House Select Committee on Energy Policy and Oversight

September 10, 2020

H.B. 746 of the 133rd General Assembly repeals H.B. 6 of the 133rd General Assembly. The table below addresses the H.B. 6 provisions being repealed and the possible effect on the law of its repeal.

Repeal of H.B. 6 provisions by topic	Effect of repeal
Payments for qualifying nuclear and renewable resources	
Repeals the in-state nuclear and renewable resource payment to qualifying nuclear resources (an electric generating facility in Ohio fueled by nuclear power) and qualifying renewable resources (an electric generating facility in Ohio that (1) uses or will use solar energy as its primary energy source, (2) obtained a major utility facility certificate from the Power Siting Board before June 1, 2019, and (3) is interconnected with the electric transmission grid subject to the control of the regional transmission organization, PJM Interconnection, L.L.C.) *(R.C. 3706.40, 3706.55, and 3706.59)*.	Removes these provisions from law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert.
Nuclear and renewable resource credit program	
Repeals the nuclear resource credit program, including the application for, the issuance of, and the payment for, nuclear resource credits administered primarily by the Ohio Air Quality Development Authority (the Authority) and the review of the qualifying resources that receive payment for the nuclear credits.	Removes these provisions from the law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert.

Repeal of H.B. 6 provisions by topic	Effect of repeal
Repeals the similar renewable resource credit program, including the application for, the issuance of, and the payment for, renewable resource credits administered primarily by the Authority *(R.C. 3706.40 to 3706.65)*.	
Monthly customer charges	
Repeals the per-customer monthly charges that an electric distribution utility (EDU) must collect starting January 1, 2021, and ending on December 31, 2027, to subsidize the credit payments to qualifying resources, which in the aggregate produce $150 million annually for payment of nuclear resource credits and $20 million annually for payment of renewable resource credits *(R.C. 3706.46)*.	Removes these provisions from law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert. Under H.B. 6, the charges billed by an EDU must be authorized by the Public Utilities Commission (PUCO). The repeal would remove authorization for the charge, which if not repealed, would be (1) for residential customers, no more than $0.85 per month, (2) for industrial customers eligible to be self-assessing purchasers, no more than $2,400 per month, and (3) for nonresidential customers that are not self-assessing purchasers a charge that avoids abrupt or excessive total net electric bill impact for typical customers.
Nuclear Generation and Renewable Generation Funds	
Repeals the Nuclear Generation Fund and Renewable Generation Fund into which customer charges collected by EDUs are deposited *(R.C. 3706.49 and 3706.53).*	Removes these provisions from law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert.
Renewable energy benchmarks	
In the law requiring EDUs and electric services companies to provide a portion of their electricity supply from renewable energy resources, repeals the changes that set the benchmark at 8.5% by the end of 2026 with no further renewable resource requirements thereafter.	Reverts to prior law and revives the previous benchmarks that were in effect that required 12.5% (including a 0.5% solar energy portion) of the electricity supply to be from renewable energy resources by 2027 and each year thereafter.
Repeals the elimination of the solar energy benchmark component after 2019 and the compliance payment provisions for noncompliance with the solar benchmarks in 2020 and thereafter.	Reverts to prior law and revives the $200 compliance payment for 2020 and revives, for subsequent years, a payment reduced by $50 each year through 2026 to a minimum of $50.

Repeal of H.B. 6 provisions by topic	Effect of repeal
(R.C. 4928.64(B)(1) and (2) and (C)(2)(a).)	
Renewable energy compliance reduction	
Eliminates the reductions in compliance with the renewable energy benchmarks that are: ▪ Based on kilowatt hours produced by qualifying renewable resources (in-state solar, described above) eligible to apply to the Authority for renewable energy credits; ▪ Based on the load and usage of mercantile customers that are self-assessing purchasers *(R.C. 4928.642 and 4928.644(B))*.	Removes these provisions from law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert.
Renewable energy credit: double counting prohibition	
Eliminates the prohibition against a qualifying renewable resource (in-state solar, described above) getting both a renewable energy credit through application to the Authority and a renewable energy credit under continuing law *(R.C. 4928.645(C))*.	Removes this provision from law. Because H.B. 6 enacted this provision as new law, there is no previous law to which to revert.
Cost recovery	
Repeals the provision that allowed cost recovery associated with a contract executed before April 1, 2014, to procure renewable energy resources through a bypassable charge only to the end of 2032 *(R.C. 4928.641)*.	Revives prior law that allowed an EDU to recover costs through a bypassable charge for such a contract *until the associated costs are fully recovered*.
Energy efficiency benchmarks	
Repeals the benchmark limitation of 8.2% in annual energy efficiency savings for each EDU by the end of 2020, with no future benchmark requirements. *(R.C. 4928.66(A)(1)(a)).*	Reverts to prior law that requires (1) the annual energy efficiency savings requirement to be an additional 2% increase each year after 2020 until 2027 and (2) the cumulative energy efficiency savings requirement to be in excess of 22% as of 2027.
Portfolio plan termination	

Repeal of H.B. 6 provisions by topic	Effect of repeal
Repeals the modification of portfolio plans to extend to, and then terminate, or to simply terminate, on December 31, 2020 *(R.C. 4928.66(F))*.	With regard to portfolio plans that were set to terminate before December 31, 2020, under pre-H.B. 6 law, the repeal of H.B. 6 has an unknown effect. There may be uncertainty about how they would be treated. Administration and regulation of other portfolio plans presumably would be governed by continuing law and pre-H.B. 6 law. Riders are currently in place for required energy efficiency programs. AEP Ohio has submitted a proposed voluntary program for 2021 to PUCO.[1] Duke Energy Ohio proposed a voluntary program to PUCO, but subsequently withdrew it.[2]
Cumulative energy savings determination	
Repeals the provisions that determine cumulative energy savings using the cumulative threshold of 17.5% for all EDUs collectively, with the result that: (1) meeting or exceeding the threshold leads to full compliance with the energy efficiency requirements, and (2) failing to meet the threshold requires PUCO to determine how and when full compliance will be achieved *(R.C. 4928.66(G)(1) and (2))*.	Removes these provisions from law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert.
Discontinuance of energy efficiency cost recovery mechanism upon full compliance	

[1] Information about AEP Ohio's proposed demand side management program to PUCO is available at: http://dis.puc.state.oh.us/TiffToPDf/A1001001A20F15B15113J01296.pdf and http://dis.puc.state.oh.us/TiffToPDf/A1001001A20F01B00853B00020.pdf, accessed on September 6, 2020.

[2] Duke Energy Ohio's application, PUCO action, and Duke's subsequent withdrawal of its proposed energy efficiency program is available at: http://dis.puc.state.oh.us/TiffToPDf/A1001001A20F03B53856H00298.pdf, http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=eebfd946-1e14-40b7-a4fe-6746b8def3d9, http://dis.puc.state.oh.us/TiffToPDf/A1001001A20F17B43712F01599.pdf, http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=2d643e50-88a2-4c8e-89f6-a41a7d57f4e8, and http://dis.puc.state.oh.us/TiffToPDf/A1001001A20F26B55050I03419.pdf, accessed on September 6, 2020.

Repeal of H.B. 6 provisions by topic	Effect of repeal
Repeals the provision that discontinues existing energy efficiency cost recovery mechanisms if full compliance with energy efficiency savings is deemed achieved (by meeting the 17.5% threshold or PUCO determination of full compliance) *(R.C. 4928.66(G)(3))*.	Removes this provision from law. Because H.B. 6 enacted this provision as new law, there is no previous law to which to revert.
Reporting requirement for customers that opt out of portfolio plan	
Revives by re-enacting the provision repealed in H.B. 6 regarding (1) energy intensity reduction reports that certain high-volume electric customers that opted out of an EDU's energy efficiency/peak demand reduction portfolio plan were required to submit to PUCO and (2) PUCO authority to suspend a customer's opt-out if it did not achieve the energy intensity identified by the customer *(R.C. 4928.6616)*.	Reverts to prior law, thereby reviving the reporting requirement and PUCO's authority to suspend the opt-out until the customer can achieve the cumulative reduction in energy intensity.
Mercantile customer opt out	
Repeals the provision allowing mercantile customers to opt out and later opt back in to an EDU's energy efficiency/peak-demand reduction portfolio plan *(R.C. 4928.6610)*.	Removes this provision from law and therefore prohibits mercantile customers from opting out or in to an EDU's portfolio plan. If any mercantile customers have opted out under this provision before its repeal, it is unclear how the repeal would affect the continuation of the opt out for these customers.
Legacy generation resource cost recovery	
Repeals provisions related to cost recovery of a legacy generation resource (which are generating facilities owned directly or indirectly by a corporation formed prior to 1960 by investor-owned utilities for the original purpose of providing power to the federal government for use in the nation's defense or in furtherance of national interests, including the Ohio Valley Electric Corporation (OVEC)).	Removes these provisions from law. Because H.B. 6 enacted them as new law, there is no previous law to which to revert. It is not clear, however, whether reversion back to any preexisting OVEC cost recovery mechanism approved by PUCO prior to the effective date of H.B. 6 would occur as a result of a repeal of this provision. Legacy generation cost recovery riders have been in place since January

Repeal of H.B. 6 provisions by topic	Effect of repeal
Repeals the requirement that any preexisting PUCO-authorized mechanism for retail recovery of prudently incurred costs related to a legacy generation resource must be replaced with a nonbypassable rate mechanism that is: ▪ Approved by PUCO for recovery of those costs through December 31, 2030 (subject to final reconciliation);	2020.[3] The repeal removes the authority for the imposition of the rider.

[3] Legacy Generation rider information and other rider information appears in EDU rate schedules available on the PUCO website page, "Tariffs: Utility and Telecom," https://puco.ohio.gov/wps/portal/gov/puco/documents-and-rules/tariffs#page=1, accessed on September 6, 2020.

The Duke Energy Ohio rate schedule is available at:
https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/Duke%20Energy%20Ohio%20-%20Electric/PUCO19%20Schedule%20of%20Rates,%20Classifications%20Rules%20and%20Regulations.pdf.

The Cleveland Illuminating Company rate schedule is available at:
https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Cleveland%20Electric%20Illuminating%20Company,%20FIRSTENERGY/PUCO13%20Schedule%20of%20Rates%20for%20Electric%20Service.pdf.

The Dayton Power & Light rate schedule is available at:
https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Dayton%20Power%20and%20Light%20Company/PUCO%2017Distrubution.pdf.

The Ohio Edison Company rate schedule are available at:
https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Ohio%20Edison%20Company,%20FIRSTENERGY/PUCO%2011%20Schedule%20of%20Rates%20for%20Electric%20Service.pdf.

The Ohio Power Company rate schedule is available at:
https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/Ohio%20Power%20Company/PUCO%2020%20Standard%20Service.pdf.
The Toledo Edison Company rate schedule is available at:
https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Toledo%20Edison%20Company,%20FIRSTENERGY/PUCO8%20Schedule%20of%20Rates%20for%20Electric%20Service.

Repeal of H.B. 6 provisions by topic	Effect of repeal
▪ Collected from all customers of Ohio EDUs; ▪ Capped at a $1.50 per month charge or credit for residential customers and $1,500 per month charge or credit for all other customer classes. *(R. C. 4928.01(A)(41) and (42) and 4928.148.)*	
Agreements for customer-site renewable energy resources	
Repeals the provisions permitting an EDU to enter into an agreement with a mercantile customer, or group of mercantile customers, to construct a customer-sited renewable energy resource in Ohio that would provide the mercantile customer or group with a material portion of their electricity requirements *(R.C. 4928.47).*	Removes this provision from law. Because H.B. 6 enacted this provision as new law, there is no previous law to which to revert.
Decoupling	
Repeals the decoupling provision which gives an EDU the ability to file an application to implement a decoupling mechanism for calendar year 2019 and each calendar year thereafter. Under the decoupling mechanism, the base distribution rates for residential and commercial customers is decoupled to the base distribution revenue and revenue resulting from implementation of	Removes this provision from law. Because H.B. 6 enacted it as new law, there is no previous law to which to revert. A decoupling rider (known as "Conservation Support Rider") has been in place for FirstEnergy customers since February 2020.[4] The repeal removes the authority for the imposition of the rider.

[4] The Cleveland Illuminating Company rate schedule is available at: https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Cleveland%20Electric%20Illuminating%20Company,%20FIRSTENERGY/PUCO13%20Schedule%20of%20Rates%20for%20Electric%20Service.pdf.

The Ohio Edison Company rate schedules are available at: https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Ohio%20Edison%20Company,%20FIRSTENERGY/PUCO%2011%20Schedule%20of%20Rates%20for%20Electric%20Service.pdf.

Repeal of H.B. 6 provisions by topic	Effect of repeal
the energy efficiency and peak demand reduction requirements, excluding program costs and shared savings, and recovered pursuant to an approved electric security plan, as of the 12-month period ending December 31, 2018 *(R.C. 4928.471)*.	
Wind farms of 5-20 megawatts (MWs)	
Repeals amendments that subjected wind farms of 5, but less than 20, MWs to local control *(R.C. 303.213, 519.213, 713.081, and 4906.13)*.	Revives pre-H.B. 6 Power Siting Board jurisdiction over all wind farms of at least 5 MWs.
Net metering system using wind under 20 MWs	
Repeals the change in the definition of "net metering system" that allows an industrial customer-generator's net metering system to meet the requirement that the system was intended primarily to offset the customer-generator's electricity requirements if the system: (1) has a capacity of less than 20 MWs, (2) uses wind as energy, and (3) it was sized so as to not exceed 100% of the customer-generator's annual requirements for electric energy at the time of interconnection *(R.C. 4928.01(A)(31)(d)).*	Removes this qualification and revives the pre-H.B. 6 definition of "net metering system" so the described industrial customer-generators would not qualify.
Rate schedule for county fairs and agricultural societies	
Repeals the requirement that EDUs file a new rate schedule with PUCO for county fairs and agricultural societies that includes either (1) a fixed monthly service fee or (2) an energy charge on a kilowatt-hour basis *(R.C. 4928.80)*.	Removes this provision from law. Because H.B. 6 enacted it as new law, there is no previous law to which to revert. The new rate schedule has been implemented by some EDUs. The repeal removes the authority for this rate schedule.

The Toledo Edison Company rate schedule is available at: https://puco.ohio.gov/static/empliibrary/files/docketing/tariffs/Electric/The%20Toledo%20Edison%20Company,%20FIRSTENERGY/PUCO8%20Schedule%20of%20Rates%20for%20Electric%20Service.

Repeal of H.B. 6 provisions by topic	Effect of repeal
Home energy assistance programs (HEAP)	
Repeals the requirement that the Director of Development Services to annually (starting in FY 2021) submit a federal waiver request for the state to spend 25% of HEAP funds for weatherization services allowed under federal law *(R.C. 4928.75; Section 5 of H.B. 6).*	Removes this provision from law. Because H.B. 6 enacted it as new law, there is no previous law to which to revert.
Property tax exemption for energy projects	
Repeals the ability of larger-scale energy generation projects to be exempted from property taxation without approval of the board of county commissioners. Repeals the ability of a board to condition a tax exemption on payments in lieu of taxes (PILOT) only if a project has at least 20 MWs. *(R.C. 5727.75; Section 4 of H.B. 6.)*	Removes these changes and revives pre-H.B. 6 law regarding the property tax exemption for energy projects.
Tangible personal property (TPP)	
Repeals the provision that disallowed any future reduction in the taxable value of TPP of an electric company that receives payments for nuclear resource credits *(R.C. 5727.231)*.	Removes this provision from law. Because H.B. 6 enacted it as new law, there is no previous law to which to revert.

H.B. 6 provisions that materially affect ratepayers

- Clean energy charge (new)
- EE/PDR charges (modified)
- Alternative energy charge (modified)
- OVEC rider (modified)

Difference between H.B. 6 and prior law

- The clean energy charge was imposed in dollar terms: up to $170 million/year; no more than $0.85/month for residential customers
- Prior law charges were imposed in terms of percentages of power supplied
  - So dollar figures require someone to estimate—ideally the EDU

EE/PDR charge – the micro view

- To provide concrete numbers, not necessarily representative ones
- My bill for 8/1 – 8/31 was $78.90 (for 593 kWh of electricity)
- My EDU provided the following “approximate values” for riders:
  - $0.51 for renewable programs
  - $1.14 for energy efficiency programs
  - $0.60 for peak demand reduction programs
  - Note that the sum of EE/PDR charges, $1.74 is > $0.85

Bill amounts vary month to month of course

- My bill for the period 8/31/19 – 10/1/19 was $51.43 (for 362 kWh)
- My EDU states that the “approximate charges” for the riders were
  - $0.41 for renewable programs
  - $0.75 for energy efficiency (EE) programs
  - $0.39 for peak demand reduction (PDR) programs
  - EE/PDR charges = $1.14 (> $0.85)

Why the focus on EE/PDR programs?

- Based on reports filed by EDUs with PUCO, it appears very likely that all six EDUs will have satisfied the H.B. 6 EE/PDR requirements by the end of 2020—implying no riders for EE/PDR going forward
- That would not have been the case if prior law requirements had continued

Riders and charges – the macro view

- H.B. 6 imposed a statewide clean energy charge of up to $170 million/year
- It effectively ended EE/PDR riders after 2020—historically those charges averaged $289 million/year (average over 2017 – 2019)
- It reduced required supply of energy from solar – a more expensive form of renewable energy -- to zero, reducing renewable energy rider
- It reduced renewable energy requirements overall from 12.5% by 2026 to 8.5%, also reducing renewable energy rider
- EDUs' and electric service companies' compliance costs for renewable requirements were $65.5 million in 2019

EDUs’ compliance costs decrease due to H.B. 6

- Since EDUs can pass on those costs to ratepayers, ratepayers would have lower-cost riders under the act
- Is that the full story?
- It is not—a look at your electricity bill will show that the generation charge is much larger than the amount of the riders
- In my most recent bill, the charge for generation was \$27.52 of the total bill of \$78.90
- Would H.B. 6 affect generation charges compared to prior law?

According to economic theory, it would

- EE/PDR programs are designed to reduce the demand for electricity
- Ohio EDUs purchase power in a wholesale market operated by PJM Energy, our regional transmission organization (RTO)
- An effective EE/PDR program should shift the demand curve to the left, resulting in a lower price for energy in the wholesale market
- By effectively doing away with Ohio's EE/PDR program, over the next few years, the demand side effect of H.B. 6 would be to increase the wholesale price of electricity
  - Note that the effects of the past EE/PDR programs would live on for several years

According to economic theory, it would (cont'd.)

- There may also be a supply side effect from H.B. 6
- PJM Energy conducted an analysis in June 2019 of the supply side effect on wholesale prices of continuing to operate the two Ohio nuclear plants
- Their conclusion was that if all the planned natural gas generation came on line along with the nuclear plants continuing in operation, the nuclear plants would serve to reduce 2023 wholesale prices by increasing supply
- But if the nuclear plants led to cancelling plans for half the planned natural gas plants, wholesale prices would increase instead

Key question—how big would be the effects on wholesale prices?

- Ohio is not a self-contained wholesale market -- the PJM marketplace coordinates the movement of wholesale electricity in all or parts of 13 states, plus the District of Columbia
- The market includes parts (or all) of other fairly large states, including Illinois, Michigan, New Jersey, North Carolina, Pennsylvania, and Virginia
- Policy decisions in Ohio would have an effect on demand or supply in this marketplace, but Ohio customers are in the minority in this market, so most of the benefits or costs of such demand or supply shifts would be felt by customers in these other states

How to estimate the effects of Ohio policy on wholesale prices

- It would be possible in concept to model the effect of Ohio's EE savings, for example, on wholesale prices by including a variable on the right hand side of an econometric equation along with other variables that would affect the price of electricity (e.g., natural gas prices)
- The equation would be used to estimate the effects of each of those variables on the wholesale price—the variable on the left hand side of the equation
- But very detailed data would be required to create a reliable model of EE savings

How to estimate the effects of Ohio policy on wholesale prices (cont'd.)

- LBO economists are aware only of annual data on EE/PDR reductions in power
  - That does not yield many data points to work with
  - There are likely to be time lags in the effect of EE/PDR programs on prices, and the lags could be measured in days, weeks, or months--they are unlikely to correspond to year-length intervals
  - Ideally, an econometrician would want to work with monthly, or even weekly data – I am not sure if even the EDUs have access to EE/PDR savings on a weekly interval
- Other factors underlying recent price movements are quite dramatic—notably for example movements in the price of natural gas
- Policy choices in other PJM states would also be important, difficult to catalogue accurately, and would require collecting even more data
- Also, as the PJM study illustrates, effects on prices would depend on supply side business decisions, which econometricians may not be well positioned to predict

How to estimate the effects of Ohio policy on wholesale prices (cont'd.)

- To conclude, H.B. 6 could have the effect of raising wholesale energy prices via its demand side effects, thereby offsetting in part or in whole the effects of the reduction in riders on customers' bills
- But it is also possible the supply side effects could dominate, yielding lower energy bills
- Producing a reliable estimate of the net effect would require a time-consuming analysis (need to collect data on other states' policies, natural gas and other prices), data collected more frequently than annually, and great expertise regarding how business decisions in the power generation industry are affected by H.B. 6

Effect of repealing H.B. 6

- Estimating effects of repealing H.B. 6 would be more difficult than estimating the effects of its enactment
- In addition to estimating effects on wholesale prices, effects on compliance costs would need to be estimated
  - how EE/PDR programs would be restored to prior law is unclear
- Historical data on EE/PDR riders may not be a reliable guide to rider amounts going forward
  - Target savings change from historical target savings under prior law
  - Technological change may reduce costs of achieving a given EE/PDR target
  - Convincing holdout customers to engage in EE/PDR savings program may require more and more expensive inducements

That concludes our presentation

Questions?