



H.B. 487

127th General Assembly
(As Introduced)

Rep. J. McGregor

BILL SUMMARY

- Creates the Ohio Renewable Energy Authority (OREA) to provide various forms of financial assistance to renewable energy businesses located in the state and specifies that the OREA will cease to exist on June 30, 2018, unless extended by an act of the General Assembly.
- Establishes the Renewable Energy Development and Investment Fund, consisting of money from General Revenue Fund (GRF), renewable energy compliance payments, forfeitures, and interest, to be used by the OREA to provide financial assistance to renewable energy businesses.
- Requires the Treasurer of State to transfer \$2.5 million from GRF to the Renewable Energy Development and Investment Fund immediately after appointments are made to the OREA and to transfer \$10 million from GRF in calendar year 2009.
- Requires, for each year beginning in 2010, the Tax Commissioner to consult with the Director of Development and the OREA to estimate the amount of state income tax revenue that is generated from state income tax taxpayers that are employed by renewable energy businesses in that year in order to determine the amount to be transferred from GRF to the Renewable Energy Development and Investment Fund for each year.
- Permits the OREA to receive and accept grants for or in aid of renewable energy development and investment from any federal agency subject to the Governor's approval and permits the OREA to receive and accept aid or contributions of money, property, labor, or other things of value from any source to be held, used, and applied only for the purposes for which the grants or contributions are made.

- Requires the OREA to submit a report to the General Assembly, the Director of Development, and the Governor regarding the bill's financial assistance program and job development prospects in the state.
- Exempts the OREA from real and personal property taxes upon any property acquired and used for its offices, but does not extend the exemption to persons or entities conducting business on the OREA's property, for which payment of state and local taxes would otherwise be required.
- Requires, by the end of 2025, an electric distribution utility to provide from specified alternative energy a portion of its electricity supply that equals 25% of the total number of kilowatt hours of electricity supplied to electric consumers whose electric load centers are served by and located within the utility's certified territory and requires an electric services company to provide a portion of its electricity supply from specified alternative energy that equals 25% of the total number of kilowatt hours of electricity it supplies to electric consumers whose load centers are served by and located within the state.
- Establishes benchmarks for alternative energy that a utility or company must implement by the end of 2025 and includes a calendar schedule listing the percentage amounts that must be generated from renewable energy resources and solar energy resources.
- Requires that at least one-half of the renewable energy resources implemented by the utility or company by the end of 2025 must be met through facilities located in Ohio.
- Requires the Public Utilities Commission (PUCO) to adopt rules creating renewable energy credits and requires that the rules provide for a system of registering the credits.
- Permits a utility or a company to use renewable energy credits for the purpose of complying with the bill's renewable and solar energy resource requirements.
- Requires the PUCO annually to review a utility's or company's compliance with the most recent applicable renewable or solar energy benchmark and to impose a renewable energy compliance payment on

utilities or companies not in compliance and prohibits utilities or companies from passing compliance payments through to consumers.

- Requires the PUCO to submit an annual report to the General Assembly describing utilities' and companies' compliance with the bill's alternative energy requirements and any strategy for utility and company compliance or for encouraging the use of alternative energy in supplying the state's electricity needs.
- Requires the PUCO to at least annually review the alternative energy market in Ohio and in the service territories of the regional transmission organizations managing transmission systems located in Ohio and to use the review to identify any needed changes to the amount of the renewable energy compliance payment.
- Requires the Governor, upon consultation with the PUCO chairperson, to appoint an Alternative Energy Advisory Committee to examine the bill's alternative energy requirements and to submit a semiannual report of its recommendations to the PUCO.
- Specifies that all costs incurred by utilities in complying with the bill's alternative energy benchmarks must be bypassable by any consumer that has exercised choice of supplier under the Competitive Retail Electric Service Law.
- Beginning in 2009, requires electric distribution utilities, as well as the Director of Development, to implement energy efficiency programs designed to achieve reductions in energy usage that results in a cumulative energy reduction in excess of 22% by 2025.
- Beginning in 2009, requires utilities to implement peak demand reduction programs designed to achieve specified reductions in peak demand through 2018 at which time the standing committees of the House of Representatives and the Senate that primarily deal with energy issues must make recommendations to the General Assembly regarding future peak demand reduction targets.
- Requires the PUCO to assess a forfeiture on utilities that fail to comply with the energy usage or peak demand reductions required by the bill, specifies the forfeiture amount, and requires forfeitures to be deposited to the credit of the Renewable Energy Development and Investment Fund.

- Requires that the PUCO produce and docket at the PUCO an annual report on the annual levels of energy usage and peak demand reductions achieved by utilities as required by the bill and that the report be provided to the Consumers' Counsel.
- Requires the PUCO to adopt rules requiring a utility upon request to provide a customer with two years' consumption data in an accessible form.
- Specifies that the PUCO may adopt rules providing for a decoupling mechanism for utilities that provides for reasonable recovery of lost revenue due to energy efficiency promotion and may provide for cost recovery for utilities for which a decoupling mechanism is not authorized.
- Declares that the Division of Mineral Resources Management in the Department of Natural Resources has exclusive authority to regulate the geologic storage of carbon dioxide in Ohio.
- Requires a person seeking to operate a carbon dioxide storage facility to obtain a permit to do so from the Chief of the Division of Mineral Resources Management, establishes conditions that must be met prior to the issuance of a permit, and authorizes the Chief to include terms and conditions in a permit that the Chief considers necessary.
- Requires the Chief to adopt rules governing the carbon dioxide storage program, and requires the rules to include permit application procedures and an application fee, requirements pertaining to the use of eminent domain by storage operators, financial assurance requirements for storage operators, penalties, a fee for carbon dioxide injection, requirements for the closure of facilities, and requirements for the long-term monitoring of facilities by the state.
- Authorizes a storage facility operator to utilize eminent domain to appropriate land that is necessary for a storage facility, and requires the Director of Transportation to establish a program allowing persons operating pipelines to use state highway lands that are necessary for the operation of storage facilities.
- Establishes the Carbon Dioxide Storage Facility Trust Fund to be administered by the Division of Mineral Resources Management, and

requires the Fund to be used for the administration of the applicable provisions of the bill and to provide funding for the long-term monitoring of storage facilities.

- Authorizes the Director of Natural Resources to enter into cooperative agreements with the federal government and other states that the Division of Mineral Resources Management determines to be necessary for the purpose of regulating carbon dioxide storage projects.
- Requires the PUCO to adopt rules establishing greenhouse gas emission reporting requirements, including participation in the climate registry, and carbon control planning requirements for each electric generating facility located in Ohio that emits greenhouse gases, including facilities in operation on the effective date of the bill.

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CONTENT AND OPERATION

Ohio Renewable Energy Authority

The bill creates the Ohio Renewable Energy Authority (OREA) as a body corporate and politic, performing essential governmental functions that focus primarily on providing funding or other forms of assistance to promote renewable energy development and investment in Ohio.

OREA: creation and general operation

(R.C. 3706.32 and 3706.33(A), (B)(1), (C), and (D))

Membership, terms, and vacancies. The OREA's membership is to consist of 11 members as follows: (1) three members appointed by the Governor, not more than two of whom can be members of the same political party, (2) three members appointed by the Speaker of the House of Representatives, not more than two of whom can be members of the same political party, (3) three members appointed by the President of the Senate, not more than two of whom can be members of the same political party, and (4) two nonvoting members appointed by the Ohio Board of Regents to represent Ohio colleges and universities. Initial members of the OREA must be appointed by August 1, 2008. The expiration dates of the terms of the initial appointees vary. The Board of Regents' initial appointees' terms expire on June 30, 2010. Of the Governor's initial appointees, one term expires on that same date; the remaining two expire June 30, 2012. Of the Speaker's and President's initial appointees, one term each expires on June 30, 2010; the remaining four expire on June 30, 2011. After that, members' terms are two years commencing on July 1 and ending on June 30. Each member is required to hold office from the date of appointment until the end of the term for which the member was appointed. A member appointed to fill a vacancy must hold office for the remainder of such term. A member must continue in office subsequent to the expiration date of his or her term until the successor takes office, or until 60 days elapse, whichever occurs first. Members are also eligible for reappointment.

Removal from membership. The bill permits the appointing authority to remove a member at any time for misfeasance, nonfeasance, or malfeasance in

office. In addition, by an affirmative vote of six voting members, a member may be removed for malfeasance or misfeasance in office, for failing to attend authority meetings regularly, or for any cause that renders the member incapable or unfit to discharge the duties of the member or the OREA.

Officers, meetings, quorum, and financial disclosures. The members must elect a chairperson, vice-chairperson, and secretary from among the OREA's voting members. Although a majority of the voting members constitutes a quorum, the bill permits the OREA to require a vote of six voting members for any action specified in its bylaws or otherwise in writing. No vacancy in the membership impairs the right of a quorum by such vote to exercise all the rights and perform all the duties of the OREA. The bill permits the OREA to establish subcommittees from among its members and to require the subcommittees to exercise any power or duty the OREA delegates in writing. The OREA must meet at least six times per year, but also may meet at any other times it considers appropriate, upon the call of the chairperson, or the written request of a majority of its voting members. Members of the OREA and its employees are required to file financial disclosure statements as required by the Ohio Ethics Law.

General authority. The OREA may do the following: (1) adopt bylaws for the regulation of its affairs and the conduct of its business, (2) adopt an official seal, (3) maintain a principal office and suboffices at such places within the state as it designates, (4) sue and plead in its own name and be sued and impleaded in its own name with respect to its contracts or the torts of its members, employees, or agents acting within the scope of their employment,¹ (5) acquire by gift or purchase, hold, and dispose of real and personal property in the exercise of the powers of the Authority and the performances of its duties under the bill, (6) make and enter into all contracts and agreements and execute all instruments necessary or incidental to the performance of its duties and the execution of its powers under the bill, (7) receive and accept from any federal agency, subject to the approval of the Governor, grants for or in aid of renewable energy development and investment, and receive and accept aid or contributions from any source of money, property, labor, or other things of value, to be held, used, and applied only for the purposes for which those grants and contributions are made, (8) provide coverage for its employees under Ohio's Workers' Compensation Law and Unemployment Compensation Law, and (9) do all acts necessary and proper to carry out the powers expressly granted to the OREA under the bill.

¹ Actions against the OREA must be brought in the common pleas court of the county in which the OREA's principal office is located or in which the cause of action arose (but only if the county in which the cause of action arose is in Ohio). All summonses, exceptions, and notices of every kind must be served on the OREA by leaving a copy at the principal office with the person in charge or the of the OREA secretary.

The bill requires the recording of the OREA's minutes, resolutions, and official decisions, and a book of these records must be authenticated by the signature of the OREA secretary. The book, as well as any OREA report or financial statement are public records under the Public Records Law, and one copy of the book must be sent to the Governor annually.

The OREA may not sell itself or any of its property or other assets or to merge the OREA with another entity, without prior approval from the General Assembly. The OREA is also exempt from the levy of any real and personal property taxes upon any property acquired and used for its offices. These exemptions do not extend to persons or entities conducting business on OREA property for which payment of state and local taxes would otherwise be required.

OREA: financial support to promote renewable energy investment and development

(R.C. 3706.31, 3706.33(B)(2), and 3706.35)

The bill requires the OREA to provide financial assistance that must be entirely directed at identifying, promoting, nurturing, and expanding job opportunities in renewable energy businesses located in the state. The bill defines "renewable energy business" to mean a person that engages in the business of generating electricity using renewable energy facilities, in the business of manufacturing equipment for renewable energy facilities, or in the business of researching and developing such equipment or facilities.²

The assistance must consist of grants, loans, loan guarantees, awards, or other forms of assistance provided to those businesses from the Renewable Energy Development and Investment Fund (discussed below). The OREA must specify the terms and conditions, if any, for the repayment of the assistance it provides and must incorporate those terms and conditions into a repayment agreement that a recipient of the assistance must sign.

The OREA must adopt a mission statement that governs its award of financial assistance. In addition, it must develop policies and guidelines for the administration of its financial assistance program and annually must conduct at

² The bill defines "renewable energy facility" to mean any technology or structure that generates electricity using solely or primarily renewable energy resources. "Renewable energy resource" means solar photovoltaic energy, solar thermal energy, wind energy, hydropower, geothermal energy, municipal solid waste, biomass energy, biologically derived methane gas, and energy derived from byproducts of the pulping process or wood manufacturing process including bark, wood chips, sawdust, and lignin in spent pulping liquors.

least one public hearing to obtain input from any interested party regarding the program's administration. The hearing must be held at a time and place determined by the OREA and only when a quorum is present.

The bill requires the OREA to maintain accounting records in accordance with generally accepted accounting principles and other required accounting standards and must prepare a financial statement not later than 90 days after the close of the fiscal period. The financial statement is subject to audit by the Auditor of State.

Annually, the OREA must submit a report to the General Assembly, Director of Development, and Governor regarding its financial assistance program under the bill, job development prospects in the state, and other information.

The bill also exempts the OREA from any of the requirements imposed under current law on the Ohio Air Quality Development Authority.

Renewable Energy Development and Investment Fund

(R.C. 3706.34)

The bill creates the Renewable Energy Development and Investment Fund in the custody of the Treasurer of State but not part of the state treasury. The Fund consists of money transferred to it from the General Revenue Fund (GRF) of the state and revenue from renewable energy compliance payments and energy efficiency and peak demand reduction forfeitures (see discussion regarding compliance payments and forfeitures under "Alternative energy," below).³ Interest on the Fund must be derived by the investment of the Fund balance only in money market accounts that must be deposited to the credit of the Fund.

Transfers from the state GRF. Under the bill the Treasurer of State must transfer \$2.5 million from GRF to the Renewable Energy Development and Investment Fund immediately after the initial member appointments are made to the OREA.⁴ In calendar year 2009, the Treasurer must transfer \$10 million to the Fund from the GRF. Beginning in 2010 and each year thereafter, the Tax Commissioner must consult with the Director of Development and the OREA to estimate the number of state income tax taxpayers that are employed by renewable

³ The bill incorrectly refers to "alternative energy" compliance payments instead of "renewable energy" compliance payments in this instance. A technical amendment is needed to correct the error.

⁴ Despite the statutory requirement to transfer amounts from GRF, the bill does not include the requisite appropriation for the transfer.

energy businesses in that year. From that information, the Commissioner must estimate the amount of state income tax revenue that is generated during that year from those taxpayers. The Commissioner may use any method that the Commissioner determines appropriate to make the estimate, such as the following: the North American Industry Classification System codes, estimated state income tax withholdings, or any other reasonable process or method. However, the bill requires the method to be consistent year to year. The Commissioner may contract with any person to assist in deriving the required taxpayer and tax revenue estimates. Subsequently, the Commissioner must certify the difference in the estimated tax revenue generated during the year compared to 2009, the baseline year. If the certified amount in any year is \$10 million or more, the Treasurer in that year must transfer an amount equal to the certified amount from the GRF to the Fund. If the amount is less than \$10 million, the Treasurer must transfer \$10 million to the Fund.

Use of the Fund for administrative purposes. In addition to providing financial assistance for renewable energy purposes as discussed earlier, the OREA may also use up to 6% of the annual GRF transfer to the Fund for administrative purposes. Administrative purposes include office space, office equipment and furnishings, service contracts, member and employee compensation, and member or employee expenses as specified in the OREA's bylaws, including mileage, any other reasonable expenses of members in attending OREA meetings and subcommittee meetings, and any filing fee for the financial disclosure statements required by the bill. The OREA must set the compensation of its members and employees, but the combined compensation and expenses paid to a member cannot exceed \$20,000 per year.

OREA termination

(R.C. 3706.36)

Unless the General Assembly provides otherwise, the bill terminates the OREA's existence on June 30, 2018. On that date the terms of office of its members, as well as the employment of the OREA's employees shall also terminate, except as necessary to close the OREA's affairs and offices. Upon termination, all property, money and other assets of the OREA belong to the state and the Treasurer must transfer to the GRF the unused balances of the Renewable Energy Development and Investment Fund. In addition, all obligations of the OREA become the State's obligations. Nothing in the bill abrogates or authorizes the abrogation of any financial assistance provided by the OREA prior to its termination or any related agreement entered into by the OREA prior to that date.

Alternative energy requirements

(R.C. 4928.64)

The bill requires that by the end of 2025 an electric distribution utility must provide from alternative energy a portion of the electricity supply required for its standard service offer and that an electric services company must provide a portion of its electricity supply from alternative energy.⁵ The bill defines "alternative energy" to mean energy from advanced energy resources or from renewable energy resources or both.⁶ For a utility, that portion must equal 25% of the total

⁵ Current law defines an "electric distribution utility" as a specific type of electric utility that supplies at least retail electric distribution service. An "electric services company" 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 (such service consists of retail electric generation, aggregation, power marketing, and power brokerage services). It includes a power marketer, power broker, aggregator, or independent power producer, but expressly excludes an electric cooperative, municipal electric utility, governmental aggregator, or billing and collection agent. (See R.C. 4928.01 [not in bill] for these and further definitions).

Under current law, each electric distribution utility in Ohio must provide consumers a market-based "standard service offer" of all competitive retail electric services necessary to maintain essential electric service to consumers, including a firm supply of electric generation service (R.C. 4928.14, not in bill).

⁶ The bill defines the following terms for the purposes of its alternative energy requirement. "Advanced energy resource" is a distributed generation system consisting of customer cogeneration of electricity and thermal output primarily to meet the energy needs of the customer's facilities, clean coal technology, nuclear technology, or energy efficiency, including demand-side management.

"Renewable energy resource" means solar photovoltaic or solar thermal energy, wind energy, hydropower, geothermal energy, fuel derived from municipal solid waste through a process other than combustion, biomass energy, biologically derived methane gas, or energy derived from non-treated byproducts of the pulping process or wood manufacturing process, including bark, wood chips, sawdust, and lignin in spent pulping liquors. "Renewable energy resource" includes, but is not limited to: (1) a fuel cell powered by any such energy, (2) any storage facility that will promote the better utilization of renewable energy resources and primarily operates off peak, or (3) a distributed generation system used by a customer to generate electricity from any such energy.

"Hydropower" means energy produced by a hydroelectric generating facility that is located at a dam within or on Ohio's borders and meets all of the following standards: (a) the facility provides for river flows that are not detrimental for fish, wildlife, and water

number of kilowatt hours of electricity supplied by the utility to any and all electric consumers whose electric load centers are served by the utility and are located within the utility's certified territory. In the case of a company, the portion must equal 25% of the total number of kilowatt hours of electricity it supplied to any and all electric consumers whose electric load centers are served by the company and are located within this state. Nothing in the bill precludes a utility or a company, however, from providing a greater percentage from alternative energy.

Alternative energy benchmarks

The bill requires that of the alternative energy supply implemented by the utility or company by the end of 2025:

(1) At least half must be generated from advanced energy resources.

(2) Half must be generated from renewable energy resources, including 1% from solar energy resources, in accordance with the following benchmark percentages:

| By end of year | Renewable energy resources | Solar energy resources |
|----------------|----------------------------|------------------------|
| 2009 | 0.25% | .005% |
| 2010 | 0.50% | .05% |
| 2011 | 1% | .1% |

quality, including seasonal flow fluctuations as defined by the applicable licensing agency for the facility, (b) the facility demonstrates compliance with Ohio water quality standards, which compliance may consist of certification under the federal "Clean Water Act of 1977" and demonstrates that it has not contributed to a finding by this state that the river has impaired water quality under the federal act, (c) the facility complies with mandatory prescriptions regarding fish passage required by the Federal Energy Regulatory Commission (FERC) license issued for the project, regarding fish protection for riverine, anadromous, and catadromus fish, (d) the facility complies with Ohio EPA recommendations and with the terms of its FERC license regarding watershed protection, mitigation, or enhancement, (e) the facility complies with federal law protecting endangered species, (f) the facility does not harm the area's cultural resources as shown through compliance with its FERC license or, if the facility is not regulated by FERC, through development of a plan approved by the Ohio Historic Preservation Office, (g) the facility complies with the terms of its FERC license or exemption that are related to recreational access, accommodation, and facilities or, if the facility is not regulated by FERC, the facility complies with similar requirements as are recommended by resource agencies, (h) the facility provides water access to the public free of charge, (i) the facility is not recommended for removal by any federal agency or agency of any state.

| By end of year | Renewable energy resources | Solar energy resources |
|----------------|----------------------------|------------------------|
| 2012 | 1.5% | .15% |
| 2013 | 2% | .2% |
| 2014 | 2.5% | .25% |
| 2015 | 3.5% | .3% |
| 2016 | 4.5% | .35% |
| 2017 | 5.5% | .4% |
| 2018 | 6.5% | .45% |
| 2019 | 7.5% | .5% |
| 2020 | 8.5% | .6% |
| 2021 | 9.5% | .7% |
| 2022 | 10.5% | .8% |
| 2023 | 11.5% | .9% |
| 2024 | 12.5% | 1% |

(3) At least one-half of the renewable energy resources implemented by the utility or company by the end of 2025 must be met through facilities located in Ohio.

Renewable energy compliance payments

The PUCO annually must review a utility's or company's compliance with the most recent applicable benchmark for renewable and solar energy resources under the bill. If the PUCO determines, after notice and a hearing, that the utility or company has failed to comply with the bill's renewable or solar energy resource benchmarks, the PUCO must impose a renewable energy compliance payment on the utility or company. The compliance payment must be remitted to the PUCO for deposit to the credit of the Renewable Energy Development and Investment Fund created in the bill and is subject to collection and enforcement procedures that apply to the collection of forfeitures under current PUCO law.⁷ The utility or company cannot pass any compliance payments through to consumers.

Compliance payments for failure to meet solar energy resource benchmarks. The bill requires that compliance payments for failure to meet solar

⁷ R.C. 4905.55 to 4905.60 and 4905.64, not in the bill.

energy resource benchmarks must be an amount per megawatt hour of undercompliance or noncompliance in the period under review starting at \$450 for 2009, \$400 for 2010 and 2011, and similarly reduced by \$50 every two years thereafter through 2024.

Compliance payments for failure to meet renewable resource energy benchmarks. The bill specifies that compliance payments for failure to meet the renewable energy resource benchmarks must equal \$45 times the number of additional renewable energy credits that the utility would have needed to comply with the applicable benchmark in the period under review.

Review of alternative energy market

The bill requires the PUCO to establish a process to provide for the review of the alternative energy market in Ohio and the service territories of the regional transmission organizations that manage transmission systems located in the state.⁸ Under the bill, the review must take place at least annually, and the PUCO must use the results of this study to identify any needed changes to the amount of the renewable energy compliance payment under the bill. The PUCO may increase the amount to ensure that payment of compliance payments is not used to achieve compliance in lieu of actually acquiring or realizing energy derived from renewable energy resources. If the PUCO finds, however, that the amount of the compliance payment should be otherwise changed, the PUCO must present this finding to the General Assembly for legislative enactment.

Compliance report

The PUCO annually must submit to the General Assembly a report describing the compliance of electric distribution utilities and electric services companies with the alternative energy requirements under the bill. The report must also describe any strategy for utility and company compliance or for encouraging the use of alternative energy in supplying Ohio's electricity needs in a manner that considers available technology, costs, job creation, and economic impacts. The PUCO must allow and consider public comments on the report prior to its submission to the General Assembly. Nothing in the report will be binding on any person, including any utility or company, for the purpose of its compliance with any benchmarks or enforcement provisions under the bill.

⁸ Regional transmission organizations coordinate the movement of electricity on a regional basis throughout North America via the electric transmission grid.

Alternative Energy Advisory Committee

The Governor, in consultation with the PUCO chairperson, must appoint an Alternative Energy Advisory Committee. The Committee must examine available technology for and related timetables, goals, and costs of the alternative energy requirements under the bill. The bill requires the Committee to submit a semiannual report of its recommendations to the PUCO.

Cost recovery for alternative energy

The bill requires that all costs incurred by a utility in complying with the alternative energy requirements must be bypassable by any consumer that has exercised choice of supplier under the Competitive Retail Electric Service Law.⁹

Renewable energy credits

(R.C. 4928.65)

Under the bill, an electric distribution utility or an electric services company may use renewable energy credits for the purpose of complying with the renewable and solar energy resources requirements. The PUCO must adopt rules specifying that one unit of credit is equal to one megawatt hour of electricity derived from renewable energy resources. The rules also must provide for the state a system of registering renewable energy credits by specifying which of any generally available registries must be used for that purpose and not by creating a registry.

Energy efficiency

(R.C. 4928.66)

The bill requires that beginning in 2009, an electric distribution utility, as well as the Director of Development, must implement energy efficiency programs designed to achieve reductions in energy usage by **0.3%** that same year, increasing an additional **0.5%** in 2010, **0.7%** in 2011, **0.8%** in 2012, **0.9%** in 2013, **1.0%** from 2014 to 2018, and **2.0%** each year thereafter, achieving a cumulative energy reduction in excess of **22%** by 2025.

Also beginning in 2009, an electric distribution utility must implement peak demand reduction programs designed to achieve a **1%** reduction in peak demand in 2009 and an additional **.75%** reduction each year through 2018. In 2018, the standing committees in the House of Representatives and the Senate primarily

⁹ R.C. 4928.03, not in bill.

dealing with energy issues must make recommendations to the General Assembly regarding future peak demand reduction targets.¹⁰

Programs implemented by a utility under the energy efficiency provisions of the bill described above may include demand-response programs and transmission and distribution infrastructure improvements that reduce line losses.

Annual report

In accordance with rules it must adopt under the bill, the PUCO, must produce and docket at the PUCO an annual report containing the results of its verification of the annual levels of energy usage and peak demand reductions achieved by each electric distribution utility. A copy of the report must be provided to the Consumers' Counsel.

Noncompliance

If the PUCO determines, after notice and hearing and based upon its annual report, that an electric distribution utility has failed to comply with an energy usage or peak demand reduction required under the bill, the PUCO must assess a forfeiture on the utility as provided in current PUCO law.¹¹ The forfeiture must be either: (1) in the amount, per day per undercompliance or noncompliance, relative to the period of the report, equal to that prescribed for noncompliances under current law, or (2) in an amount equal to the then existing market value of one renewable energy credit per megawatt hour of undercompliance or noncompliance. Revenue from forfeitures assessed for energy efficiency and peak demand reduction requirements under the bill must be deposited to the credit of the Renewable Energy Development and Development Fund created by the bill.

Customer requests for consumption data

The PUCO must adopt rules that require an electric distribution utility to provide a consumer upon request with two years' consumption data in an accessible form.

¹⁰ Because actions of a General Assembly are not binding on future General Assemblies, this recommendation requirement will likely be construed as directory and not mandatory. See, OH Const. Art. II, §§1, 15.

¹¹ R.C. 4905.55 to 4905.60 and 4905.64, not in the bill.

Decoupling mechanism and cost recovery

Rules adopted by the PUCO may also provide for a decoupling mechanism that must provide a utility reasonable recovery of lost revenue resulting from its promotion of energy efficiency to consumers.¹² In approving such mechanism for a utility, the PUCO must consider whether the utility should maintain its weather risk and must consider appropriate consumer protections that ensure that the utility's rates or prices are just and reasonable, including such protections as a cap on any percentage rate or price increase under the mechanism or on any increase in overall rates or prices resulting from the mechanism. The rules may also provide, subject to notice and hearing, for a utility for which a decoupling mechanism has not been authorized to receive just and reasonable recovery of costs the utility incurs in meeting the energy efficiency and peak demand reductions required by the bill.

Geologic storage of carbon dioxide

(R.C. 1572.01 and 1572.02)

The bill establishes a regulatory framework that allows for the geologic storage of "carbon dioxide" defined in the bill as anthropogenically sourced carbon dioxide of sufficient purity and quality as not to compromise the safety and efficiency of an underground reservoir to contain the carbon dioxide effectively. The bill declares that the Division of Mineral Resources Management in the Department of Natural Resources has exclusive authority to regulate the geologic storage of carbon dioxide in Ohio and must administer the geologic carbon dioxide storage program established under the bill. The bill defines "geologic storage" to mean the permanent or short-term underground storage of carbon dioxide in an underground reservoir (see "**Storage facility permits**," below).

Storage facility permits

(R.C. 1572.01 and 1572.02)

Under the bill, a person seeking to operate a storage facility in Ohio must apply for a permit to do so from the Chief of the Division of Mineral Resources Management in accordance with the bill. The bill defines "storage facility" to mean the underground reservoir, underground equipment, and surface buildings and equipment utilized in the subsurface storage of carbon dioxide, excluding any pipelines used to transport the carbon dioxide from one or more capture facilities

¹² Decoupling is a rate mechanism separating or "decoupling" revenues from electricity sales allowing utilities to increase their rates to make up for lost revenues if the demand for electricity drops.

to the storage facility. "Storage facility" may include an enhanced oil recovery or natural gas operation. Under the bill, "storage operator" is defined to mean an individual, corporation, partnership, limited liability company, or other entity authorized by the Division of Mineral Resources Management to operate a storage facility in Ohio. "Underground reservoir" is defined to mean a subsurface sedimentary stratum, formation, aquifer, cavity, or void, naturally or artificially created, including an oil or natural gas reservoir, saline formation, or coal seam suitable or capable of being made suitable for the injection and storage of carbon dioxide. "Underground reservoir" includes any necessary and reasonable areal buffer and subsurface monitoring zone designated by the Division for the purposes of ensuring the safe and efficient operation of a storage facility and protecting against pollution and the invasion, escape, or migration of carbon dioxide.

The Chief must issue a permit under the bill only if all of the following apply:

(1) The storage facility is suitable and feasible for the injection and storage of carbon dioxide;

(2) A good faith effort has been made by the permit applicant to obtain the consent of a majority of the owners of property interests that will be affected by the storage facility, and the applicant has obtained remaining property interests by eminent domain (see "*Eminent domain*," below);

(3) The use of the storage facility for the geologic storage of carbon dioxide will not contaminate resources containing fresh water, oil, natural gas, coal, or other commercial mineral deposits; and

(4) The storage will not unduly endanger human health and the environment.

In issuing a permit, the Chief may include terms and conditions in the permit that the Chief determines to be necessary.

With respect to each parcel of property that is affected by the issuance of a permit under the bill, the Chief must cause a copy of the permit to be filed and recorded in the office of the county recorder of the county in which the parcel is located. In addition, prior to injecting any carbon dioxide into a storage facility pursuant to a permit issued under the bill, the storage operator must cause to be filed and recorded in the office of the applicable county recorder and with the Division of Mineral Resources Management a statement that the storage operator has acquired by purchase, lease, eminent domain, or otherwise all of the necessary property rights with respect to the storage facility that is the subject of the permit.

The filing must include the date on which carbon dioxide will commence being injected into the storage facility.

Rules

(R.C. 1572.03)

The bill requires the Chief to adopt rules in accordance with the Administrative Procedure Act that establish all of the following:

(1) Application procedures for permits issued under the bill and procedures for the issuance or denial of an application for a permit;

(2) The amount of the application fee that must be submitted with the application, which under the bill must be deposited to the credit of the Carbon Dioxide Storage Facility Trust Fund (see "**Carbon Dioxide Storage Facility Trust Fund**," below);

(3) Requirements applicable to storage operators for obtaining the approval of the Chief prior to appropriating property interests under the bill (see "**Eminent domain**," below);

(4) Financial assurance requirements for the proper maintenance, well plugging, and abandonment of a storage facility by a storage operator and to protect the storage facility against pollution and the invasion, escape, or migration of carbon dioxide. The financial assurance requirements may include a requirement that a storage operator purchase a surety bond or other financial surety.

(5) Penalties and procedures for the enforcement of the applicable provisions of the bill and rules adopted under them, including civil penalties that may be imposed on any person violating any applicable provision of the bill or of rules adopted or terms and conditions of a permit issued under them, which under the bill must be deposited to the credit of the Carbon Dioxide Storage Facility Trust Fund (see "**Carbon Dioxide Storage Facility Trust Fund**," below);

(6) The amount of a fee to be charged by the Division and paid by a storage operator for each ton of carbon dioxide that is injected into a storage facility by the storage operator. The rules must require that the proceeds from the fee be deposited in the state treasury to the credit of the Carbon Dioxide Storage Facility Trust Fund (see "**Carbon Dioxide Storage Facility Trust Fund**," below).

(7) Closure requirements applicable to storage facilities upon the completion of carbon dioxide injection operations at a storage facility. The rules must require the Division to issue a certificate of completion of injection

operations upon the termination of carbon dioxide injection at a storage facility and its successful closure. The rules must require that not later than ten years, or another time frame specified by rule, after the issuance of a certificate, upon a showing by the storage operator that the storage facility is reasonably expected to retain its mechanical integrity and remain emplaced, the ownership of the storage facility transfers to the state. The rules also must provide that upon the transfer of ownership, the storage operator, and any generator of carbon dioxide that was injected into the storage facility by the storage operator, are released from liability with respect to the storage facility and that any long-term monitoring or remediation of any leakage at the storage facility becomes the responsibility of the state.

(8) A long-term monitoring program for the purposes of the monitoring storage facilities, remediation of mechanical problems associated with storage facilities and surface infrastructure, repairing mechanical leaks at storage facilities, and plugging and abandonment of wells that are associated with storage facilities;

(9) Procedures for allowing the conversion of enhanced recovery of oil or natural gas operations into a storage facility; and

(10) Any other requirements or procedures that are determined necessary by the Chief in order to implement the applicable provisions of the bill.

Eminent domain

(R.C. 1572.04)

The bill authorizes a storage operator, subject to rules adopted under the bill, to appropriate, in accordance with current law governing the exercise of eminent domain, surface and subsurface rights and interests in land, including easements and rights-of-way, that are necessary for both of the following:

(1) The operation of a storage facility; and

(2) The transporting of carbon dioxide among facilities constituting a storage facility.

Notwithstanding the eminent domain authority established in the bill, no property rights in a storage facility may be acquired pursuant to the bill's eminent domain authority.

Use of state highway lands

(R.C. 5501.452)

Under the bill, the Director of Transportation is required to implement a program allowing, by lease or permit, the use of lands owned by the state and acquired or used for the state highway system, for highways, in connection with highways, or as incidental to the acquisition of land for highways by any person operating a pipeline that is necessary for the operation of a carbon dioxide storage facility regulated under the bill. For the purposes of this provision, "operation of a storage facility" includes operation for the purpose of transporting carbon dioxide by pipeline from its source for injection into the storage facility.

The program must be operated in accordance with guidelines developed by the Department of Transportation and in effect on January 1, 1996. The bill provides, however, that nothing in that provision requires the Director to maintain a lease or permit at a specific location or prohibits the Director from modifying the terms of a specific lease or permit.

Carbon Dioxide Storage Facility Trust Fund

(R.C. 1572.06)

The bill creates in the state treasury the Carbon Dioxide Storage Facility Trust Fund to be administered by the Division of Mineral Resources Management. The Fund is required to consist of the proceeds of the fees established in rules adopted under the bill and of civil penalties imposed for violations under the bill. Money in the Fund must be used by the Division for the administration of the applicable provisions of the bill and for funding for the long-term monitoring of storage facilities as provided in rules adopted under the bill.

Cooperative agreements with state and federal governments

(R.C. 1572.05)

The bill authorizes the Director of Natural Resources to enter into cooperative agreements with the federal government and other states that the Division of Mineral Resources Management determines to be necessary for the purpose of regulating carbon dioxide storage projects.

Inapplicability to oil and gas recovery operations

(R.C. 1572.07)

The bill declares that nothing in the applicable provisions of the bill or in rules adopted under them applies to the use of carbon dioxide as part of or in conjunction with any enhanced recovery of oil or natural gas where the sole purpose of the project is the recovery of oil or natural gas.

Exemption of carbon dioxide from existing gas storage program

(R.C. 1571.01)

Current law establishes a regulatory program for the underground storage of certain gases. The bill exempts from that program the underground injection of carbon dioxide that is regulated under the bill.

Greenhouse gas emissions, carbon control

(R.C. 4928.69)

Greenhouse gases

The bill requires the PUCO to adopt rules establishing greenhouse gas emission reporting requirements for each electric generating facility located in Ohio that emits greenhouse gases, including facilities in operation on the bill's effective date (see **COMMENT**).¹³ The rules must include participation in the Climate Registry. The Registry's web site describes the Registry as "a collaboration between states, provinces, and tribes aimed at developing and managing a common greenhouse gas emissions reporting system with high integrity that is capable of supporting various greenhouse gas emissions reporting and reduction policies for its member states and tribes and reporting entities."¹⁴

¹³ "[Greenhouse gases] allow sunlight to enter the atmosphere freely. When sunlight strikes the Earth's surface, some of it is reflected back towards space as infrared radiation (heat). Greenhouse gases absorb this infrared radiation and trap the heat in the atmosphere. . . . Some of [the gases] occur in nature (water vapor, carbon dioxide, methane, and nitrous oxide), while others are exclusively human-made (like gases used for aerosols). . . . During the past 20 years, about three-quarters of human-made carbon dioxide emissions were from burning fossil fuels." From the U.S. Energy Information Administration, at <<http://www.eia.doe.gov/oiaf/1605/ggcebro/chapter1.html>>.

¹⁴ <<http://www.theclimateregistry.org/>>. According to the web site, as of February 1, 2008, Ohio is listed as having joined the Registry, along with all other states except Alaska, Texas, Louisiana, Mississippi, Arkansas, North Dakota, South Dakota, Nebraska,

The bill does not address the relationship between the required PUCO rules and any authority of the Ohio Environmental Protection Agency (EPA) regarding greenhouse gas control. The Ohio EPA currently does not have any rules regarding reporting by any type of emitter of greenhouse gases, which include, but are not limited to, electric generating facilities. A recent federal act requires the U.S. EPA to prescribe mandatory reporting requirements for greenhouse gas emissions and appropriate emission thresholds for particular economic sectors, including electric generation. Draft rules are expected this summer and final rules must be in place in mid-2009. The rules apparently will be issued under existing authority of the federal Clean Air Act, under which Ohio EPA typically is the implementing state agency. Reportedly, other state agencies that wish to enforce such federal rules must petition the federal government for permission.

Carbon control

The bill requires the PUCO to adopt rules establishing carbon control planning requirements for each electric generating facility located in Ohio that emits greenhouse gases, including facilities in operation on the bill's effective date. (The reference to "carbon control" likely means "carbon dioxide control.") There currently are no such federal or state requirements, and none are being proposed for the foreseeable future. The bill does not describe the scope of the carbon control planning requirements, for example, whether the rules will be directed at the filing of long-term plans or address technology standards.

COMMENT

The bill is not clear as to whom the PUCO's greenhouse gas reporting and carbon control planning requirements under R.C. 4928.68 will apply, that is, as to public utilities the PUCO regulates and/or other owners of electric generation. If it includes the latter, there is no authority under current law or the bill for the PUCO to enforce compliance as to those nonutility owners.

HISTORY

| ACTION | DATE |
|----------------------------------|-------------|
| Introduced h0487-i-127.doc/kl | 02-21-08 |

Kentucky, Indiana, and West Virginia. The Ohio contact listed on the site is the Director of Ohio EPA. The state's listing currently enables a utility's voluntary participation in the Registry.