

Ohio Legislative Service Commission

Bill Analysis

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Rep. Stautberg

BILL SUMMARY

Renewable energy resources

• Makes changes in classifications of current renewable energy resources, specifically regarding solar and geothermal energy, hydroelectric facilities, and fuel cells.

Advanced energy resources

- Classifies as an advanced energy resource:
 - Any mercantile customer or supplier method or any modification or replacement of certain items that reduces the energy intensity of any water supply function or water treatment function.
 - Any method, modification, or replacement of certain items that increases the rated capacity of a transmission or distribution line.

Alternative energy benchmarks

- Makes renewable energy compliance payments permissive.
- Requires that the advanced-energy portion must be counted toward compliance with the alternative energy benchmarks "in every year it is provided" in order to meet compliance, beginning in 2009.
- Requires that certain energy savings and peak demand reduction associated with heat rate and other efficiency or energy intensity improvements be counted as advanced energy for purposes of the benchmarks.

- Permits advanced energy resources and certain savings and reductions to be counted toward the alternative energy benchmarks regardless of whether they may be counted toward the energy efficiency and peak demand reduction (EE/PDR) requirements.
- Permits all energy efficiency and peak demand reductions and certain savings and reductions to be counted toward EE/PDR requirements regardless of whether they may be counted toward the alternative energy benchmarks.
- Requires that at least half of the renewable benchmarks be met from renewable energy resources located in Ohio or that are eligible or become eligible to be provided as capacity, energy, or ancillary services through or within the wholesale electric market.
- Modifies the calculation of the 3% cost cap.
- Modifies provisions governing mercantile customer-sited advanced or renewable energy resources, including specifying that those resources include certain plans, resources, behaviors, policies, practices, and energy intensity reductions.
- Repeals a provision that requires solicitations ordered by the Public Utilities Commission (PUCO) for renewable energy credits to be made as part of the electric distribution utility's (EDU's) or electric services company's (ESC's) default service.

Energy efficiency requirements

- Modifies the description of the savings that energy efficiency programs must achieve.
- Modifies the yearly energy savings requirements to make the requirements in years 2019-2025 more gradual, such that the cumulative savings requirement of an excess of 22% by the end of 2025 remains the same.
- Permits a number of items to be included in energy efficiency programs, including certain policies, behaviors, practices, or programs, and increased use of postconsumer recycled glass by a mercantile customer.
- Permits banking of energy savings, and prohibits the PUCO from compelling the use of those banked savings.

Peak demand reduction

 Requires that peak demand reduction be measured relative to the measure used by the applicable regional transmission organization to establish a supplier's resource adequacy or capacity obligation.

Changes applying to energy efficiency and peak demand reduction

- Makes forfeitures permissive, and modifies the requirements for the amounts of forfeitures.
- Requires that federal energy efficiency and peak demand reduction benchmarks supersede Ohio's EE/PDR requirements.
- Requires that many new items be counted toward compliance with the EE/PDR requirements.
- Adds to and modifies how compliance with EE/PDR requirements must be measured.
- Requires EDUs to have three-year compliance plans to meet EE/PDR requirements approved by the PUCO, but permits EDUs to continue or implement compliance plans based on the current requirements if those plans were approved by or filed with the PUCO before the bill's effective date.
- Permits certain retail customers to opt out of an EDU's compliance plan, thereby exempting the customer from cost recovery mechanisms but also removing the customer's ability to benefit from the plan.
- Permits retail customers to opt back into compliance plans.
- Requires the opt-out and opt-in provisions to apply to accounts subject to the self-assessing purchaser option under the kilowatt hour tax.
- Requires EDUs to select one of two cost caps that, when met, relieve the EDU of achieving the EE/PDR requirements for the year and from making further expenditures to meet them.
- Expressly grants EDUs cost recovery for certain items, including shared savings
 incentives earned on or before a cost cap is met and compliance costs, incentives,
 and related items from certain temporary overcompliance.

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- Requires rather than permits a cost recovery mechanism for energy efficiency and peak demand reduction programs to exempt a mercantile customer that commits its demand-response or customer-sited capabilities for integration into the programs.
- Modifies requirements for the calculation of baselines for compliance with the EE/PDR requirements.
- Prohibits the PUCO from imposing a penalty or requiring any shortfall to be carried forward to a future compliance year as a result of noncompliance or undercompliance resulting from the application of the cost cap.
- Requires liberal construction of the EE/PDR requirements.
- Permits the PUCO to require an EDU to offer energy efficiency resources and demand response resources into regional transmission organization capacity auctions under certain circumstances.
- Directs that conflicts between certain current PUCO methods and the current alternative energy benchmarks and EE/PDR requirements are to be resolved between the PUCO and the Supreme Court in favor of maximizing compliance.

Recodification

Recodifies the law governing alternative energy and EE/PDR requirements.

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CONTENT AND OPERATION

Renewable energy resources

Changes to classifications of current renewable energy resources

Solar and geothermal

Current law already classifies geothermal energy and solar photovoltaic or solar thermal energy as renewable energy resources. But the bill specifies that these are to be classified as renewable energy resources regardless of whether electricity is produced.¹ The bill makes this specification for purposes of (1) advanced energy projects funded by the Ohio Air Quality Development Authority,² (2) the Advanced Energy Program administered by the Director of the Development Services Agency,³ and (3) the alternative energy benchmarks (including the use of renewable energy credits).⁴ (See **COMMENT** 1.)

Hydroelectric facilities

For purposes of (1) advanced energy projects funded by the Ohio Air Quality Development Authority,⁵ (2) the Advanced Energy Program administered by the Director of the Development Services Agency,⁶ and (3) the alternative energy benchmarks (including the use of renewable energy credits),⁷ the bill permits the use of hydroelectric facilities located on water discharged to a lake. Current law requires the facilities to be located at a dam on a river, or on water discharged to a river.

For these same three purposes, the bill also permits the facility to be within the provinces of Ontario or Quebec. Current law requires the location to be within or bordering Ohio, or within or bordering an adjoining state.⁸

¹ R.C. 3706.25(E) and 4928.01(A)(37)(a).

² R.C. 3706.26, not in the bill.

³ R.C. 4928.62.

⁴ R.C. 4928.64 to 4928.6410 and 4928.65.

⁵ R.C. 3706.26, not in the bill.

⁶ R.C. 4928.62, not in the bill.

⁷ R.C. 4928.64 to 4928.6410 and 4928.65.

⁸ R.C. 3706.25(E), 4928.01(A)(37)(b), and 4928.65.

Fuel cells

While current law specifies that a renewable energy resource includes any fuel cell used in the generation of electricity, the bill adds "energy derived from" such a fuel cell. The bill makes this change for purposes of (1) advanced energy projects funded by the Ohio Air Quality Development Authority, (2) the Advanced Energy Program administered by the Director of the Development Services Agency, and (3) the alternative energy benchmarks (including the use of renewable energy credits).

Advanced energy resources

Energy intensity

For purposes of (1) the alternative energy benchmarks (including the use of renewable energy credits)¹³ and (2) the Advanced Energy Program administered by the Director of the Development Services Agency,¹⁴ the bill adds to the list of advanced energy resources any mercantile customer or supplier method or any modification or replacement of any property, process, device, structure, or equipment that reduces the energy intensity of any water supply function or water treatment function. The bill defines a water supply function as the functions associated with:

- Raw water collection, purification, treatment, and storage;
- Establishing or maintaining pressure to balance water supply and demand;
- Water delivery and transfer.

The bill defines a water treatment function as any of the preliminary, secondary, tertiary, and advanced activities, whether physical, biological, or chemical, associated with the removal of contaminants from, or conditioning of, wastewater prior to its return to the environment or recycled use. The bill defines energy intensity as the amount of energy used to produce a certain level of output or activity, measured by the

¹⁴ R.C. 4928.62, not in the bill.



⁹ R.C. 3706.25(E) and 4928.01(A)(37)(a).

¹⁰ R.C. 3706.26, not in the bill.

¹¹ R.C. 4928.62, not in the bill.

¹² R.C. 4928.64 to 4928.6410 and 4928.65.

¹³ R.C. 4928.64 to 4928.6410 and 4928.65.

quantity of energy needed to perform a particular activity, expressed as energy per unit of output, energy per unit of gross total floor space, or an activity measure of service.¹⁵

The bill does *not* make the same addition for purposes of advanced energy projects funded by the Ohio Air Quality Development Authority.¹⁶

Continuing law defines a mercantile customer as a commercial or industrial customer if the electricity consumed is for nonresidential use and the customer consumes more than 700,000 kilowatt hours (kWh) per year or is part of a national account involving multiple facilities in one or more states.¹⁷

Transmission or distribution line capacity

For purposes of (1) the alternative energy benchmarks (including the use of renewable energy credits)¹⁸ and (2) the Advanced Energy Program administered by the Director of the Development Services Agency,¹⁹ the bill adds to the list of advanced energy resources any method or any modification or replacement of any property, process, device, structure, or equipment that increases the rated capacity of a transmission or distribution line.²⁰ The bill does *not* make the same addition for purposes of advanced energy projects funded by the Ohio Air Quality Development Authority.²¹

Alternative energy benchmarks

Permissive compliance payments

The bill permits rather than requires the Public Utilities Commission (PUCO) to impose renewable energy compliance payments on an electric distribution utility (EDU) or an electric services company (ESC) for a failure to comply with the renewable energy portion of the alternative energy benchmarks.²²

¹⁵ R.C. 4928.01(A)(34)(j), (41), (42), and (43).

¹⁶ R.C. 3706.25(E); R.C. 3706.26, not in the bill.

¹⁷ R.C. 4928.01(A)(19).

¹⁸ R.C. 4928.64 to 4928.6410 and 4928.65.

¹⁹ R.C. 4928.62, not in the bill.

²⁰ R.C. 4928.01(A)(34)(a)(ii).

²¹ R.C. 3706.25(B); R.C. 3706.26, not in the bill.

²² R.C. 4928.643. An amendment is needed to clarify that the benchmarks referred to are those applicable to renewable energy resources.

Under continuing law, an EDU is an electric utility that supplies at least retail electric distribution service, and an ESC is an electric light company that is engaged on a for-profit or not-for-profit basis in the business of supplying or arranging for the supply of only a competitive retail electric service in Ohio. An ESC includes a power marketer, power broker, aggregator, or independent power producer but excludes an electric cooperative, municipal electric utility, governmental aggregator, and billing and collection agent.²³

Half from advanced energy resources

The bill allows that half of the alternative energy resources implemented by 2025 and thereafter may be *met* from advanced energy resources. Current law allows that half may be *generated* from advanced energy resources. The bill also requires that this half (from advanced energy resources) must be counted toward compliance with the alternative energy benchmarks "in every year it is provided" in order to meet compliance, beginning in 2009. The operation of this provision is unclear.²⁴ Current law does not require this for the half that must be generated from renewables.²⁵

Heat rate and efficiency or energy intensity improvements

While the bill does not add these to the definition of an advanced energy resource, it nevertheless requires that certain energy savings and peak demand reduction associated with heat rate and other efficiency or energy intensity improvements (see "**Energy intensity**" above, for the definition of "energy intensity") be counted as advanced energy for purposes of the alternative energy benchmarks. These savings and reductions must have been achieved since 2006 from electric generating plants that have existed as of January 1, 2013, and are located either within an EDU's certified territory, or owned and operated by an affiliate of the EDU as long as the generating plant was previously owned, in whole or in part, by an EDU located in Ohio.²⁶ (See **COMMENT** 2.)

²³ R.C. 4928.01(A)(6) and (9).

²⁴ R.C. 4928.641(B)(1).

²⁵ R.C. 4928.641(B)(2).

²⁶ R.C. 4928.6640(G).

Double-counting provisions

Advanced energy that qualifies as energy efficiency and peak demand reduction (EE/PDR)

The bill permits double counting of any advanced energy resource that also counts toward the energy efficiency and peak demand reduction (EE/PDR) requirements. Specifically, the bill requires an advanced energy resource to be counted toward compliance with the alternative energy benchmarks regardless of whether the resource or its attributes may be counted toward compliance with the EE/PDR requirements.²⁷

Certain savings and reductions that qualify as EE/PDR

The bill permits double counting of certain energy efficiency savings and demand reductions that also count toward the EE/PDR requirements. Specifically, the bill requires the following savings and reductions to be counted toward compliance with the alternative energy benchmarks regardless of whether the resource or its attributes may also be counted toward compliance with the EE/PDR requirements:

- Energy efficiency savings or demand reductions produced by alternative energy technologies or energy efficiency technologies, products, or activities that (1) a mercantile customer owns and for which a revolving loan was issued by a municipal corporation and (2) may be committed to an EDU;
- Energy efficiency savings or demand reductions realized by a mercantile customer that (1) are produced by a special energy improvement project that the mercantile customer owns and (2) may also be committed to an EDU;
- Energy efficiency savings or demand reductions produced by a special energy improvement project located in an EDU's certified territory.²⁸

(See **COMMENT** 3.)

In another provision, the bill requires these savings and reductions, as well as all other energy efficiency savings and peak demand reductions, to be counted toward the

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²⁸ R.C. 717.25(E), 1710.061(A) and (B), and 4928.6410(A).



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²⁷ R.C. 4928.6410(B).

EE/PDR requirements regardless of whether they may be counted toward compliance with the alternative energy benchmarks.²⁹

In-state requirement for renewables

The bill requires that at least half of the renewable benchmarks be met from renewable energy resources located in Ohio *or* that are eligible or become eligible to be provided as capacity, energy, or ancillary services through or within the wholesale electric market. The bill specifies that the wholesale market is the market operated by PJM Interconnection or its successor, the Midcontinent Independent System Operator or its successor, or any regional transmission entity "performing the functions identified in [current requirements for when entities may own or control transmission facilities in Ohio] and applicable to this state." Current law requires half of the renewable benchmarks to be met through facilities in Ohio. The bill also removes a provision that requires the remaining half to be met with resources shown to be deliverable into Ohio, but is silent on where this remaining half is to come from.³⁰

Alternative energy cost cap

The bill prohibits an EDU or ESC from continuing to comply with, or from being subject to any obligation to continue to comply with, in any year, the advanced or renewable benchmarks if continued compliance for that year would exceed the cost cap as defined by the bill. Current law states that an EDU or ESC need not comply with those benchmarks to the extent that the reasonably expected cost of compliance exceeds the 3% cost cap as stated in current law.

The cost cap under current law is the point at which the reasonably expected cost of benchmark compliance exceeds, by 3%, the reasonably expected cost of otherwise producing or acquiring the requisite electricity. The cost cap under the bill is to be 3% of the "sales supply amount," which is the sales baseline (in megawatt hours (MWh) for the applicable compliance year) multiplied by the generation supply dollar amount. The bill specifies that the sales baseline consists of an average of the EDU's or ESC's annual retail sales of electricity sold in Ohio from the three preceding years. The bill defines the generation supply dollar amount as the reasonably expected dollar amount per MWh for the generation supply available to consumers under the standard service offer (SSO) during the applicable compliance year. The bill further specifies that the reasonably expected dollar amount consists of a weighted average of the cost of the SSO supply for the delivery during the compliance year, net of distribution losses. The bill, however,

³⁰ R.C. 4928.641(B)(3); R.C. 4928.12, not in the bill.



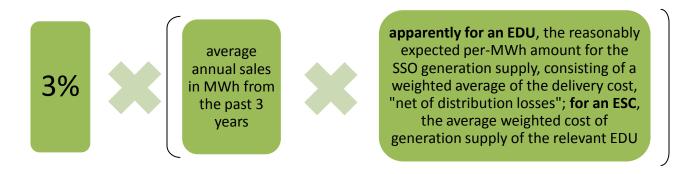
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²⁹ R.C. 4928.6642.

defines "generation supply dollar amount," with respect to an ESC, to mean the average weighted cost of generation supply of the "relevant *EDU*."

In summary:

The bill's cost cap³¹



Current cost cap



Recovery of ongoing contract costs

The bill states that "[n]otwithstanding the cost cap," ongoing costs that are associated with contracts by an EDU to procure renewable energy resources and that are being recovered from customers through a bypassable charge as of the bill's effective date must continue to be recovered for the terms of the contracts.³²

Mercantile customer-sited advanced or renewable energy resources

The bill requires that for a mercantile customer-sited advanced or renewable energy resource to qualify toward the alternative energy benchmarks, the customer must either (1) contractually commit the resource to an EDU or ESC for purposes of compliance with those benchmarks or (2) contractually commit the resource to an EDU for integration into the EDU's demand-response, energy efficiency, or peak demand

³² R.C. 4928.644(D).



³¹ R.C. 4928.641(B) and 4928.644(A) and (B).

reduction programs. Current law requires the latter, but specifies only that the resource be committed for integration into an EDU's programs described above. The bill specifies that a qualifying mercantile customer-sited resource includes the following new items:

- A resource, behavior, or practice that reduces line or transformation losses;
- A behavior or practice that improves the relationship between real and reactive power (current law already includes a *resource* that does this);
- A behavior or practice that makes efficient use of waste heat or other thermal capabilities owned or controlled by a mercantile customer (current law already includes a *resource* that does this);
- A plan, policy, behavior, or practice that reduces the total energy intensity
 of a facility, pipeline, building, plant, or equipment regardless of the type
 of energy intensity reduction, provided that the plan, policy, behavior, or
 practice does not result in a substitution of an alternative form of energy
 use for the use of purchased electricity;
- A plan, policy, behavior, or practice that reduces the energy intensity of any water supply function or water treatment function;
- An energy intensity reduction that is achieved, in whole or in part, as a result of the funding provided from the Universal Service Fund;
- "[S]torage, behavior, practice, or technology" that allows a mercantile customer more flexibility to modify its demand or load and usage characteristics (current law includes "storage technology" that allows this).³³

(See "**Energy intensity**" for the definitions of "energy intensity, "water supply function," and "water treatment function.")

Solicitations for renewable energy credits

The bill removes a provision that requires any PUCO-ordered solicitations for renewable energy credits to be made as part of the EDU's or ESC's default service. Under current law, the PUCO may require these solicitations before the EDU's or ESC's request for a force majeure determination can be made. A force majeure determination,

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³³ R.C. 4928.64(A)(3).

in this context, is a determination as to whether renewable energy resources are sufficiently and reasonably available in the marketplace.³⁴

Energy efficiency requirements

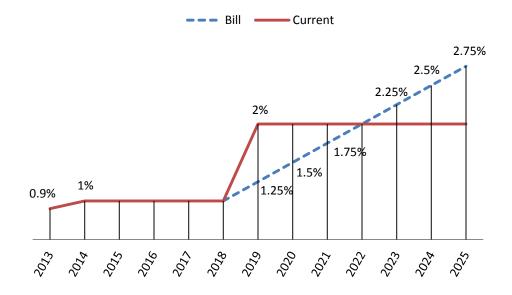
Description of the savings that programs must achieve

The bill modifies the description of the savings that required energy efficiency programs must achieve. Current law requires simply that those programs achieve "energy savings." The bill requires that the programs achieve energy *efficiency* savings that reduce the quantity of energy required to maintain or improve "end-use or utility system functionality."³⁵

Yearly savings requirements

The bill modifies the yearly energy savings requirements, decreasing the percentages for years 2019-2021, but increasing them for years 2023-2025. The cumulative savings requirement of an excess of 22% by the end of 2025 remains the same. The following graph shows the specific modifications:

Energy Savings Requirements³⁶



³⁶ R.C. 4928.661.



³⁴ R.C. 4928.645(A) and (B).

³⁵ R.C. 4928.661.

Items to be counted toward compliance with the savings requirements

The bill permits the following new items to be included as energy efficiency (EE) programs to meet compliance with the annual energy savings requirements:

- A policy, behavior, practice, or program designed and implemented to comply with EE requirements (see COMMENT 4);
- Increased use of post-consumer recycled glass by a mercantile customer.³⁷

Under continuing law, the following may be counted toward compliance with the annual energy savings requirement, and the bill also includes them as EE programs:

- A combined heat and power system placed into service or retrofitted on or after September 10, 2012 (see COMMENT 5);
- A waste energy recovery system placed into service or retrofitted on or after September 10, 2012, except that a waste energy recovery system at a state institution of higher education that recovers waste heat from electricity-producing engines or combustion turbines and that simultaneously uses the recovered heat to produce steam may be included only if it was placed into service between January 1, 2002, and December 31, 2004 (see **COMMENT** 6).³⁸

Also, under continuing law, a waste energy recovery system is defined as either the type described in the second dot point directly above or a facility that generates electricity through the conversion of energy from either (1) exhaust heat from engines or manufacturing, industrial, commercial, or institutional sites, except for exhaust heat from a facility whose primary purpose is the generation of electricity, or (2) reduction of pressure in gas pipelines before gas is distributed through the pipeline, provided that the conversion of energy to electricity is achieved without using additional fossil fuels.³⁹

A combined heat and power system is defined under continuing law as the coproduction of electricity and useful thermal energy from the same fuel source designed to achieve thermal-efficiency levels of at least 60%, with at least 20% of the system's total useful energy in the form of thermal energy.⁴⁰

⁴⁰ R.C. 4928.01(A)(40).



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³⁷ R.C. 4928.66(A).

³⁸ R.C. 4928.01(A)(38)(b) and 4928.66(A).

³⁹ R.C. 4928.01(A)(38).

Banking of energy savings

The bill permits any energy savings achieved in excess of the EE requirements to be banked and applied toward achieving the EE requirements in future years (see **COMMENT** 7).⁴¹

The bill also prohibits the PUCO from compelling the use of banked energy savings as a result of noncompliance or undercompliance resulting from the application of the EE/PDR cost cap.⁴²

Peak demand reduction requirements

Measurement

The bill requires that peak demand reduction be measured relative to the measure of the peak demand that is used by the applicable regional transmission organization to establish a supplier's resource adequacy or capacity obligation.⁴³ The bill defines a "regional transmission organization" for this provision as the PJM Interconnection Regional Transmission Organization, L.L.C. or any entity performing the functions, within Ohio, identified in current requirements for which entities may own or control transmission facilities in Ohio.⁴⁴

Definition of peak demand reduction programs

The bill defines a peak demand reduction program as a policy, practice, behavior, or program designed to comply with peak demand reduction requirements.⁴⁵ (See **COMMENT** 8.)

Changes applicable to both energy efficiency and peak demand reduction

Permissive forfeitures

The bill permits rather than requires the PUCO to assess a forfeiture on an EDU that fails to comply with the EE/PDR requirements. The bill also repeals one of the PUCO's options for the amount of the forfeiture. This option permits a forfeiture to be \$10,000 per day per undercompliance or noncompliance. Consequently, under the bill,

⁴⁵ R.C. 4928.66(D).



⁴¹ R.C. 4928.6640(J).

⁴² R.C. 4928.6647.

⁴³ R.C. 4928.662(A).

⁴⁴ R.C. 4928.66(F); R.C. 4928.12, not in the bill.

the only option that remains is that a forfeiture be in an amount equal to the then existing market value of one renewable energy credit per MWh of undercompliance or noncompliance.⁴⁶

Supersedence by federal EE/PDR benchmarks

The bill prohibits the EE/PDR requirements and any associated compliance requirements from applying after the date that any federal benchmarks requiring energy savings or peak demand reduction become effective. The bill specifies that this supersedence applies regardless of whether the federal benchmarks specify that they have a preemptive effect on state EE/PDR requirements.⁴⁷ (See **COMMENT** 9.)

Items to be counted toward compliance with the EE/PDR requirements

The bill requires that the following be counted toward meeting the EE/PDR requirements regardless of the intent or origin of the improvement:

- Transmission and distribution infrastructure improvements that reduce line losses;
- Energy savings and peak demand reduction that are achieved, in whole or in part, as a result of funding from the Universal Service Fund.⁴⁸

The bill also requires that the following be counted toward compliance with the EE/PDR requirements (but does not apply the condition "regardless of the intent or origin of the improvement"):

• Energy savings and peak demand reduction achieved through actions taken by customers or through utility programs that comply with federal standards for either or both EE/PDR requirements, including resources associated with such savings or reduction that are recognized as capacity resources by a regional transmission organization (the bill defines a "regional transmission organization" for this provision as the PJM Interconnection Regional Transmission Organization, L.L.C. or any entity performing the functions, within Ohio, identified in current requirements for which entities may own or control transmission facilities in Ohio);⁴⁹

⁴⁹ R.C. 4928.66(F) and 4928.6640(A); R.C. 4928.12, not in the bill.



⁴⁶ R.C. 4928.6656; R.C. 4905.54, not in the bill.

⁴⁷ R.C. 4928.6660.

⁴⁸ R.C. 4928.6627(B).

- Energy savings and peak demand reductions that occur as a consequence of consumer reductions in water usage or reductions and improvements in wastewater treatment;⁵⁰
- Energy savings and peak demand reduction associated with heat rate and other efficiency or energy intensity improvements achieved since 2006 from electric generating plants that have existed as of January 1, 2013, and are located either within an EDU's certified territory, or owned and operated by an affiliate of the EDU as long as the generating plant was previously owned, in whole or in part, by an EDU located in Ohio;⁵¹
- All energy savings and peak demand reduction that is physically located within the EDU's certified territory and is bid into regional transmission organization capacity auctions as energy efficiency resources and demand response resources (see above for the definition of a regional transmission organization);⁵²
- Energy efficiency savings or demand reductions discussed above under "Certain savings and reductions that qualify as EE/PDR."

Measuring compliance with the EE/PDR requirements

As found, deemed, annualized, and gross savings bases

The bill requires that energy savings and peak demand reduction be measured on the higher of an as found or deemed basis, achieved since 2006 and going forward. The bill does not define the terms "as found basis" or "deemed basis." The bill also requires the PUCO to count both the energy savings and peak demand reduction on an annualized basis and also on a gross savings basis. 54

New construction

For new construction, energy savings and peak demand reduction are to be counted based on 2008 federal standards. But the bill specifies that when new construction replaces an existing facility, the difference in savings and reduction

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⁵⁰ R.C. 4928.6640(F).

⁵¹ R.C. 4928.6640(G).

⁵² R.C. 4928.6640(H).

⁵³ R.C. 4928.6640(B).

⁵⁴ R.C. 4928.6640(C) and (D).

between the *new* and *replaced* facility is what must be counted toward the requirements.⁵⁵

British thermal units

The bill requires the PUCO to recognize and count energy savings or peak demand reductions, on a British thermal unit equivalent basis, that occur as a consequence of an approved compliance plan. But the bill states that a British thermal unit savings related to a reduction in gas usage or associated with switching equipment or processes from electric usage to gas usage does not qualify.⁵⁶

EDUs in the same holding company system

The bill requires the PUCO to permit the EE/PDR requirements to be met on an aggregated basis for EDUs in the same holding company system.⁵⁷

Continuous counting

The bill requires that the energy savings and peak demand reduction amounts approved by the PUCO continue to be counted toward the EE/PDR requirements as long as the requirements remain in effect (see **COMMENT** 10).⁵⁸

Notification to the PUCO

The bill requires an EDU to annually notify the PUCO regarding which measurements as described above will be included to determine compliance with the EE/PDR requirements. While this provision refers specifically to "measurements," it may also refer to some of the items required to be counted toward compliance with the requirements under the bill.⁵⁹

Demand-response capabilities vs. programs for mercantile customers

The bill requires that compliance with the EE/PDR requirements be measured by including the effects of all demand-response *capabilities* for mercantile customers. The term used in current law in place of "capabilities" is *programs*.⁶⁰

⁵⁵ R.C. 4928.6640(B).

⁵⁶ R.C. 4928.6640(E).

⁵⁷ R.C. 4928.6640(I).

⁵⁸ R.C. 4928.6640(J).

⁵⁹ R.C. 4928.6641.

⁶⁰ R.C. 4928.6625.

Compliance plans

The bill requires EDUs to have compliance plans to meet the EE/PDR requirements.⁶¹ Presumably, these compliance plans are to replace program portfolio plans that are required to be filed under current PUCO rules.⁶² The bill specifies that after the expiration of any compliance plan filed with or approved by the PUCO prior to the bill's effective date, each subsequent compliance plan must encompass at least a three-year period.⁶³ Compliance plans are required to be approved by the PUCO in advance of the period for which compliance is required.⁶⁴

For approval by the PUCO, the compliance plans are required to include:

- Recovery from customers of all program costs incurred to implement the measures adopted for compliance with the mandates;
- At the choice of the EDU, for each rate class of customer, compensation through either a lost revenue mechanism or a revenue decoupling mechanism (see definitions below); and
- A shared savings incentive mechanism that permits the EDU to retain one-third of the after-tax net benefits associated with the approved programs as measured by a utility cost test (see definition below).

The bill requires the incentive mechanism to apply to all compliance activities, except (1) compliance that exceeds the EE/PDR requirements and (2) the Percentage of Income Payment Plan Program, the Home Energy Assistance Program, the Home Weatherization Assistance Program, and the Targeted Energy Efficiency and Weatherization Program, if those programs are adopted by the PUCO and they are not cost-effective.

The bill defines a lost revenue mechanism as a mechanism to recover either or both of the following based on kWhs eliminated as a result of compliance with EE/PDR requirements:

- All lost, forgone, or eliminated distribution revenue;
- All lost, forgone, or eliminated distribution and transmission revenue.

⁶⁴ R.C. 4928.6612.



⁶¹ R.C. 4928.6610.

⁶² O.A.C. 4901:1-39-01(I) and 4901:1-39-04.

⁶³ R.C. 4928.6610.

The bill defines a revenue decoupling mechanism as a rate design or other cost recovery mechanism that provides recovery of the cost of distribution service irrespective of distribution service sales.

For purposes of calculating a shared savings incentive only, the bill permits the PUCO to modify the utility cost test to include societal benefits that are validated by independent measurement and verification protocols that meet the evidentiary standard as specified by the U.S. Supreme Court in the 1993 case *Daubert v. Merrell Dow Pharmaceuticals, Inc.*⁶⁵

The bill defines a utility cost test as a test to determine the net present value of the difference between the benefits and costs of an energy efficiency or peak demand reduction program. These program "costs" are, specifically, the EDU's costs of implementing the policy, behavior, practice, or program, including the incentives paid to customers, and the increased supply costs for the periods when load is not reduced through the operation of the policy, behavior, practice, or program. The "benefits" are, specifically, the EDU's avoided supply costs of energy and demand and the reduction in transmission, distribution, generation, or capacity costs for the periods when load is reduced. The cost test is expressly required to include incentive costs but is also required to exclude any net costs incurred by the customer participating in the program.⁶⁶

Compliance plans based on the current requirements

The bill permits EDUs to continue or implement compliance plans that are based on the current EE/PDR requirements. In order to do this, the plan must have at least been filed with the PUCO before the bill's effective date (or it must have been approved). The EDU may also continue existing approved cost recovery and incentive mechanisms, until such costs and incentives are fully recovered. The bill states that all of its provisions governing the EE/PDR requirements apply if the EDU continues or implements a compliance plan based on the current requirements. But the bill permits an EDU that chooses to continue or implement one of these compliance plans to elect not to be subject to the bill's EE/PDR cost cap. The PUCO must be notified of the election. (See **COMMENT** 11.)

⁶⁷ R.C. 4928.6613.



⁶⁵ R.C. 4928.01(A)(16), 4928.66(C) and (G), and 4928.6611; R.C. 4928.58(E)(1), not in the bill.

⁶⁶ R.C. 4928.66(H).

Retail customers may opt out of compliance plans

The bill permits a retail customer of an EDU that receives service above the primary voltage level, as determined by the EDU's tariff classification, to opt out of the EDU's compliance plan.⁶⁸ Under the bill, this opt out exempts the customer's subject accounts from the cost recovery mechanisms.⁶⁹ It also removes the customer's ability to obtain direct benefits from the EDU's compliance plan, and may further limit the customer's ability to participate in or directly benefit from any compliance plans (see **COMMENT** 12).⁷⁰ The bill expressly prohibits a retail customer that has opted out from participating in a mercantile customer agreement under continuing law as revised by the bill (see "**Mercantile customers' exemption from cost recovery**" below).⁷¹

The bill appears to further require, in order for a customer to opt out, that the customer (1) have adopted an ongoing energy management system that allows for identification and, in the customer's sole discretion, implementation of options to reasonably and cost effectively reduce the energy intensity of the organization (the bill is not clear as to what this organization is) and (2) have an energy management system that incorporates independent measurement and verification or includes measurement and verification protocols that meet or exceed measurement and verification protocols that are generally accepted within the customer's business sector. This analysis states that the bill *appears* to require this because (1) and (2) above must be affirmed in the customer's opt-out notice, but they are not direct requirements for opting out.⁷²

If the energy management system of a customer that opts out does not incorporate independent measurement and verification protocols as described above, the bill permits the PUCO to request information from the customer for the limited purpose of determining if the protocols are reasonable compared to generally accepted protocols within the customer's business sector. If the PUCO determines that the customer's protocols do not meet the protocols generally accepted within the customer's business sector, the PUCO may provide the customer with measurement and verification protocols that meet the generally accepted protocols. The customer must either adopt the protocols provided or adopt alternate protocols that meet the protocols generally accepted within the customer's business sector. But the bill specifies that in no event does the PUCO have any authority to supervise or regulate the customer's energy

⁷² R.C. 4928.6631(B).



⁶⁸ R.C. 4928.6630.

⁶⁹ R.C. 4928.6632.

⁷⁰ R.C. 4928.6630 and 4928.6632.

⁷¹ R.C. 4928.6633(C).

management system or the customer's process for measurement and verification.⁷³ (See **COMMENT** 13.)

The opt out is to extend to all of the customer's accounts, irrespective of the size or service voltage level, associated with the activities performed by the customer and located on or adjacent to the customer's premises that are served above the primary voltage level.⁷⁴

As mentioned above, the bill requires the customer to send a written opt-out notice to the EDU, and to submit a copy to the PUCO Secretary. The notice must include (1) a statement that the customer is opting out, (2) the opt-out effective date, (3) the numbers of each account related to the customer's premises that receives service above the primary voltage level as determined by the utility's tariff classification (see **COMMENT** 14), (4) the physical location of the load center, and (5) the affirmation described above regarding the energy management system. The affirmation must be "verified."⁷⁵

Retail customers may opt back in to compliance plans

The bill permits a retail customer to opt back in after a previous election to opt out if the previous opt out was for at least three consecutive calendar years. The customer must give 12 months' advance notice to the PUCO and the EDU. The opt-in status must be maintained for three consecutive calendar years before the customer is eligible subsequently to opt out. The customer is then required to give the EDU 12 months' advance notice of the subsequent opt out.

In order to opt back in, a customer must give the EDU written notice and submit a copy to the PUCO Secretary. The notice must include (1) a statement that the customer is opting in, (2) the opt-in effective date, (3) the numbers of each account related to the customer's premises that receives service above the primary voltage level as determined by the utility's tariff classification (see **COMMENT** 14), and (4) the physical location of the load center.⁷⁶

⁷⁶ R.C. 4928.6633 and 4928.6634.



⁷³ R.C. 4928.6635.

⁷⁴ R.C. 4928.6630.

⁷⁵ R.C. 4928.6631.

Opt-out and opt-in provisions apply to accounts of self-assessing purchasers

The bill states that its opt-out and opt-in provisions apply to any accounts subject to the self-assessing purchaser option under current law governing the kWh tax on electricity (see **COMMENT** 15). Under this law, the following commercial or industrial customers may elect to self-assess the excise tax at discounted rates:

- A commercial or industrial customer that purchases electricity through a
 meter of an end user in Ohio or through more than one meter at a facility
 in Ohio located on contiguous property separated only by a roadway,
 railway, or waterway in excess of 45 million kWh of electricity over the
 course of the preceding calendar year;
- A commercial or industrial customer that will consume more than 45 million kWh of electricity over the course of the succeeding 12 months as estimated by the Tax Commissioner;
- A qualified end user that receives electricity through a meter of an end user in Ohio or through more than one meter at a facility in Ohio located on contiguous property separated only by a roadway, railway, or waterway and that consumes, over the course of the previous calendar year, more than 45 million kWh in other than its qualifying manufacturing process. This type of end user may elect to self-assess the tax with respect to the electricity used in other than its qualifying manufacturing process.⁷⁷

EE/PDR requirements cost cap

The bill creates two cost caps, one of which must (subject to an exception explained below) be chosen by an EDU within 90 days after the bill's effective date, for EE/PDR compliance plans.⁷⁸ The caps relieve the EDU of achieving the EE/PDR requirements for the year and from making further expenditures to meet them. Similarly, the bill requires that an EDU that has met the cap be deemed to have met the requirements for the year.⁷⁹ The two cost caps are:

 When the costs for compliance in any year exceed the cost per kWh of energy efficiency savings and cost per kilowatt of peak demand reduction that was incurred in calendar year 2013.

⁷⁹ R.C. 4928.6617.



Legislative Service Commission

⁷⁷ R.C. 4928.6636; R.C. 5727.81, not in the bill.

⁷⁸ R.C. 4928.6615 and 4928.6616.

 When the total annualized rate impact of program costs and shared savings incentives associated with compliance in any year exceeds the program costs approved for that EDU for the calendar year 2013.⁸⁰

The bill requires the cost cap to be selected by the EDU as a one-time irrevocable option, exercised solely at the discretion of that EDU. The cost cap selected is to apply to the EDU's compliance plans approved after the bill's effective date.⁸¹ But the bill, in a separate provision, permits an EDU that chooses to continue or implement a compliance plan based on the current EE/PDR requirements that was at least filed before the bill's effective date (not necessarily approved before that date) to elect not to be subject to this cost cap.⁸² Because these plans filed under current law but not yet approved do not necessarily have to be approved before the bill's effective date, the election provisions may conflict. An EDU that chooses to implement such a plan may choose not to be subject to a cap while at the same time be required to choose a cost cap provided in the bill.

The bill specifies that these cost caps are to minimize future rate impacts associated with the EE/PDR requirements as a consumer safeguard.⁸³ The bill requires that expenditures of program costs be curtailed as soon as practicable after the cost cap is met.⁸⁴ The bill never expressly permits recovery of EE/PDR costs incurred after a cost cap is met, though it does permit recovery from "temporary overcompliance" (see "**Cost recovery**" below).

Any excess compliance with the EE/PDR requirements achieved at the time the cost cap is met may be banked for future use.⁸⁵

The bill requires EDUs to notify the PUCO when the cost cap is met.⁸⁶

The bill prohibits the effects of lost revenue recovery or revenue decoupling from being included in the cost cap.⁸⁷

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80 R.C. 4928.6616.

81 R.C. 4928.6615.

82 R.C. 4928.6613(B).

83 R.C. 4928.6616.

84 R.C. 4928.6622(A).

85 R.C. 4928.6623.

86 R.C. 4928.6618.
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Cost recovery

The bill contains a number of provisions pertaining to an EDU's cost recovery and the EE/PDR requirements.

- The bill requires the PUCO to honor an EDU's contractual obligations that existed prior to the bill's effective date to ensure full recovery of costs relating to actions taken under previously approved compliance plans. The bill requires this to be done "[u]nder either cost cap option."88
- The bill states that nothing in its "cost-cap" provisions prevents the timely recovery of compliance costs and incentives incurred by an EDU before the bill's effective date and costs or compensation under a lost revenue mechanism, revenue decoupling mechanism, or other approved incentive mechanism (see "Compliance plans" above, for the definitions of "lost revenue mechanism" and "revenue decoupling mechanism").89
- The bill permits EDUs to recover all compliance costs, incentives, and related items resulting from any temporary overcompliance "resulting from" some of the bill's provisions.⁹⁰
- The bill requires that an EDU receive full recovery of shared savings incentives earned on or before the cost cap is met.⁹¹
- The bill prohibits recovery, as a cost of compliance with the EE/PDR requirements, of payments or incentives made to certain electric generating plants that achieve energy savings and peak demand reduction associated with heat rate and other efficiency or energy intensity improvements (see "Heat rate and efficiency or energy intensity improvements" above).92

Mercantile customers' exemption from cost recovery

The bill requires rather than permits any cost recovery mechanism for energy efficiency and peak demand reduction programs under the EE/PDR requirements to

⁹² R.C. 4928.6640(G).



⁸⁸ R.C. 4928.6619.

⁸⁹ R.C. 4928.6620.

⁹⁰ R.C. 4928.6622(B).

⁹¹ R.C. 4928.6622(A).

exempt any mercantile customers that commit their demand-response or other customer-sited capabilities for integration into the EDU's programs. But the bill requires that the exemption in each year be proportionate to the annual compliance benchmark for that year compared to the customer's annualized demand or energy usage for the applicable baseline period. Continuing law also requires the PUCO to determine that the exemption reasonably encourages the mercantile customers to commit those capabilities to those programs.⁹³

Facilitating contractual commitments by mercantile customers

The bill requires that the EE/PDR requirements facilitate efforts by a mercantile customer or a group of mercantile customers to offer certain customer-sited capabilities to an EDU *through a contractual commitment* as part of a reasonable arrangement submitted to the PUCO under continuing law. Current law does not specify "through a contractual commitment."⁹⁴

Baseline reductions

The bill requires rather than permits the PUCO to reduce the baselines for the EE/PDR requirements to adjust for new economic growth in the EDU's certified territory. It further requires the PUCO to reduce the baselines for the EE/PDR requirements to adjust for a downturn in the economy. Finally, the bill requires that the following be excluded from "the baseline" (presumably both baselines):

- The load and usage of customers for which reasonable arrangements have been approved;
- The load and usage of customers that have opted out of participation in energy efficiency and peak demand reduction programs under the bill.⁹⁵

Requirement for demand-response and smart grid investment programs

The bill changes a current requirement that demand-response programs and smart grid investment programs must be cost-beneficial to be included in energy efficiency and peak demand reduction programs. The bill changes the requirement to "cost effective" rather than "cost-beneficial."

⁹⁶ R.C. 4928.6627(A).



⁹³ R.C. 4928.6650.

⁹⁴ R.C. 4928.6626.

⁹⁵ R.C. 4928.665.

Prohibition on penalties and requiring shortfalls to be carried forward

The bill prohibits the PUCO from imposing a penalty or requiring any shortfall to be carried forward to a future compliance year as a result of noncompliance or undercompliance resulting from the application of the EE/PDR requirements cost cap. This prohibition appears to apply to penalties imposed for and shortfalls relating to noncompliance or undercompliance with the EE/PDR requirements, though the bill is not exactly clear. These provisions are located in a section that refers to energy savings, but does not specifically reference peak demand reductions.⁹⁷

Liberal construction of EE/PDR requirements

The bill requires the PUCO to liberally construe the EE/PDR requirements in favor of counting energy savings and peak demand reduction achieved by customers or through utility programs in order to achieve the EE/PDR requirements. The bill adds "as further specified in [provisions governing what must be counted toward the EE/PDR requirements and how they must be measured]."98

Offering EE/PDR into regional transmission organization capacity auctions

The bill permits the PUCO to require an EDU to offer energy efficiency resources and demand response resources into regional transmission organization capacity auctions (with some potential exceptions, explained below) if:

- The energy efficiency resources (1) have been installed and the EDU can demonstrate resource ownership, provided that savings must be adjusted for regional transmission organization measurement and verification standards, (2) have an approved measurement and verification plan approved by the regional transmission organization (see COMMENT 16), and (3) are of sufficient scale; and
- The demand response resources are owned by the EDU and will be available in the applicable delivery year.

The bill prohibits the PUCO from requiring an EDU to offer *projected* energy efficiency resources or demand response resources into regional transmission organization capacity auctions (see "**Measurement**" above for definition of a "regional transmission organization").

⁹⁸ R.C. 4928.6646.



⁹⁷ R.C. 4928.6647.

The bill also states that the PUCO does not have any authority to supervise or regulate ownership or use rights of customer-sited capabilities which are not voluntarily committed to an electric distribution utility.⁹⁹

Modification of provision regarding statewide building codes

The bill modifies a description of energy efficiency and peak demand reduction programs and improvements in a provision that prohibits conflict with statewide building codes adopted by the Board of Building Standards. Current law prohibits programs or improvements implemented by an EDU from conflicting with the building codes. The bill prohibits conflicts with programs or improvements "implemented or undertaken" (without linking the implementation or undertaking to an EDU) to meet the EE/PDR requirements.¹⁰⁰

Prohibition on requiring EE/PDR in excess of the law

The bill prohibits the PUCO from requiring an EDU to achieve energy savings or peak demand reduction in excess of the EE/PDR requirements.¹⁰¹

Advanced energy projects

The bill alters the definition of both types of advanced energy projects: those funded by the Ohio Air Quality Development Authority and those under the Advanced Energy Program administered by the Director of the Development Services Agency. Current law defines those projects in part as any technologies, products, activities, or management practices or strategies that facilitate the generation or use of electricity or energy. The bill adds "any type of" before "energy." 102

Repeal of prohibition relating to waste energy recovery systems

The bill repeals a provision that prohibits a waste energy recovery system that is or was used to meet the energy efficiency requirements to be used also to meet the advanced energy portion of the alternative energy benchmarks. Arguably, this current-law provision is irrelevant, and the repeal has no effect. This is because continuing law, unchanged by the bill, does not expressly permit waste energy recovery systems to be used to meet the advanced energy portion in the first place. Continuing law does,

⁹⁹ R.C. 4928.6659.

¹⁰⁰ R.C. 4928.6658.

¹⁰¹ R.C. 4928.6645.

¹⁰² R.C. 3706.25(A) and 4928.01(A)(25); R.C. 3706.26 and 4928.62, not in the bill.

however, qualify certain waste energy recovery systems as *renewable* energy resources.¹⁰³

Resolution of conflicts between current law and PUCO methods

The bill directs how conflicts are to be resolved between certain current PUCO methods and the current statutory alternative energy benchmarks and EE/PDR requirements. Specifically, it requires that to the extent that the PUCO may have adopted methods to measure alternative energy, energy efficiency, and peak demand reduction compliance that are different or inconsistent with the current statutory requirements for the alternative energy benchmarks and EE/PDR requirements, any difference or inconsistency must, for purposes of addressing all cases or controversies, be resolved by the PUCO and the Supreme Court in favor of the measurement method that maximizes the amount of compliance during the period in question.¹⁰⁴ (See **COMMENT** 17.)

Recodification

The bill recodifies the sections that contain the current alternative energy benchmarks and EE/PDR requirements. The recodification is done in such a way that the style of existing law is preserved. The bill also provides recodification tables for the two sections being recodified.¹⁰⁵

The following two charts show, by topic, how the existing law recodification and the new provisions of the bill are organized.

Reorganization of Alternative Energy Requirements

Subject	New Section Number	Former Section Number
Alternative energy resource definition	4928.64	4928.64(A)
Alternative energy benchmarks	4928.641	4928.64(B)
PUCO annual compliance review	4928.642	4928.64(C)(1)
Compliance payments	4928.643	4928.64(C)(2)
Cost cap	4928.644	4928.64(C)(3)

¹⁰⁵ Sections 3 and 4 of the bill.



¹⁰³ R.C. 4928.01(A)(34) and (37).

¹⁰⁴ Section 5 of the bill.

Subject	New Section Number	Former Section Number
Compliance modification; force majeure determination	4928.645	4928.64(C)(4)
PUCO annual review of alternative energy resource market	4928.646	4928.64(C)(5)
PUCO annual report to the General Assembly	4928.647	4928.64(D)(1)
Alternative Energy Advisory Committee	4928.648	4928.64(D)(2)
Alternative energy benchmark costs bypassable by consumers exercising choice of supplier	4928.649	4928.64(E)
Eligibility to meet alternative energy benchmarks and EE/PDR requirements	4928.6410	New

Reorganization of EE/PDR Requirements

Subject	New Section Number	Former Section Number
Definitions	4928.66	4928.66(A)(1)(a), 2nd sentence; New
EE/P	DR Requirements	
EE savings requirements and benchmarks	4928.661	4928.66(A)(1)(a), 1st and 3rd to 5th sentences; New
PDR requirements and benchmarks	4928.662	4928.66(A)(1)(b)
Baseline and Benchmark Calculations and Adjustments		
Calculating baselines	4928.665	4928.66(A)(2)(a); New
Mercantile customer's capability availability effect on baseline	4928.666	4928.66(A)(2)(c), 3rd sentence
Normalizing baseline	4928.667	4928.66(A)(2)(c), 4th sentence
Amending benchmarks	4928.668	4928.66(A)(2)(b)
Compliance		
Compliance Plans		
Compliance plan required	4928.6610	New
Compliance plan requirements	4928.6611	New
PUCO plan approval	4928.6612	New

Subject	New Section Number	Former Section Number	
Previously approved/pending compliance plans; cost cap election	4928.6613	New	
	Cost Cap		
EDU cost cap election	4928.6615	New	
Cost cap options	4928.6616	New	
Compliance achieved if cost cap met	4928.6617	New	
Notice when cost cap met	4928.6618	New	
Contractual obligations/full cost recovery for previously approved compliance plans	4928.6619	New	
Recovery of compliance costs/incentives unaffected by cost cap	4928.6620	New	
Effects of lost revenue mechanism or revenue decoupling not included in cost cap	4928.6621	New	
Curtail expenditures when cost cap met; recovery for overcompliance	4928.6622	New	
Banking of compliance in excess of cost cap	4928.6623	New	
Cor	npliance Methods		
Compliance using mercantile customer capabilities	4928.6625	4928.66(A)(2)(c), 1st sentence	
Compliance using reasonable arrangements	4928.6626	4928.66(A)(2)(d), 2nd sentence	
Compliance using other programs	4928.6627	4928.66(A)(2)(d), 1st sentence; New	
Cust	Customer opt out/opt in		
Customer opt out	4928.6630	New	
Process to opt out	4928.6631	New	
Effect of opt out	4928.6632	New	
Subsequent opt out/opt in	4928.6633	New	
Process to opt in	4928.6634	New	
Energy management system; independent measurement and verification protocols	4928.6635	New	
Self-assessing purchaser option	4928.6636	New	

Subject	New Section Number	Former Section Number		
Compl	Compliance measurement			
Compliance measurement standards	4928.6640	New		
Notice about standards used	4928.6641	New		
Eligibility to meet EE/PDR requirements and alternative energy resource portfolio standards	4928.6642	New		
Com	pliance limitations			
PUCO cannot require overcompliance	4928.6645	New		
Liberal construction regarding compliance requirements	4928.6646	New		
No penalties or carry-forward regarding undercompliance/ noncompliance	4928.6647	New		
C	Cost Recovery			
Exempting mercantile customers	4928.6650	4928.66(A)(2)(c), 2nd sentence		
Revenue decoupling mechanism	4928.6651	4928.66(D)		
Miscellaneous				
Annual report	4928.6655	4928.66(B)		
Forfeiture	4928.6656	4928.66(C)		
Customer consumption data	4928.6657	4928.66(E)		
Conflict with state building code not permitted	4928.6658	4928.66 (A)(2)(e)		
Resources offered to regional transmission organization	4928.6659	New		
Preemption	4928.6660	New		

COMMENT

1. The bill specifies that solar and geothermal energy are renewable energy resources *regardless of whether electricity is produced*. This specification applies to the alternative energy benchmarks. Dut the alternative energy benchmarks require an

¹⁰⁶ R.C. 3706.25(E) and 4928.01(A)(37)(a).

¹⁰⁷ R.C. 4928.64 to 4928.6410.

EDU to provide "a portion of the electricity supply" required for its standard service offer from alternative energy resources, including renewables.¹⁰⁸ Therefore, the bill may conflict with this provision since it does not require electricity to be produced for solar and geothermal.

2. The bill requires that certain energy savings and peak demand reductions associated with heat rate and other efficiency or energy intensity improvements be counted as advanced energy for purposes of the alternative energy benchmarks. ¹⁰⁹ But it does not add these savings and reductions to the definition of "advanced energy resource" for purposes of those benchmarks. Also, the requirement is located outside of the provisions governing the alternative energy benchmarks. Relocation of the requirement to the provisions governing the alternative energy benchmarks or altering the definition of "advanced energy resource" would add clarity to the bill and facilitate ease of use of the Revised Code.

3. In one of the bill's double-counting provisions, it requires certain savings and reductions, related to mercantile customers and special energy improvement projects, to be counted toward compliance with the alternative energy benchmarks (regardless of whether they may be counted toward compliance with the EE/PDR requirements). But the bill does not specify *how* these must be counted toward compliance with the alternative energy benchmarks. In other words, it does not classify them as advanced energy or renewable energy. And these savings and reductions are not classified as advanced energy or renewable energy, or otherwise required to be counted toward the alternative energy benchmarks, under current law. Similar to the situation discussed in **COMMENT** 2, amending the appropriate definition of "advanced energy resource" or "renewable energy resource" would add clarity to the bill.

4. The bill includes a policy, behavior, practice, or program designed and implemented to comply with EE requirements as an energy efficiency program.¹¹¹ Current law permits energy efficiency programs (and peak demand reduction programs) to include demand-response programs and smart grid investment programs, provided that those programs are demonstrated to be cost-beneficial. (The bill changes this requirement to "cost effective.")¹¹² The bill's provision regarding policies, behaviors,

¹¹² R.C. 4928.6627(A).



¹⁰⁸ R.C. 4928.641(A).

¹⁰⁹ R.C. 4928.6640(G).

¹¹⁰ R.C. 717.25(E), 1710.061(A) and (B), and 4928.6410(A).

¹¹¹ R.C. 4928.66(A)(1).

practices, or programs contains neither a cost-beneficial nor a cost-effective requirement.

- 5. Continuing law, as recodified by the bill, permits a combined heat and power system placed into service or retrofitted on or after September 10, 2012, to be included in an energy efficiency program.¹¹³ Other provisions of continuing law, however, appear to permit *any* combined heat and power system to be included in an energy efficiency program, regardless of when the system was placed into service or retrofitted.¹¹⁴ This may need further clarification.
- 6. Continuing law, as recodified by the bill, permits waste energy recovery systems, of a certain type, placed into service or retrofitted on or after September 10, 2012, to be included in an energy efficiency program. Other provisions of continuing law, however, appear to permit *any* waste energy recovery system of the same type to be included in an energy efficiency program, regardless of when the system was placed into service or retrofitted. This may need further clarification.
- 7. The bill permits any energy savings achieved in excess of the EE requirements to be banked and applied toward achieving the EE requirements in future years. This provision applies only to the EE requirements, but is located in an extensive section and within a division that applies to *both* the EE and PDR requirements. Relocation of the provision would add clarity to the bill and facilitate ease of use of the Revised Code.
- 8. Similar to **COMMENT** 4, the bill defines a peak demand reduction program as a policy, practice, behavior, or program designed to comply with the peak demand reduction requirements.¹¹⁸ Current law permits peak demand reduction programs to include demand-response programs and smart grid investment programs, *provided that those programs are demonstrated to be cost-beneficial*. (The bill changes this requirement to "cost effective.")¹¹⁹ The bill's provision regarding policies, behaviors, practices, or programs contains neither a cost-beneficial nor a cost-effective requirement.

¹¹⁹ R.C. 4928.6627(A).



¹¹³ Current R.C. 4928.66(A)(1)(a), second sentence; R.C. 4928.66(A)(2) as recodified.

¹¹⁴ R.C. 4928.01(A)(40) and 4928.6627(A).

¹¹⁵ Current R.C. 4928.66(A)(1)(a), second sentence; R.C. 4928.66(A)(3) as recodified.

¹¹⁶ R.C. 4928.01(A)(38)(a) and 4928.6627(A).

¹¹⁷ R.C. 4928.6640(J).

¹¹⁸ R.C. 4928.66(D).

9. The bill prohibits the EE/PDR requirements and any associated compliance requirements from applying after the date that any federal benchmarks requiring energy savings or peak demand reduction become effective. Decause this provision's impact on the law is dependent on a hypothetical future event, this provision could be removed by this or a future General Assembly before the hypothetical event occurs. In that case, the provision would never have an effect on the law.

10. The bill requires that the energy savings and peak demand reduction amounts approved by the PUCO continue to be counted toward the EE/PDR requirements as long as the requirements remain in effect.¹²¹ The operation of this provision is unclear. It could just be duplicative language, because it may be requiring approved savings and reductions (which are required to count toward the EE/PDR requirements) to count toward the EE/PDR requirements.

11. The bill states that all of its provisions governing the EE/PDR requirements apply if the EDU continues or implements a compliance plan based on the current EE/PDR requirements. Since the bill changes many of the current EE/PDR requirements, it is not clear how those changed requirements could apply to a plan based on different requirements.

12. In one provision, the bill permits certain retail customers to opt out of "both the opportunity and ability to obtain direct benefits from [an EDU's] compliance plan." In a similar but slightly different provision, the bill prohibits accounts that are subject to an opt out from being "eligible to participate in, or directly benefit from, programs arising from [EDU] compliance plans approved by the [PUCO]." The first provision appears to refer to a specific compliance plan, while the second may refer to any of an EDU's compliance plans – present or future – approved by the PUCO.

13. In the opt-out provisions, the bill appears to employ two different standards for the PUCO's review of a retail customer's measurement and verification protocols. At first, the bill permits the PUCO to request information to determine if the protocols are reasonable compared to generally accepted protocols. Then the bill continues to allow the

¹²⁰ R.C. 4928.6660.

¹²¹ R.C. 4928.6640(J).

¹²² R.C. 4928.6613.

¹²³ R.C. 4928.6630.

¹²⁴ R.C. 4928.6632.

PUCO to provide the customer with alternative protocols if the PUCO determines that the customer's protocols *do not meet* generally accepted protocols.¹²⁵

14. The bill's opt-out provisions are required to extend to all of the customer's accounts associated with the activities performed by the customer and located *on or adjacent to* the customer's premises that are served above the primary voltage level. ¹²⁶ The description of these accounts in the opt-out and opt-in notice requirements is slightly different. The notices are required to include numbers of each account *related to* the customer's premises that receives service above the primary voltage level. ¹²⁷

15. The bill states that its opt-out and opt-in provisions apply to any accounts subject to the self-assessing purchaser option under current law governing the kWh tax on electricity. Under this law, purchasers that may self assess the tax are generally those who consume over 45 million kWh of electricity per year. The bill also allows any retail customer that receives service above the primary voltage level, as determined by the EDU's tariff classification, to opt out or opt in. And it expressly states that the opt out extends to *all* of the customer's accounts "irrespective of the size or service voltage level." The voltage level requirement appears to apply to the self-assessors as a condition. It is not clear whether the amount of consumption and voltage level are compatible standards. Therefore, the self-assessment provision and the opt-out and opt-in provisions may conflict.

16. The bill permits the PUCO to require an EDU to offer energy efficiency resources and demand response resources into regional transmission organization capacity auctions if:

 The energy efficiency resources (1) have been installed and the EDU can demonstrate resource ownership, provided that savings must be adjusted for regional transmission organization measurement and verification standards, (2) have an approved measurement and verification plan approved by the regional transmission organization, and (3) are of sufficient scale; and

¹²⁹ R.C. 4928.6630 and 4928.6633(A).



¹²⁵ R.C. 4928.6635.

¹²⁶ R.C. 4928.6630.

¹²⁷ R.C. 4928.6631(A)(3) and 4928.6634(C).

¹²⁸ R.C. 4928.6636; R.C. 5727.81, not in the bill.

• The demand response resources are owned by the EDU and will be available in the applicable delivery year. 130

It is not clear what the phrase "provided that savings must be adjusted for regional transmission organization measurement and verification standards" is referring to. It may also be redundant to (2), above.

17. The bill directs how conflicts are to be resolved between certain current PUCO methods and the current statutory alternative energy benchmarks and EE/PDR requirements. Specifically, it requires resolutions by the PUCO and the Supreme Court in favor of maximizing compliance with those benchmarks and requirements. ¹³¹ This provision could violate the constitutional requirements regarding the separation of powers of the branches of government if it is interpreted as interfering with judicial authority to administer justice. ¹³²

HISTORY

ACTION DATE

Introduced 10-16-13

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¹³² Ohio Constitution, Article IV, Section 1; State ex rel. Johnston v. Taulbee, 66 Ohio St.2d 417, 420-423, N.E.2d 80 (1981).



¹³⁰ R.C. 4928.6659.

¹³¹ Section 5 of the bill.