 2016 before subsequently eliminating it on October 12, 2016. The estimates in Table 1 assume PUCO will structure the ZEN rider in analogous fashion to Rider RRS, albeit while incorporating the duration, utility ZEN credit allocation, and customer rate caps newly specified by H.B. 381.

Table 1. Trend Scenario of Ohio-based ZEN Credit Purchases and Ratepayer Payments Over Entire Program Period, Under H.B. 381

Program Period	Number of Ohio-based ZEN Credits to be Purchased	Cost per ZEN Credit	Uncapped Cost of Ohio-based ZEN Credits, All Customers	Estimated Amount Paid for ZEN credits, All Customers	Cost of Ohio ZEN Credits to be purchased, Government Customer Class
Year 1 – CY 2019	16,516,679	$17.00	$280,783,542	$177,890,745	$1,120,712
Year 2 – CY 2020	16,525,766	$17.00	$280,938,015	$177,890,815	$1,120,712
Year 3 – CY 2021	16,436,466	$17.75	$291,747,270	$177,895,996	$1,120,745
Year 4 – CY 2022	16,442,419	$17.75	$291,852,941	$177,896,072	$1,120,745
Year 5 – CY 2023	16,558,979	$18.56	$307,334,646	$177,903,475	$1,120,792
Year 6 – CY 2024	16,706,558	$18.56	$310,073,721	$177,904,802	$1,120,800
Year 7 – CY 2025	16,815,285	$19.32	$324,871,297	$177,909,106	$1,120,827
Year 8 – CY 2026	16,869,178	$19.32	$325,912,512	$177,909,248	$1,120,828
Year 9 – CY 2027	16,929,337	$19.67	$333,000,067	$177,910,210	$1,120,834
Year 10 – CY 2028	17,021,144	$19.67	$334,805,898	$177,910,459	$1,120,836
Year 11 – CY 2029	17,021,144	$20.17	$343,316,469	$177,911,600	$1,120,843
Year 12 – CY 2030	17,021,144	$20.17	$343,316,469	$177,911,600	$1,120,843
Total	**201 million MWh**	**N/A**	**$3.77 billion**	**$2.13 billion**	**$13.4 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

The estimates in Table 1 are largely predicated on FirstEnergy customer statistics found in PUCO regulatory filings. LSC can only access publicly available data, and some of it is nearly ten years old. Moreover, the summary statistics found in PUCO filings may not capture the variability in customers' electricity usage. Therefore, the ratepayer caps may not apply in uniform fashion to every customer within the same customer class. To the extent that usage substantially varies within the eight customer classes (and variations thereof based upon special or unique contract arrangements) described by FirstEnergy in 2007, the true cost to ratepayers would vary from the amounts illustrated in Tables 1 and 2. Also, if PUCO departs from the cost allocation method[8] used for Rider RRS, the actual amounts allocated to ratepayers would differ.

[8] Namely, the revenue requirement is allocated within a utility to each rate schedule based on demand. The demand values used in the allocation will be the average of the four monthly coincident peaks, including distribution losses, for the months of June through September of calendar year 2013.

Table 2. Estimated Allocation of Ratepayer Payments for Ohio-based ZEN Credit for CY 2019, Under H.B. 381				
Customer Class	**Cleveland Electric Illuminating**	**Ohio Edison**	**Toledo Edison**	**FirstEnergy, TOTAL**
Residential	$20,213,753	$27,909,593	$8,331,308	$56,454,653
Nonresidential	$48,060,395	$56,061,074	$17,314,623	$121,436,093
Total	**$68,274,148**	**$83,970,667**	**$25,645,931**	**$177,890,745**

Sources: PUCO Case No. 07-551-EL-AIR, FirstEnergy application, Schedule E-4, filed 8/6/2007; PUCO Case No. 14-1297-EL-SSO, Testimony of FirstEnergy's Joanne Savage, Attachment JMS-2 (Revised), filed 11/14/2014; U.S. EIA Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State

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.[9] 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 support of similar legislation during 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 a bill with eligibility criteria identical to that found in H.B. 381.[10]

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 (as then pending in the Ohio General Assembly, but also interchangeable with ZEN eligibility proposed by H.B. 381) 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."[11]

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[9] 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.

[10] Then 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).

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

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 in tandem with the two Ohio plants, ratepayers in the FirstEnergy territory would pay incrementally higher amounts, subject to the rate caps specified in the bill. Alternatively, the out-of-state plant could displace generation from an Ohio nuclear plant that subsequently ceases operation, and Ohio ratepayers would pay a larger share of their rider for ZEN credits generated by the Pennsylvania units.

Public Utilities Commission of Ohio

The Public Utilities Commission of Ohio informed LSC that it will incur additional expenditures for the newly assigned duties created by the bill. The agency reported that it would spend $330,000 in the first year after its enactment and $275,000 in the second year to implement and maintain the policies enacted by the bill. These numbers were derived from current agency expenditures on salaries, accounting and forecasting practices, and other administrative practices. This biennial total includes the cost of additional labor, legal counsel, and software necessary to implement and maintain the ZEN resource program.

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. 381 requires PUCO to conduct an inquiry in 2029 to determine whether it is in the public interest to continue the zero-emissions nuclear resource program after 2030, and PUCO must report its findings to the General Assembly.

All increases in agency costs likely would be paid from appropriation item 870622, Utility and Railroad Regulation, which draws on the Public Utilities Fund (Fund 5F60).[12]

Because the Zero-Emissions Nuclear Resources Fund is established as a custodial fund, not a fund in the state treasury, expenditures from the fund will not require appropriation by the General Assembly.

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[12] Fund 5F60 receives funding from an assessment on the utilities regulated by PUCO. The amount of the assessment is based on the amounts appropriated by the General Assembly for line items drawing on Fund 5F60. More details can be found in the Catalog of Budget Line Items (COBLI), an LSC publication that can be found on the LSC website.

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 fifth column in Table 1 yields CAT receipts of $0.5 million in CY 2019. Over the entire 12–year term, the CAT would collect $5.6 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, 85% must be credited to the GRF, 13% to the School District Tangible Property Tax Replacement Fund, and 2% 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 FENOC 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 would owe the CAT on behalf of the second transaction because 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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