Mary S. Connor *Legislative Service Commission*

Sub. S.B. 221*

127th General Assembly
(As Reported by S. Energy and Public Utilities)

Sen. Schuler (By request)

BILL SUMMARY

- Focuses on two main subject areas: electricity prices and electricity sources.

On pricing:

- Preserves the right of customer choice enacted S.B. 3 of the 123rd General Assembly; as to generation service, generally extends the life of the utilities' current rate plans beyond their scheduled expiration; and allows future, cost-related adjustments to generation prices.

- Also grants the Public Utilities Commission (PUCO) the authority to regulate electric utilities under the traditional regulatory approach that applied to them before S.B. 3.

- Revises and adds to the current objectives of state electric services policy enacted under S.B. 3.

- Retains the general standard service offer (SSO) requirement for electric distribution utilities.

- Declares that, as of January 1, 2009 (2011 for Dayton Power & Light), a utility's SSO price:

  --As to each customer with a (bilateral or other) contract with a utility approved by the PUCO before October 28, 2007, will consist of that

* This analysis was prepared before the report of the Senate Energy and Public Utilities Committee appeared in the Senate Journal. Note that the list of co-sponsors and the legislative history may be incomplete.

contract price, exclusive of its transmission and distribution service components;

--As to each of its customer classes, will consist of the total charges--exclusive of charges for transmission and distribution services--that are payable by customers on February 1, 2008 (2010 for DP&L) under the utility's current SSO rate plan and, further, is subject to (1) any price adjustments for costs incurred by the utility and authorized under its existing rate plan for implementation on or after that February 1 but before the following January 1, and (2) to the extent they are not included in those total charges or price adjustments, any price adjustments for deferred costs authorized by PUCO order.

- Authorizes a distribution utility to apply for a modified SSO consisting of either an "electric security plan" (ESP) or a "market rate option" (MRO).

- Provides that, under an ESP, a utility's SSO price can change relative to changes in the baseline measure of any one or more costs incurred by it to serve jurisdictional load in Ohio, excluding certain costs related to environmental law violations.

- Allows an ESP to provide for automatic SSO price adjustments for certain enumerated costs and requires consistency with traditional rate-making law if the costs concern construction of a new generating facility or major environmental retrofit.

- Requires that any adjustment for a particular cost in a utility's ESP application be determined using a baseline measure of cost.

- Requires that, other than in a utility's initial application, that baseline must be the cost, and the associated kilowatt-hours sold, as determined under the utility's then-existing approved plan and that, regarding a new generating facility or major environmental retrofit, associated decreases in cost and changes in kilowatt-hours sold must include any retirement of all or part of any other generating facility, the cost of which had been included in the utility's rate base prior to the bill's effective date or was included in a prior ESP.

- Authorizes the PUCO to specify in an ESP any alternate standard, factors, or methodology that it must use, within a timeframe the PUCO

specifies, to approve a MRO for the utility if it later files an application for that approval.

- Requires open, competitive bidding for generation supply under a MRO.

- Prohibits an electric utility selling or transferring any generating facility it owns in whole or in part to any person without prior PUCO approval.

- Requires an electric distribution utility with a PUCO-approved ESP to file an energy delivery infrastructure modernization plan or any plan providing for the utility's recovery of costs and a just and reasonable rate of return on such modernization.

- Adds to current law regarding line extensions a provision requiring the PUCO to consider rules regarding distribution costs, including line extensions, in carrying out the state electric policy.

- Requires the PUCO to employ a Federal Energy Advocate and requires the Advocate to examine the value of the participation of Ohio electric utilities in regional transmission organizations and submit a report to the PUCO.

- Requires that the Advocate monitor Federal Energy Regulatory Commission and other federal agencies and advocate on behalf of Ohio retail electric service consumers at the federal level.

On energy sources:

- Requires an electric distribution utility by the end of 2025 to supply a portion of its SSO supply from advanced energy, in the amount of 25% of the number of kilowatt-hours it supplies in its certified distribution territory, and subject to other requirements including regarding the use of sustainable resources and regarding the location of the facility.

- Requires the PUCO to establish energy efficiency standards relating to the actual load growths and peak demands of electric distribution utilities and authorizes rules providing for revenue decoupling.

- Requires the PUCO to establish carbon control planning requirements for generating facilities and to establish greenhouse gas emission reporting requirements.

- Adds the following to the types of air quality projects that can be funded by the Ohio Air Quality Development Authority (OAQDA) and declares that both qualify as air and thermal pollution facilities under Section 13, Article VIII, Ohio Constitution: property, devices, or equipment used in the manufacture and production of any equipment that qualifies as an air quality project; and property, devices, or equipment that reduce air contaminant emissions through the generation of electricity using sustainable resources.

- In the manner of its current authority to fund air quality projects, authorizes OAQDA to issue revenue bonds to fund specified types of advanced energy projects and declares that such projects qualify as air and thermal pollution control facilities under the Ohio Constitution.

- Grants OAQDA authority regarding programs to achieve best cost rates for state-owned buildings, facilities, and operations, state-supported colleges and universities, willing local governments, and willing school districts through pooled purchases of electricity and the financing of taxable or tax-exempt prepayment of commodities; and regarding programs to achieve optimal cost electricity for key industrial and energy-intensive sectors.

- Grants OAQDA authority regarding programs to achieve optimal cost financing for new electric generating facilities and regarding the siting, financing, construction, operation, and risk reduction for next-generation base load generating systems, including clean coal facilities with carbon capture or sequestration or advanced nuclear power plants.

- Grants OAQDA authority regarding energy efficiency incentives, sustainable resource energy installations, and research and development regarding sustainable energy.

- Requires the Department of Natural Resources, the Ohio Environmental Protection Agency, and the PUCO jointly by rule to develop an interim policy framework for regulating pilot and demonstration, carbon sequestration activities in Ohio or sequestration products produced in Ohio.

TABLE OF CONTENTS

CONTENT AND OPERATION

Overview

The bill focuses on two main subject areas: electricity prices and electricity sources.

Regarding pricing, the bill focuses on the policy and process under which the electricity prices of Ohio's seven incumbent utilities will be established after the scheduled expiration of the current rate plans under which they serve Ohio's retail electric market (December 31, 2010, for Dayton Power & Light; all others, the end of 2008). In brief, the bill preserves the right of customer choice enacted by the electric law of S.B. 3 of the 123rd General Assembly, extends the life of the utilities' current rate plans beyond their scheduled expiration, and allows future,

cost-related adjustments to generation prices. However, if necessary, the PUCO can also regulate electric utilities under the traditional regulatory approach that applied to them before S.B. 3. The bill also repeals transitional (2001-2005) provisions of S.B. 3 that are obsolete.[1] However, it retains the competitive market provisions of that law, so it apparently does not intend that any such return to traditional regulation would reinstate the exclusive generation supplier status that existed for those utilities before S.B. 3.

The bill's pricing provisions do not focus only on generation service but also contain a provision regarding long-term planning for distribution system modernization and related cost recovery. It also requires a PUCO staff report on the value of utility participation in regional transmission organizations.

Regarding energy sources, the bill prohibits future utility divestitures of electric generating facilities without prior PUCO approval; grants authority for state-issued revenue bonds to finance advanced energy projects; provides for a 2025, advanced energy portfolio requirement for electric utilities and 2025 load growth and peak demand energy efficiency standards for electric utilities; requires a greenhouse gas emissions reporting system and requires carbon control planning for generating facilities; and provides for the development of an interim policy framework for regulating carbon sequestration in Ohio.

I. Electricity prices

Return to pre-S.B. 3 regulation

(R.C. 4905.31 and 4928.05(A)(1))

By way of background, S.B. 3 in effect repealed "traditional price regulation" for electric generation service and declared that the price of generation service would be competitively market-determined starting January 1, 2001. Incumbent electric utilities no longer had state-established, exclusive service territories for generation service.[2] Other suppliers of generation service ("electric services companies," meaning generally, power marketers, power brokers, and aggregators) could compete to supply electricity to transmission/distribution

[1] R.C. 4928.31, 4928.32, 4928.33, 4928.34, 4928.35, 4928.36, 4928.37, 4928.38, 4928.39, 4928.40, 4928.41, 4928.42, 4928.431, and 4928.44.

[2] Although such exclusive "certified" territories continued as to other components of electric service, such as distribution (R.C. 4933.81 *et seq.*, not in the bill).

customers of the incumbent utilities at each customer's option.[3] Too, incumbent electric utilities were free to vie for each other's generation customers.

To effect that competitive market, S.B. 3 prohibited government regulation of generation prices. On the state level, it generally revoked PUCO authority to regulate generation service under public utility law (R.C. Chapters 4901. to 4909., 4933., 4935., and 4963.) except as to service reliability and public safety.

The bill allows the PUCO to decide to reinstate traditional regulation[4] of generation service. The standard by which the PUCO could do so under the bill is that it finds that traditional regulation is necessary to implement the statutory electric services policy described next below. The bill is not clear as to whether the authority to return to traditional regulation also includes PUCO authority to go back and forth between regulatory approaches.

What does it mean to return to "traditional regulation"? In brief, traditional regulation addresses all facets of utility operation that affect the provision of utility services, for example, utility stock and bond issuance, mergers and acquisitions, and, of course, service pricing. Under its duty to balance the interests of utilities and consumers, the PUCO determines a utility's "revenue requirement"--the amount of revenue a utility needs to cover all its operating costs and earn a rate of return on its overall plant investment. Largely based on consumption data and subject to PUCO approval, the utility then sets its rates so that they will provide it the opportunity to earn that revenue target.

This traditional ratemaking uses a snapshot method of identifying operating costs and plant investment so that, by statute, their calculation is contemporary to the time period for which rates are being determined. In general, any time a utility desires to change its rates because of any change in cost or investment, it has to file a "base rate case" with the PUCO, in which not the specific change, but all the asset, cost, revenue, and expense elements comprising a utility's rates are evaluated anew based on contemporary information.

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[3] Generally, neither current law nor the bill affect right of a municipal utility to provide electric service within its jurisdiction as established under the Ohio Constitution; nor do they affect the exclusive authority of an electric cooperative to provide electric service to its members within its certified territory as that territory is established by statute. Within the limitations of those respective authorities, both municipals and electric cooperatives compete with electric utilities and electric services companies.

[4] A return to traditional regulation does not exactly mean a return to pre-S.B. 3 regulation, since S.B. 3 repealed certain provisions of traditional regulation, such as provisions authorizing an electric fuel component in rates and provisions addressing environmental compliance facilities of electric utilities, and amended other provisions.

Additional notable aspects of traditional regulation (which further relate to pricing under "***Energy security plan***," below) are that the basis for valuating utility assets and the basis for determining a utility's operating costs for rate-making purposes are specified in statute. For instance, under traditional regulation valuation must be done on an original cost basis,[5] for facilities "used and useful" in rendering service, and using books and records maintained by the utility in accordance with a uniform system of accounts specified by the PUCO (R.C. 4905.13, 4909.05(C), and 4909.15(A)). Further, the rate-making process of traditional regulation generally requires the filing of a base rate case application under a statute (R.C. 4909.18) that prescribes certain hearing and other requirements.

State electric services policy

(R.C. 4928.02)

The bill revises and adds to the current objectives of the state electric services policy enacted under S.B. 3. Among other reasons relating to how the electric law is implemented, the state policy is significant because, under the bill, it is integral to the criterion on which the PUCO can decide to return to pre-S.B. 3 regulation and because consistency with the policy is a criterion the bill requires the PUCO to weigh when approving generation prices other than under traditional regulation.

Under both current law and the bill, the statutory electric policy applies statewide, and the PUCO is required to ensure that the policy is effectuated (R.C. 4928.06(A), not in the bill).

The current policy objectives, which have their genesis in S.B. 3's competitive generation market concept, are as follows: (1) ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service, (2) ensure the availability of unbundled and comparable retail electric service that provides consumers with the supplier, price, terms, conditions, and quality options they elect to meet their respective needs, (3) ensure diversity of electricity supplies and suppliers, by giving consumers effective choice of supplies and suppliers and by encouraging the development of distributed and small generation facilities, (4) encourage innovation and market access for cost-effective supply- and demand-side retail electric service, (5) encourage cost-effective and efficient access to information regarding the operation of the transmission and distribution systems of electric

[5] As opposed to some other basis, for example, original cost less depreciation or replacement cost new.

utilities in order to promote effective customer choice of retail electric service, (6) recognize the continuing emergence of competitive electricity markets through the development and implementation of flexible regulatory treatment, (7) ensure effective competition in the provision of retail electric service by avoiding anticompetitive subsidies flowing from a noncompetitive retail electric service to a competitive retail electric service or to a product or service other than retail electric service, and vice versa, (8) ensure retail electric service consumers protection against unreasonable sales practices, market deficiencies, and market power, and (9) facilitate the state's effectiveness in the global economy.

The bill changes these policy objectives by adding seven new objectives and modifying three of the current objectives. Specifically, objective (4) above is changed to read: "encourage innovation and market access for *cost-effective retail electric service, including, but not limited to, demand-side management, time-differentiated pricing, and implementation of advanced metering infrastructure*."

Objective (5) above is changed to read: "encourage cost-effective and efficient access to information regarding the operation of the transmission and distribution systems of electric utilities in order to promote *both* effective customer choice of retail electric service *and the development of performance standards and targets for service quality for all consumers, including annual achievement reports written in plain language*."

Objective (8) above is changed to read: "ensure retail electric service consumers *just and reasonable rates and* protection against unreasonable sales practices, market deficiencies, and market power."

The following new objectives are added to the state electric services policy: (1) ensure that an electric utility's transmission and distribution systems are available to a customer-generator or owner of distributed generation, so that the customer-generator or owner can market and deliver the electricity it produces, (2) preclude imbalances in knowledge and expertise among parties in a proceeding under the electric law to eliminate any appearance of disproportionate influence by any of those parties, (3) ensure that consumers and shareholders share the benefits of electric utility investment in facilities supplying retail electric generation service, (4) provide coherent, transparent means of giving appropriate incentives to technologies that can adapt successfully to potential environmental mandates, (5) protect at-risk populations when considering the implementation of any new advanced energy technology, (6) encourage implementation of distributed generation across customer classes through regular review and updating of rules governing critical issues such as, but not limited to, interconnection standards, standby charges, and net metering, and (7) encourage the education of small business owners in Ohio regarding the use of energy efficiency programs and advanced energy technologies in their businesses and encourage that use.

Price regulation

(R.C. 4928.14 and 4928.141)

Under S.B. 3, beginning generally in 2006 and currently, an electric utility's only duty regarding generation service is to provide a SSO that assures the availability of a firm supply of electricity to (1) any of its distribution customers that have never chosen an alternate generation supplier and (2) any customers that did choose but returned, if only briefly, to the utility because their supplier defaulted on its contract.[6] In general, for various reasons, the standard service offer of each incumbent utility over time has become, instead of an "essential service, fall-back" offer, *the* generation service offer for most of its distribution customers.

Current law enacted under S.B. 3 contemplates that a utility's standard service offer generation price will be "market-based." Alternately, it can be determined by competitive bidding, but not if the PUCO determines "at any time that a competitive bidding process is not required [because] other means to accomplish generally the same option for customers is readily available in the market and a reasonable means for customer participation is developed."

Generally, since the time S.B. 3's SSO requirement took effect, the incumbent utilities have operated under various SSOs that were developed by settlement among parties. These SSOs are typically referred to as "rate stabilization plans" and were approved by the PUCO as market-based SSOs. Rate stabilization is an utility/PUCO-generated concept described as responding to an assessment that there is no effective competition in the electric generation market. The general nature of the utilities' rate stabilization plans is that they preserve generation prices at existing levels[7] but allow for price increases in relation to certain costs and under certain circumstances.

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[6] More fully, a customer can return under current law to (the standard service offer of) its incumbent utility if the customer's supplier (1) has defaulted on its contract, (2) is in receivership, (3) has filed for bankruptcy, (4) is no longer capable of providing the service, (5) is unable to provide delivery to transmission or distribution facilities for such reasonable period of time as the PUCO may specify by rule, or (6) has had its PUCO certification suspended, conditionally rescinded, or rescinded (R.C. 4928.14(C); under the bill, the division is changed to (H)).

[7] Generally meaning, at the level of the utility's pre-2000 price of electricity, determined through an unbundling process that required the price of generation to be the amount that remained after all other electric service components were removed from the bundled price for electric service that reflected the vertical integration of Ohio electric utilities prior to S.B. 3. Those bundled prices had not changed since the utilities' last rate cases,

2009 (2011) SSOs

The bill retains the general standard service offer requirement for electric utilities. It declares that, as of January 1, 2009 (2011 for DP&L), as to each customer with a (bilateral or other) contract with a utility approved by the PUCO before October 28, 2007, a utility's SSO will consist of that contract price, exclusive of its transmission and distribution service components.

Also, as of that January 1, a utility's SSO, as to each of its customer classes, will consist of the total charges--exclusive of charges for transmission and distribution services--that are payable by customers on February 1, 2008 (2010 for DP&L) under the utility's current SSO rate plan and, further, that are subject to (1) any price adjustments for costs incurred by the utility and authorized under its existing rate plan for implementation on or after that February 1 but before the following January 1, and (2) to the extent they are not included in those total charges or price adjustments, any price adjustments for deferred costs authorized by PUCO order. (One effect of this provision is a current rate stabilization charge of any utility scheduled to expire under its current rate plan will continue.)

Later SSOs

Relative to its plan to take effect in 2009, the bill allows any utility to seek approval of a new SSO, in the form of either an "electric security plan" (ESP) or a "market rate option" (MRO). Such an ESP or MRO will take effect on the date the PUCO specifies in its approval order and supersede the utility's prior SSO.

The bill expressly states that it does not preclude a utility for which an ESP has been approved under the bill from later filing an application for a MRO or vice versa; and that the PUCO has no authority to require a utility for which it has ever approved a MRO, to file an application for an ESP. Additionally, the bill does not limit a utility competing for generation customers in the certified distribution service territory of another utility.

The bill requires the PUCO to adopt rules governing the filing requirements for an application containing the new standard service offer. Upon that filing, the PUCO must set the date and time for hearing, send written notice of the hearing to the utility, and publish notice of the hearing one time in a newspaper of general circulation in each county in the service area affected by the application.

Additionally, the bill contains a contract discovery provision. Specifically, subject to such protection for proprietary or confidential information as is

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which generally occurred in the late 1980s to mid-90s, so, they have not been evaluated since then under the rate-making criteria of traditional regulation.

determined appropriate by the PUCO, a utility must make available to any party to an ESP or MRO proceeding that submits an appropriate discovery request every contract or agreement that is relevant to the proceeding and is between the utility, or any of its affiliates, and a consumer, electric services company, political subdivision, or any party to the proceeding.

Electric security plans

Terms and conditions. Under an ESP, a utility's generation prices will change relative to changes in one or more costs specified in the utility's application and incurred by it to serve jurisdictional load in Ohio. Excluded as allowable costs under an ESP are any financial penalties, fines, court costs, and attorney's fees associated with violations of or noncompliances with federal or any state's environmental laws or with facilities' permits.

Under the bill, if the utility has entered into a contract or agreement with an affiliate for the provision of a competitive retail electric service, the PUCO must treat the affiliate's costs of providing that service as a cost of the utility under the electric security plan.

Any allowable adjustment under an ESP for a change in a capitalized cost must include a just and reasonable return on that cost. And, the amount of any price adjustment must be offset by any decrease in costs and change in kilowatt-hours sold that are associated with serving Ohio jurisdictional load, except for a decrease that would have occurred pursuant to the scheduled expiration of a regulatory transition charge charged by a utility. (Specifically, the bill excludes any reductions in amortization relating to costs recovered through a regulatory transition charge[8] authorized by the PUCO as of February 1, 2008.)

Any cost incurred by a utility to serve jurisdictional load in Ohio is allowable under an ESP. The bill enumerates certain of those costs, but an ESP is not limited to only those costs. The enumerated costs are (1) environmental compliance costs for one or more specified generating facilities, (2) the cost of fuel for one or more specified generating facilities or the cost of purchased power (3) operating, maintenance, and other costs, including taxes, (4) costs of

[8] A regulatory transition charge is a charge that S.B. 3 permitted the PUCO to grant an electric utility so that it could collect revenue from customers for pre-S.B. 3 regulatory assets that met the definition of a "transition cost" under S.B. 3. Under S.B. 3, that revenue period for a utility was to end not later than December 31, 2010. "Regulatory assets" are the unamortized amounts capitalized or deferred on a utility's books of account per PUCO orders and can include such items as deferred PIPP (Percentage of Income Payment Plan) arrears or deferred demand-side management costs (R.C. 4928.01(A)(26), 4928.39, and 4928.40 of current law).

investment in one or more specified generating facilities, and (5) costs of providing standby and default service pursuant to electric law (specifically, R.C. 4928.14(A) and relettered (H)). An ESP that includes any of those costs can provide for automatic increases or decreases in the SSO price, but, in the case of a cost under (3), only if the cost was outside of the utility's control or responsibility.

In addition, costs in an ESP expressly can include (6) the cost of construction of one or more new, specified generating facilities that, superseding Power Siting Board authority under R.C. Chapter 4906., the PUCO determines and certificates the need for as to the SSO on the basis of resource planning projections developed in accordance with policies and procedures the PUCO must prescribe by rule and (7) the cost of construction, in excess of $250 million, of an environmental retrofit to a specified, then-existing generating facility. In the case of a price adjustment for a cost described in (6) and (7), the bill requires that the adjustment be consistent with the rate-making formula and standards of continuing R.C. 4909.15 and consistent with procedures that ordinarily apply to a base rate case under R.C. 4909.18 as those procedures may be applicable. Additionally, subject to such terms and conditions as the PUCO prescribes in its order approving the ESP, a price adjustment under (6) or (7) must be for the actual life of the facility.

If the costs of an advanced energy technology or facility implemented under the bill (see "***Advanced energy***," below) are included in the ESP, the portion of the standard service offer price attributable to those costs are not payable by any consumer that has exercised choice of supplier under continuing law (R.C. 4928.03), but only "to the extent" the PUCO determines that the advanced energy technology or facilities implemented by that supplier are comparable to that implemented by the utility under the bill at the time of the issuance of an ESP approval order. (That means that, if the PUCO determines that the supplier's advanced energy portfolio is only partially comparable to the utility's, a proportional amount of the part of the standard service offer price attributable to the utility's advanced energy costs included in the ESP will be payable.)

The bill requires that any adjustment for a particular cost in a utility's initial ESP application be determined using a baseline measure of cost as of February 1 of the year in which the utility's existing rate plan will expire (2008 or 2010, as applicable).

If a utility continues to provide its SSO pursuant to an ESP, for any later such application by the utility, the baseline measure must be the cost, and the associated kilowatt-hours sold, as determined under the utility's then-existing approved plan. With regard to a generating facility described in (6) and (7) above, associated decreases in cost and changes in kilowatt-hours sold must include, but are not limited to, retirement of all or part of any other generating facility, the cost

of which had been included in the utility's rate base[9] prior to the bill's effective date or was included in an ESP as a cost described in (4), (6), or (7) above.

Aside from price adjustments, the bill additionally authorizes the PUCO to specify in an ESP any alternate standard, factors, or methodology that it must use, within the timeframe the PUCO specifies, to approve a MRO for the utility if it later files an application for that approval (see "***Market rate option***," below).

ESP approval. The bill allows the PUCO, when deciding upon an application for an ESP filed by a utility that transferred all or part of its generating facilities to an affiliate of the utility, and to the extent authorized by federal law, to consider purchased power or other contracts or agreements between the utility and its affiliates or between the utility and the holding company that owns or controls the utility.

Under the bill, the burden of proof regarding an ESP application is on the utility. The PUCO must find all of the following to approve, or modify and approve, an ESP: (1) the plan and prices it establishes are just and reasonable as to each customer class and are consistent with the state electric policy and (2) the utility is in compliance with the contract discovery provision mentioned earlier in this analysis.

In its approval order, the PUCO must prescribe such requirements necessary for the utility to implement "applicable" objectives of the state policy. The order also can provide a schedule and the procedural and substantive terms and conditions for periodic PUCO review of the ESP.

Market rate option

Terms and conditions. The bill states that, under a MRO, a utility's SSO price must be determined periodically through an open, competitive bidding process. Prior to the approval of the MRO, the utility must conduct such competitive bidding to establish the original price under the MRO.

MRO approval. As with an ESP, the burden of proof in a MRO proceeding is on the utility. The PUCO by order must approve, or modify and approve, the MRO if it determines all of the following are met: (1) the MRO and its prices are just and reasonable as to each customer class and are consistent with the state electric policy and (2) the utility is in compliance with the contract discovery provision of the bill.

[9] The use of "rate base" is not entirely clear here as to whether it intends to refer a facility's included rates in effect any time prior to the bill's effective date or to an asset included in a utility's rates prior to S.B. 3's effective date.

Aside from those two standards, which also apply to ESP approval, the PUCO must determine for a MRO that (3) with respect to generation service, the relevant markets are subject to effective competition. For that purpose and unless the PUCO already established an effective competition standard, factors, or methodology in an earlier ESP for that utility as allowed under the bill, the PUCO must consider the factors prescribed in continuing electric law[10] and such other or additional factors as it can prescribe by rule. It also must prescribe by rule the methodology it will use to evaluate whether the effective competition standard is met.

In addition, for a MRO, the PUCO must determine that (4) the MRO price for a customer class as determined under the original competitive bidding is more favorable than, or at least comparable to, its price-to-compare for that class. That price-to-compare is a PUCO-determined price that is for the comparable time period and is established "in the manner of an [ESP]."

As with an ESP order, a MRO approval order must prescribe such requirements as are necessary for the utility to implement applicable objectives of the state electric policy. The order can provide the procedural and substantive terms and conditions for periodic PUCO review of the MRO. That review must provide for the reconciliation of the standard service offer price to ensure that the price is just and reasonable as to each customer class and consistent with the state policy.

Distribution system modernization; line extensions

(R.C. 4928.02 and 4928.111)

The bill requires an electric utility with a PUCO-approved ESP to file with the PUCO a "long-term energy delivery infrastructure modernization plan or any plan providing for the utility's recovery of costs and a just and reasonable rate of return on such infrastructure modernization." The plan must specify the initiatives the utility must take to improve electric service reliability by rebuilding, upgrading, or replacing the utility's distribution system. The plan must be filed in an application under the traditional ratemaking law (R.C. 4909.18) and therefore

[10] Under R.C. 4928.06(D), these factors include, but are not limited to, (1) the number and size of alternative providers of the service, (2) the extent to which the service is available from alternative suppliers in the relevant market, (3) the ability of alternative suppliers to make functionally equivalent or substitute services readily available at competitive prices, terms, and conditions, and (4) other indicators of market power, which may include market share, growth in market share, ease of entry, and the affiliation of suppliers of services.

subject to any hearing and other requirements to the extent they would apply under that law.

The bill also contains a provision requiring the PUCO, in carrying out the state electric policy, to "consider rules as they apply to the costs of distribution infrastructure, including, but not limited to, lines extensions for the purpose of development" in Ohio. Under continuing law, a utility's filed distribution rates must "include an obligation to build distribution facilities when necessary to provide adequate distribution service, provided that a customer requesting that service may be required to pay all or part of the reasonable incremental cost of the new facilities, in accordance with rules, policy, precedents, or orders of the [PUCO]" (R.C. 4928.15(A)).

RTO participation; consumer advocate

(R.C. 4928.68)

The bill requires the PUCO to employ a federal energy advocate. The bill requires that person to examine the value of the participation of Ohio electric utilities in regional transmission organizations[11] and submit a report to the PUCO on whether continued participation of those utilities is in the interest of retail electric consumers.

Additionally under the bill, the PUCO employee must monitor the activities of the Federal Energy Regulatory Commission (FERC) and other federal agencies and, represented by the Attorney General, must "advocate on behalf of the interests of Ohio retail electric service consumers." Currently, there is one, state-level entity that functions as a consumer advocate: the Ohio Consumers' Counsel, who advocates on both the state and federal levels, on behalf of the residential consumers of electric, gas, natural gas, and certain other public utilities (R.C. Chapter 4911.). The PUCO itself often is a party to federal proceedings.

Governmental aggregation

(R.C. 4928.20 and 4928.21)

Current law authorizes the electric load of electric customers to be aggregated for the purpose of purchasing retail electric generation (R.C. 4928.03). Aggregators performing that function include governmental aggregators, specifically, municipalities, townships, and counties that can aggregate the electric

[11] In brief, these "RTOs" coordinate the transportation of electricity over transmission lines of any number of participating utilities. Ohio utilities belong to either of two such RTOs: MISO (The Midwest Independent System Operator) or PJM Interconnection.

load of customers within their respective jurisdictions. Current law establishes various requirements for and limitations on a governmental aggregation, including, for instance, a popular vote on the question of whether the local government can aggregate load without first obtaining the individual permission of each customer.

The bill changes current law's limitation that, in the case of such an "automatic" governmental aggregation, the local government must allow any person that is so enrolled in the aggregation an opportunity to opt out of the aggregation every *two* years, without paying a switching fee. The bill provides that a customer can opt-out *up to every four years* without paying a switching fee.

II. Energy sources

Divestiture policy

(R.C. 4928.17(E))

Current law enacted by S.B. 3 authorizes an electric utility to divest itself of any generating asset without prior PUCO approval. The bill prohibits an electric utility selling or transferring any generating facility it owns in whole or in part to any person without prior PUCO approval. (Prior to S.B. 3, an electric utility, like any other public utility, was subject to policy and a process regarding such prior PUCO approval under R.C. 4905.48 (not in the bill). PUCO approval authority under the bill does not reference that statute.)

Advanced energy portfolio

(R.C. 4928.142)

Advanced energy requirement

The bill requires that, by the end of 2025, each electric distribution utility must comply with the bill's requirement for advanced energy in its SSO supply portfolio. An effect of the bill is that it allows the utility to decide the manner and timing of its compliance with that requirement. The requisite amount of advanced energy is 25% of the total number of kilowatt-hours of electricity the utility supplies to any and all electric consumers whose electric load centers are located in its certified distribution service territory. The bill expressly states that it does not preclude a utility from providing a greater percentage.

In fulfilling the 25% requirement, the utility must comply with the following standards: (1) at least 50% of the advanced energy it implements by the end of 2025 must be generated from sustainable resources and must include solar power, and the remainder must be supplied from advanced energy facilities, (2) at

least 50% of the advanced energy it implements by the end of 2025 must be met through facilities located in Ohio, (3) the utility must comply with the advanced energy requirement in a manner that considers available technology, costs, job creation, and economic impacts, and (4) to be counted as an advanced energy technology or facility, its on-site construction must be initiated after the bill's effective date. (The effect of (4) is to allow current advanced energy technology or facilities that are not yet in their on-site construction phase to be counted toward the 2025 standard.) Once counted, a particular technology or facility remains counted for purposes of the utility's compliance with the bill's advanced energy requirement.

The bill defines "sustainable resources" as including, but not limited to, solar; wind, tidal or wave; biomass, including, but not limited to, biomass involving the use of tree parts; landfill gas; biofuel; hydro; or geothermal resources that are used in the generation of electricity.

The bill also defines "sustainable resources" as including fuel cells powered by those resources. As noted in (4) below, fuel cells used to generate electricity also count as "advanced energy facilities" under the bill.

The bill defines "advanced energy facilities" as consisting of methods or any modifications or replacements of any property, processes, devices, structures, or equipment that meet any of the following: (1) regarding clean coal technology, technology that includes the design capability to control or prevent the emission of carbon dioxide, which design capability the commission shall adopt by rule and shall be based on economically feasible best available technology or, in the absence of a determined best available technology, shall be of the highest level of economically feasible design capability for which there exists generally accepted scientific opinion, (2) regarding advanced nuclear energy production, generation III technology as defined by the Nuclear Regulatory Commission, other later technology, or "significant improvements to existing facilities," (3) fuel cells used to generate electricity, including, but not limited to, a proton exchange membrane fuel cell, phosphoric acid fuel cell, molten carbonate fuel cell, or solid fuel cell, (4) regarding cogeneration technology, technology using a heat engine or power station to generate electricity and useful heat simultaneously. Under the bill, "advanced energy facility" further includes any property or system to be used in whole or in part for any of the purposes in (1) to (4) above, whether another purpose also is served, and any property or system incidental to or that has to do with, or the end purpose of which is, any of the foregoing.

PUCO strategy; advisory committee

The bill requires the PUCO to submit to the General Assembly an annual report describing the compliance of electric distribution utilities with the bill's

advanced energy requirement and describing any interim goals or strategy for utility compliance or for encouraging the use of advanced 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 before submitting it. The bill expressly states that nothing in the report binds any person, including any utility for the purpose of its compliance with the advanced energy requirement or the purpose of enforcing that requirement.

The bill additionally requires the Governor to appoint an advanced energy advisory committee in consultation with the chair of the PUCO. The committee is charged with examining available technology for and related timetables, goals, and costs of the bill's advanced energy requirement and semiannually submitting a report of its recommendations to the PUCO.

Enforcement and exception to compliance

Under the bill, if the PUCO determines, after notice and hearing, that the utility has failed to comply with the 2025-25% requirement, it must issue an order requiring the utility to comply fully within such time as must be specified in the order. The order must specify the process and schedule for later verifying the utility's compliance to the PUCO.

However, the PUCO's authority to order a utility's full compliance is subject to a price limitation: under the bill, the PUCO cannot require full compliance "to the extent that" the ratio between the blended advanced energy and nonadvanced energy price in 2025 and the portion of that price attributable to nonadvanced energy exceeds 1.03. (In other words, full compliance cannot be required if the utility's overall standard service price in 2025 would rise by more than 3% if the utility were made to fully comply with the 2025-25% requirement; and the PUCO could require something less than full compliance, up "to the extent that" that price effect would not occur.)

Regarding financial penalties for noncompliance, the bill authorizes the PUCO to pursue mandamus, injunction, or other civil remedies against a utility to compel its compliance with a compliance order under the bill or with an order in a later proceeding in which it determines the utility has failed to comply with the compliance order. The bill also authorizes the PUCO to assess forfeitures. The maximum amount of the forfeiture is $10,000 per day per noncompliance. (R.C. 4928.16(B)(2), referencing R.C. 4905.54 *et seq*.) (That amount is the same as that which applies to a public utility under traditional regulation and can otherwise apply to an electric distribution utility for violations of or noncompliances with electric law under R.C. Chapter 4928.) Under continuing law, such forfeitures are deposited to the credit of the general revenue fund (R.C. 113.09).

Energy efficiency standards

(R.C. 4928.64)

The bill requires the PUCO to establish by rule energy efficiency standards applicable to electric distribution utilities. Under the rules, a utility must implement energy efficiency measures that will result in not less than 25% of actual growth in its electric load and not less than 10% of its total peak demand being achieved through those measures by 2025. The rules must include a requirement that an electric distribution utility provide a customer upon request with two years of consumption data in an accessible form.

Additionally, the rules may provide for "decoupling." (Although not further described in the bill, this term generally refers to a policy that detaches utility earnings from amount of commodity sold.)

Greenhouse gas emissions, carbon control

(R.C. 4928.69)

The bill requires the PUCO to adopt rules establishing greenhouse gas[12] emission reporting requirements (presumably applicable only to public utilities regulated by the PUCO). 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."[13]

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[12] "[G]reenhouse 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/ggccebro/chapter1.html>.

[13] <http://www.theclimateregistry.org/>. According to the web site, as of August 9, 2007, Ohio is listed as having joined the Registry, along with all other states except Alaska, Texas, Louisiana, Mississippi, Arkansas, North Dakota, South Dakota, Nebraska, 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.

The bill also 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.

Carbon sequestration

(R.C. 1551.41)

The bill requires the Department of Natural Resources, the Ohio Environmental Protection Agency, and the PUCO, jointly by rule, to develop an interim policy framework for supervision and regulation by the agencies of pilot and demonstration, carbon sequestration activities located in Ohio and sequestration products produced in Ohio.

State revenue bonds

(R.C. 122.41, 122.451, 3706.01 through 3706.18, and 4905.40)

Current law authorizes the Ohio Air Quality Development Authority (OAQDA) to issue revenue bonds and notes, the proceeds of which can be used to fund the cost[14] of air quality projects. Funding can come in the form of an OAQDA loan or grant or can otherwise be paid from bond proceeds.

[14] "Cost" means the cost of acquisition and construction, the cost of acquisition of all land, rights-of-way, property rights, easements, franchise rights, and interests required for such acquisition and construction, the cost of demolishing or removing any buildings or structures on land so acquired, including the cost of acquiring any lands to which such buildings or structures may be moved, the cost of acquiring or constructing and equipping a principal OAQDA office and sub-offices, the cost of diverting highways, interchange of highways, and access roads to private property, including the cost of land or easements for such access roads, the cost of public utility and common carrier relocation or duplication, the cost of all machinery, furnishings, and equipment, financing charges, interest prior to and during construction and for no more than 18 months after completion of construction, engineering, expenses of research and development, the cost of any commodity contract, including related fees and expenses, legal expenses, plans, specifications, surveys, studies, cost and revenue estimates, working capital, other expenses necessary or incident to determining the feasibility or practicability of acquiring or constructing a project, administrative expense, and such other expense as may be necessary or incident to the acquisition or construction of the project, the financing of such acquisition or construction, including the amount authorized in the OAQDA bond resolution, the financing of the placing of such project in operation, and any obligation, cost, or expense incurred by any governmental agency or person for surveys, borings, preparation of plans and specifications, and other engineering services, or any other cost described above (R.C. 3706.01(I)).

OAQDA's financing authority is granted in relation to the enactment of Section 13, Article VIII, Ohio Constitution (referenced in R.C. 3706.01(G) and 3706.03(A)). That constitutional provision empowers state government to lend the state's aid and credit to private entities (by issuing of debt backed by revenues other than tax revenues) for the express purposes of controlling air, water, and thermal pollution or disposing of solid waste. But the constitutional provision also includes a prohibition that,

> except for facilities for pollution control or solid waste disposal, as determined by law, no guarantees or loans and no lending of aid or credit shall be made [by statute or otherwise] for facilities to be constructed for the purpose of providing electric or gas utility service to the public.

The bill adds to the types of air quality projects that can be funded by the OAQDA. It also gives OAQDA new, identical, statutory authority to issue revenue bonds for advanced energy projects. The latter also involves extending to advanced energy projects two existing statutory provisions relating to a Department of Development mortgage insurance program for air quality, wastewater, or solid wastes projects.

The bill additionally expressly denies OAQDA the authority to build, own, or operate an air quality facility or advanced energy facility, except as may be required to effect a facility's financing.

Air quality projects

Projects currently eligible for OAQDA funding are, in brief: (1) methods, or modifications or replacements of property, processes, devices, structures, or equipment, directed at air contaminants,[15] (2) property used for collecting, storing, treating, using, processing, or disposing of a by-product or solid waste resulting from a project described in (1), (3) motor vehicle inspection stations and station equipment, (4) ethanol or other biofuel facilities and facility equipment, (5) property, devices, or equipment that reduce emissions of air contaminants through improvements in energy efficiency or energy conservation, (6) research and development projects under the Ohio Coal Development Office, (7) property used

[15] That is, methods, modifications, or replacements that remove, reduce, prevent, contain, alter, convey, store, disperse, or dispose of particulate matter, dust, fumes, gas, mist, smoke, noise, vapor, heat, radioactivity, radiation, or odorous substances, or substances containing those contaminants, or that render them less noxious or reduce their concentration in the air (R.C. 3706.01(C) and (G)).

for collecting, storing, treating, using, processing, or disposing of a by-product or solid waste resulting from a project described in (6) or from the use of clean coal technology, excluding property used primarily for other subsequent commercial purposes, (8) property that is part of the FutureGen project[16] or related to its siting, and (9) property or any system to be used for any of the purposes described in (1) to (8), whether another purpose is also served, and any property or system incidental to or that has to do with, or the end purpose of which is, any of (1) to (8) above.

The bill makes the following newly eligible as "air quality projects" and also expands (9) above to include these new types of projects: (1) property, devices, or equipment necessary for the manufacture and production of any equipment that qualifies as an air quality project, and (2) property, devices, or equipment that reduce air contaminant emissions through the generation of electricity using sustainable resources. "Sustainable resources" include, but are not limited to, solar, wind, tidal or wave, biomass, including, biomass involving the use of tree parts, biofuel, hydro, or geothermal resources; and include fuel cells powered by sustainable resources. The bill declares that both of these new types of air quality projects qualify as facilities for the control of air pollution and thermal pollution related to air under Section 13, Article VIII, Ohio Constitution (R.C. 3706.01(G)).

Advanced energy projects

OAQDA authority to fund advanced energy projects under the bill, and the statutory requirements for bonds and all other funding details, mirror those of existing law as to air quality projects. Similar to the law regarding air quality projects, the bill declares that advanced energy projects for industry, commerce, distribution, or research, including public utility companies, qualify as facilities for the control of air pollution and thermal pollution related to air under Section 13, Article VIII, Ohio Constitution (R.C. 3706.03(A)). This declaration is subject to the limitation within that constitutional provision, as noted above.

Under the bill, "advanced energy projects" consist of methods or of modifications or replacements of property, processes, devices, structures, or equipment, regarding any of the following: (1) for clean coal technology, technology that includes the design capability to control or prevent the emission of carbon dioxide, which design capability the PUCO must adopt by rule and must be

[16] This project is a coal-fueled, zero-emissions power plant designed to prove the feasibility of producing electricity and hydrogen from coal and nearly eliminating carbon dioxide emissions through capture and permanent storage. The future site of the project has been narrowed by the U.S. Department of Energy to Texas or Illinois.

based on economically feasible best available technology or, in the absence of a determined best available technology, shall be of the highest level of economically feasible design capability for which there exists generally accepted scientific opinion, (2) for advanced nuclear energy production, generation III technology as defined by the Nuclear Regulatory Commission, other later technology, or "significant improvements to existing facilities," (3) electric generating fuel cells including, but not limited to, proton exchange membrane fuel cells, phosphoric acid fuel cells, molten carbonate fuel cells, or solid fuel cells, and (4) cogeneration technology using a heat engine or power station to generate electricity and useful heat simultaneously. An advanced energy project also includes any property or system to be used in whole or in part for (1) to (4) above, whether another purpose also is served, and any property or system incidental to or that has to do with, or the end purpose of which is, any of (1) to (4).

The bill declares that advanced energy projects for industry, commerce, distribution, or research, including public utility companies, qualify as facilities for the control of air pollution and thermal pollution related to air under Section 13, Article VIII, Ohio Constitution (R.C. 3706.03(A)).

Additional OAQDA authority

(R.C. 3706.04)

Current law lists a number of general powers of the OAQDA with respect to air quality projects, including, for example, adopting an official OAQDA seal, making loans and grants, acquiring or constructing property, engaging in certain competitive bidding, and receiving federal funds. The bill extends those same powers with respect to advanced energy projects funded by OAQDA.

Further, the bill establishes additional OAQDA authority (although the bill is not clear regarding how these new powers relate, if at all, to OAQDA bonds or bond proceeds). The bill authorizes OAQDA to develop, encourage, promote, support, and implement programs to achieve best cost rates for state-owned buildings, facilities, and operations, state-supported colleges and universities, willing local governments, and willing school districts through pooled purchases of electricity and the financing of taxable or tax-exempt prepayment of commodities. OAQDA additionally may develop, encourage, promote, support, and implement programs to attract and retain key industrial and energy-intensive sectors of Ohio's economy.

The bill also empowers OAQDA to develop, encourage, promote, support, and implement programs to achieve optimal cost financing for electric generating facilities to be constructed on or after January 1, 2009. And, it empowers

OAQDA to lead, encourage, promote, and support siting,[17] financing, construction, and operation for, and reduce the costs of associated risks of, early implementations of next-generation base load generating systems, including clean coal generating facilities with carbon capture or sequestration or advanced nuclear power plants.

Additional authority is granted for OAQDA to develop, encourage, and provide incentives for investments in energy efficiency; develop, encourage, promote, and support implementation in Ohio of sustainable resource energy installations; and engage in and coordinate state-supported energy research and development with respect to reliable, affordable, and sustainable energy in Ohio.

HISTORY

ACTION	DATE
Introduced	09-25-07
Reported, S. Energy and Public Utilities	---

S0221-RS-127.doc/jc

[17] This apparently intends that OAQDA lead, encourage, promote, and support siting of such facilities before the Power Siting Board, if the facilities qualify as major utility facilities under power siting law.