

ORIGINAL

IN THE SUPREME COURT OF OHIO

In the Matter of the Application of) Case No. 2013-1874
Champaign Wind, LLC, for a Certificate to)
Construct a Wind-Powered Electric) On Appeal from the Ohio Power Siting
Generating Facility in Champaign County,) Board, Case No. 12-160-EL-BGN
Ohio)

BRIEF OF AMICI CURIAE, ENVIRONMENTAL LAW & POLICY CENTER AND
OHIO ENVIRONMENTAL COUNCIL, IN SUPPORT OF APPELLEE OHIO POWER
SITING BOARD

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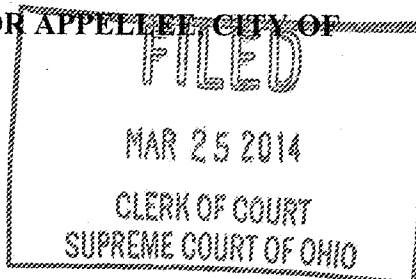
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I. INTRODUCTION

In 2008, the Ohio General Assembly enacted Senate Bill 221, which, among other things, requires Ohio utilities to provide “renewable energy resources,” including wind power and solar energy, as a small percentage of the electricity that they supply to retail consumers. Ohio Rev. Code (“R.C.”) § 4928.64(B)(1),(2). Half of those renewable energy resources supplies must be met through facilities located in Ohio, and the other half can be supplied from out-of-state resources that are deliverable to Ohio. R.C. § 4928.64(B)(3).

Put in context, for the year 2013, Senate Bill 221’s “benchmark” is that two percent of the overall electricity supplied by Ohio utilities to retail consumers must be from renewable energy resources, and, accordingly, only one percent “through facilities located in this state.” R.C. § 4928.64(B)(2),(3). When sales to wholesale consumers are also taken into account, however, the corresponding percentages are even lower: less than one percent of Ohio’s overall electricity supplies were required to be from in-state renewable energy resources in 2013. The Ohio law’s modest in-state renewable energy resources preference is not unusual, follows longstanding policy precedents, and is constitutionally permissible.

Senate Bill 221 was enacted against the backdrop of Ohio’s longstanding constitutional, statutory, and regulatory requirements designed to promote the use of in-state Ohio coal resources by utilities in generating and supplying electricity to consumers. The Ohio Constitution, art. VIII, § 15 specifically sets forth Ohio’s policy to “encourage the use of Ohio coal.” By statute, Ohio has enacted a “State policy to increase coal use”: “It is declared to be the public policy of the state . . . to assist in the development of facilities and technologies that will lead to increased, environmentally sound use of Ohio coal.” R.C. § 1551.31. The Public Utilities Commission of Ohio (“Commission”) has implemented these Ohio policies by, for example,

ruling that utilities can charge Ohio ratepayers for the costs of installing “scrubbers” on their coal plants to facilitate burning high-sulfur Ohio coal. *See In the Matter of the 1990 Long-Term Forecast Report of Ohio Power Co.*, Pub. Util. Comm. Nos. 90-659-EL-FOR, 90-660-EL-FOR, 1991 Ohio PUC LEXIS 1143, at 76-78 (Sept. 24, 1991).

Ohio’s energy and public utilities regulatory policies have favored other in-state facilities as well. For example, the Commission approves preferential “unique arrangement” (or “reasonable arrangement”) economic development rates for various in-state Ohio manufacturing companies in order to retain or attract jobs in Ohio and bolster Ohio’s economy. The Commission has allowed utilities to charge higher rates to other Ohio ratepayers to subsidize and offset these preferential discounts for in-state businesses. *See* R.C. § 4905.31. For example, the Commission recently entered an order adopting a special discount rate for Republic Steel, explaining that “[t]he unique arrangement will help Republic to retain approximately 100 high paying, industrial jobs, as well as create approximately 449 new jobs during the term of the arrangement, at the expanded Lorain Facility.” *In the Matter of the Application of Republic Steel for Approval of a Reasonable Arrangement for Republic Steel’s Lorain Ohio Facility*, Pub. Util. Comm. No. 13-1913-EL-AEC, Opinion and Order at 7-8 (Mar. 19, 2014). The Commission concluded that this preferential rate subsidy for an in-state business “not only benefits the public interest by facilitating job growth in northern Ohio, but also aids in enhancing Ohio’s effectiveness in the global economy.” *Id.* at 7.

Senate Bill 221, however, is different – in ways that make it even more constitutionally permissible – than the Ohio in-state coal use preferences and in-state manufacturers’ rate subsidies because the legislative goals of advancing Ohio’s renewable energy resources go beyond just favoring Ohio’s economic development. Senate Bill 221’s renewable energy

resources preference also promotes public health, safety, and welfare purposes by providing Ohioans with cleaner air and cleaner water and a more reliable in-state electric grid with diverse local fuel sources.

To be clear: Ohio's in-state renewable energy resources preference does create Ohio jobs and advance Ohio's economic development, as do Ohio's in-state coal preference and its preferential "unique arrangement" economic development rates. However, Senate Bill 221's in-state renewable energy preference provision is also designed to produce and achieve important non-economic values: cleaner air and water, less pollution, improved public health, greater local fuel diversity, and better electricity grid reliability. These fall within the traditional, appropriate, legitimate, and lawful police powers and authority of state and local governments.

Appellants Union Neighbors United, Robert McConnell, Diane McConnell, and Julia F. Johnson (collectively, "UNU" or "Appellants") argue that Senate Bill 221's statutory provision designed to promote utilities purchasing in-state Ohio renewable energy for a small percentage of their overall electricity supply to retail consumers violates the dormant Commerce Clause by discriminating against out-of-state renewable energy resources. Merit Brief of Appellants Union Neighbors United ("UNU Br.") at 12-16. Appellants then continue part of their constitutional argument as follows:

Monies from the [Advanced Energy Fund] are administered by the State to provide "financial, technical, and related assistance for advanced energy projects in this State or for economic development assistance." R.C. § 4928.62(A). Ohio redistributes those AEF funds in a geographically discriminatory manner, by limiting funding to in-state sources only. *Id.* This sort of in-state subsidy was ruled unconstitutional in *West Lynn Creamery v. Healy*, 512 U.S. 186 (1994).

UNU Br. at 15. That geographical preference is, of course, precisely the point of Ohio's constitutional and statutory provisions favoring in-state coal and in-state manufacturers. *See*

Ohio Const. art. VIII, § 15 (State Assistance to the Development of Coal Technology); R.C. § 1551.31 (State policy to increase coal use).¹

UNU's argument is also at odds with evolving Commerce Clause and dormant Commerce Clause decisions that have promoted principles of federalism by creating more room for states to exercise their police powers to protect the health, safety, and welfare of their citizens. More fundamentally, UNU's argument ignores the much more robust non-economic goals of Senate Bill 221's renewable energy resources development provisions.

Striking down Ohio's renewable energy resource standard would impede Ohio's efforts to achieve cleaner air and cleaner water, improve public health, and modernize its electric grid, would depart from basic principles of federalism, and would imperil other longstanding public policies, such as Ohio's explicit support for the use and development of in-state Ohio coal energy resources. This Court should deny UNU's constitutional challenges for the following reasons:

First, this Court need not reach the constitutional argument raised by UNU because the Appellants lack standing to raise that issue.

Second, this Court need not reach the constitutional argument raised by UNU because the issue here is moot.

Third, Ohio's in-state renewable energy resources preference does not violate the dormant Commerce Clause. It lawfully advances the public health, safety, and welfare of

¹ Amici are aware of this Court's decision in *Dayton Power & Light Co. v. Lindley*, 58 Ohio St. 2d 465, 476 (Ohio 1979). That decision, however, predates the United States Supreme Court's evolving Commerce Clause jurisprudence, and it involved a much more significant percentage of Ohio's electricity supply and power plants. Moreover, the State of Ohio has continued to promote and support the use of in-state Ohio coal through constitutional and statutory provisions. For example, the Ohio Coal Development Office explains that it "co-funds the development and implementation of technologies that can use Ohio's vast reserves of high-sulfur coal in an economical, environmentally sound manner." The Ohio Air Quality Development Authority, *Coal Research and Development: OCDO*, <http://www.ohioairquality.org/ocdo/ocdo.asp>.

Ohioans and is consistent with the United States Supreme Court's recent Commerce Clause decisions that promote federalism and allow more room for states to experiment with locally-designed solutions to complex problems. Ohio's in-state renewable energy resources preference builds upon Ohio's in-state coal energy use preference.

This Court should uphold Ohio's ability to achieve cleaner air and cleaner water in Ohio by increasing use of local renewable energy resources to generate electricity in ways that advance public health, safety, and welfare, and improve environmental quality. The Court should reject UNU's arguments, which are at odds with Ohio public policies, and are not warranted by the proper application of constitutional law and principles to this case as explained below.

A. Interests of the Amici

Amici Environmental Law and Policy Center and Ohio Environmental Council are not-for-profit organizations with members and professional staff in Ohio. They are dedicated to protecting environmental quality and improving public health while advancing economic growth and development. They supported Senate Bill 221 and have participated in cases before the Commission and other public forums to effectively implement Senate Bill 221's renewable energy resources provisions in order to protect Ohio's environmental quality, improve public health, strengthen Ohio's electric grid, and promote the health, safety, and welfare of all people who breathe Ohio's air and use and enjoy Ohio's rivers, lakes, and streams.

II. STATEMENT OF FACTS

This case presents an appeal of the Ohio Power Siting Board's ("Siting Board") decision "[b]ased on the record" to "issue a Certificate of Environmental Compatibility for the construction, operation, and maintenance of the proposed wind-powered electric generation facility in Champaign County, Ohio, subject to the conditions set forth in" the Siting Board's

Opinion, Order, and Certificate. *In the Matter of the Application of Champaign Wind, LLC, for a Certificate to Construct a Wind-Powered Electric Generating Facility in Champaign County, Ohio*, Board Case No. 12-160-EL-BGN, Opinion, Order, and Certificate, at 102 (May 28, 2013) (“Order”), UNU Appx. at 113. After considering the extensive administrative record evidence regarding the proposed Buckeye II wind power facility, the Siting Board concluded: “Based on our consideration of all of these issues discussed in the above section, the Board finds that the proposed project serves the public interest, convenience, and necessity, in accordance with Section 4906.10(A)(6), Revised Code” *Id.* at 73, *Id.* at 84.

A. Ohio’s Alternative Energy Portfolio Standard in Senate Bill 221

Ohio is moving forward to develop and use “alternative energy resources,” including both “advanced energy resources” and “renewable energy resources,” to help meet consumers’ electricity demand in the state. *See* R.C. § 4928.64. The legislative provisions advancing this goal were enacted in Senate Bill 221 and are sometimes referred to as the alternative energy portfolio standard (“AEPS”).

The AEPS specifically requires Ohio distribution utilities and electric service companies to provide a small percentage of their overall electricity supply to Ohio retail consumers from “alternative energy resources.” R.C. § 4928.64(B). Half of those alternative energy resources must be generated from “renewable energy resources” such as wind power and solar energy. *Id.* In turn, “[a]t least one-half of the renewable energy resources implemented by the utility or company shall be met through facilities located in this state; the rest shall be met with resources that can be shown to be deliverable into this state.” R.C. § 4928.64(B)(3). Utilities that fail to meet the alternative energy “benchmarks” must submit compliance payments to the Advanced Energy Fund (“AEF”). R.C. § 4928.64(C)(2).

Senate Bill 221 involved comprehensive revisions to Ohio's electricity laws and public utilities regulatory system, so the General Assembly was aware of how these renewable energy resources provisions fit into the context of Ohio's overall electricity supplies. For the year 2013, when the Siting Board was considering the Buckeye II wind power facility, Senate Bill 221 set a "benchmark" for renewable energy resources to comprise two percent of the electricity supplied by distribution utilities for their "standard service offer" and by electric service companies "for retail consumers in this state." R.C. § 4928.64(B)(2). One-half of that amount – namely, one percent of the overall electricity supplied – "shall be met through facilities located in this state." R.C. § 4928.64(B)(1)-(3). When sales to wholesale consumers are taken into account, the corresponding percentages of Ohio's overall electricity supplies are even lower – less than one percent was to be supplied by in-state renewable energy resources in 2013.

Effectively utilizing Ohio's renewable energy resources produces multiple public health, safety, and welfare benefits, in addition to creating jobs in Ohio and growing Ohio's economy. First, using in-state renewable energy resources protects Ohioans' public health and Ohio's environment. *See* Order at 72, UNU Appx. at 83 ("[W]e have taken into account that the renewable energy generation by the proposed facility will benefit the environment and consumers."). Developing local renewable energy resources displaces power generated by more polluting local fossil-fuel plants and thereby reduces mercury, smog, soot, and sulfur dioxide emissions, each of which harms human health. Mercury is a neurotoxin that crosses the placenta barrier and can reduce fertility and damage normal fetal growth and development. Smog, soot, and sulfur dioxide pollute the air that people breathe and exacerbate asthma and other respiratory

ailments.² *See id.* at 29, *Id.* at 40 (“Staff states that the operation of the proposed facility would not produce air pollution; thus, there are no applicable air quality permits.”). These pollutants also contaminate waterways that are relied on for drinking water and in which people swim, fish, and boat.

These benefits were recognized in the legislative process leading to the enactment of Senate Bill 221, including the AEPS. For example, Senator Ray Miller said that he supported Senate Bill 221 because it “works to preserve our environment,” and Senator Wilson noted that the bill “will help protect the environment.” Ohio Senate Session, Oct. 31, 2007 (third consideration of S.B. 221), <http://www.ohiochannel.org/MediaLibrary/Media.aspx?fileId=111367>.

Second, the statute enhances public safety because wind power and solar energy development diversify Ohio’s energy mix and strengthen its electric grid reliability by adding some renewable energy to the current supply mix of coal, nuclear and natural gas generated electricity supply. *See* Order at 28, UNU Appx. at 39 (“[T]he Board finds that the proposed facility is consistent with the plans for expansion of the regional power grid . . . , and that the proposed facility will serve the interests of electric system economy and reliability.”).

As Representative McGregor explained during debate on Senate Bill 221, alternative energy resources “create an abundance of energy, harden our distribution system by fostering thousands of new small power producers, reduce the erosion of our distribution system by creating a multitude of small producers, and it will slow the growth of grid damaging big

² *See* United States Environmental Protection Agency (“USEPA”), *Mercury: Environmental Effects*, <http://epa.gov/mercury/eco.htm>; USEPA, *Smog – Who Does It Hurt?* (July 1999), available at <http://www.epa.gov/airnow/health/smog.pdf>; USEPA, *Particulate Matter (PM): Health*, <http://www.epa.gov/pm/health.html>; USEPA, *Sulfur Dioxide: Health*, <http://www.epa.gov/airquality/sulfurdioxide/health.html>.

megawatt plants. This is the beginning of the strongest industrial growth in Ohio since World War II.” Ohio House Session – Part 2, Apr. 22, 2008 (third consideration of Sub. S.B. 221), <http://www.ohiochannel.org/MediaLibrary/Media.aspx?fileId=112900>; *see also* R.C. § 4928.02(C) (“It is the policy of this state to do the following throughout this state . . . Ensure diversity of electricity supplies and suppliers . . . by encouraging the development of distributed and small generation facilities.”).

Third, developing Ohio’s renewable energy resources enhances public welfare by creating new jobs and private investment in a new and growing industrial sector while also reducing pollution. For example, Governor Strickland described a key purpose of Senate Bill 221 as “[a]ttract[ing] energy jobs of the future through an Ohio advanced energy portfolio standard.” Press Release, Governor Strickland Proposes Energy, Jobs and Progress Plan (Aug. 29, 2007), *available at* <https://votesmart.org/public-statement/285489/governor-strickland-proposes-energy-jobs-and-progress-plan#.UxoAYT9dWy4>. Senator Dale Miller echoed that goal in stating that Senate Bill 221 “makes a start on creating jobs through the expansion of advanced energy and renewable energy in Ohio.” Ohio Senate Session, Oct. 31, 2007 (third consideration of S.B. 221), <http://www.ohiochannel.org/MediaLibrary/Media.aspx?fileId=111367>.

These public health, safety, and welfare benefits are within the State’s traditional police powers and control over the heavily-regulated electric utility sector. State government “is vested with the responsibility of protecting the health, safety, and welfare of its citizens.” *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 342 (2007). In particular, “the regulation of utilities is one of the most important of the functions traditionally associated with the police power of the States.” *Ark. Elec. Coop. Corp. v. Ark. Public Serv. Comm’n*, 461 U.S. 375, 377 (1983). The public health, grid reliability, environmental, and

consumer benefits from diversifying Ohio electricity supply to include more local wind power and other renewable energy are real, substantial, and quantifiable. *See* Pub. Util. Comm., *Renewable Resources and Wholesale Price Suppression* (Aug. 2013) (examining Ohio's renewable energy resources and finding significant grid and electricity price benefits).

B. The Ohio Public Siting Board Proceedings on the Buckeye II Wind Power Project

The Siting Board reviews, adjudicates, and issues certificates authorizing the construction and operation of major electricity generation facilities, including coal-fired power plants, natural gas-fired power plants, wind power and other renewable energy facilities, transmission lines, and gas pipelines, if it determines that they are environmentally compatible and in the public interest. *See* R.C. § 4906.01. UNU intervened before the Siting Board to challenge the proposed Buckeye II wind power project in Champaign County, Ohio. The Siting Board considered UNU's arguments and others, including the responses. Order at 35-73, UNU Appx. at 46-84. The Siting Board concluded that the Buckeye II wind power "project serves the public interest, convenience, and necessity" and met applicable siting standards under Ohio law. *Id.* at 73, *Id.* at 84. The Siting Board "emphasize[d]" that it had "taken into account that the renewable energy generation by the proposed facility will benefit the environment and consumers." *Id.* at 72, *Id.* at 83.

UNU applied to the Siting Board for rehearing. Among other things, UNU argued that the Siting Board improperly relied on the in-state renewable energy resources preference in approving the siting application because the in-state preference violated the dormant Commerce Clause. *See In the Matter of the Application of Champaign Wind, LLC, for a Certificate to Construct a Wind-Powered Electric Generating Facility in Champaign County, Ohio*, Board Case No. 12-160-EL-BGN, Application for Rehearing of Intervenors Union Neighbors United,

Inc., Robert and Diane McConnell, and Julia F. Johnson, at 14-16 (June 27, 2013). The Siting Board rejected that argument, finding that challenges to the constitutionality of Ohio statutes must be determined by the Court. The Siting Board further explained that “even if Section 4928.64(B), Revised Code [the in-state renewable energy preference] were not at issue, the Board finds that the project serves the purpose of delivering energy to Ohio’s bulk power transmission system in order to serve the generation needs of electric utilities and their customers, as discussed in the application.” See *In the Matter of the Application of Champaign Wind, LLC, for a Certificate to Construct a Wind-Powered Electric Generating Facility in Champaign County, Ohio*, Board Case No. 12-160-EL-BGN, Entry on Rehearing, at 20-21 (Sept. 30, 2013) (“Entry on Rehearing”). On November 27, 2013, UNU filed its notice of appeal with this Court.

III. ARGUMENT

A. Proposition of Law No. 1: Appellant UNU Lacks Standing to Challenge the Constitutionality of Senate Bill 221’s In-State Renewable Energy Resources Preference Because UNU Is Not a Member of the Supposedly Injured Class.

UNU lacks standing to challenge the constitutionality of the in-state renewable energy resources preference. “[T]he constitutionality of a state statute may not be brought into question by one who is not within the class against whom the operation of the statute is alleged to have been unconstitutionally applied and who has not been injured by its alleged unconstitutional provision.” *Palazzi v. Estate of Gardner*, 32 Ohio St. 3d 169, 175 (1987). Following *Palazzi*, this Court has held that a consumer group and an environmental group lacked standing to challenge a preference for in-state coal, explaining that the “class against whom [the in-state coal preference] is alleged to be unconstitutionally applied is out-of-state coal suppliers. Appellants are not

members of that class.” *Indus. Energy Consumers v. Pub. Util. Comm’n*, 68 Ohio St. 3d 547, 557 (1994).

The same principle applies to this case. The class against whom R.C. § 4928.64(B) is alleged to be unconstitutionally applied is out-of-state renewable energy suppliers, and UNU is not alleged to be members of that class.³ UNU has expressed no interest in engaging in any interstate commerce that might be even minimally impacted by the Ohio statute. Therefore, UNU lacks standing to argue that Ohio’s modest in-state renewable energy preference violates the dormant Commerce Clause.

Moreover, under federal law, in addition to Article III’s case or controversy requirement, standing “concerns . . . the question whether the interest sought to be protected by the complainant is arguably within the zone of interests to be protected or regulated by the statute or constitutional guarantee in question.” *Ass’n of Data Processing Serv. Orgs., Inc. v. Camp*, 397 U.S. 150, 153 (1970). For the dormant Commerce Clause, the zone of interest concerns “the free movement of goods [across] State borders.” *Huish Detergents, Inc. v. Warren Cty.*, 214 F.3d 707, 710 (6th Cir. 2000); *see also New Energy Co. v. Limbach*, No. 86-784, 1986 Ohio LEXIS 771, at *4-6 (1986) (citing *Boston Stock Exch. v. State Tax Comm’n*, 429 U.S. 318, 320 n.3 (1977)). The interests that UNU seeks to protect do not include the free movement of goods across state borders. Thus, UNU’s interests are outside the dormant Commerce Clause’s zone of interest, and UNU does not have standing to challenge Ohio’s in-state renewable energy preference as violating the dormant Commerce Clause.

³ According to UNU’s Merit Brief, “Appellant Union Neighbors United is a nonprofit corporation formed to promote the safety and well-being of the Champaign County community by addressing issues relating to the siting of industrial wind turbines” and the three individual intervenors “reside and own real property within the Project’s boundaries.” UNU Br. at 2-3.

B. Proposition of Law No. 2: Appellant UNU's Challenge to the Constitutionality of Senate Bill 221's In-State Renewable Energy Resources Preference Is Moot Because It Will Have No Practical Legal Effect in This Case.

This Court need not reach the issue of the constitutionality of Ohio's in-state renewable energy resources preference because that issue is moot in this case. See *In re L.W.*, 168 Ohio App. 3d 613, 618 (Ohio Ct. App. 2006). A moot issue is where a party “seeks to get a judgment . . . upon some matter which, when rendered, for any reason cannot have any practical legal effect upon a then-existing controversy.” *Harris v. City of Akron*, 2009-Ohio-3865, ¶7 (Ohio Ct. App. 2009) (quoting *Culver v. Warren*, 84 Ohio App. 373, 393 (Ohio Ct. App. 1948)).

UNU argues that the Siting Board relied on R.C. § 4928.64(B)(3) to find that the project meets the public interest, convenience and necessity as required by R.C. § 4906.10(A)(6). UNU Br. at 12-16. In denying UNU's application for rehearing, however, the Siting Board stated that it would have reached the same conclusion that the project serves the public need, regardless of Section 4928.64(B). Entry on Rehearing at 20-21, UNU Appx. at 134-135. Furthermore, contrary to UNU's argument that the Siting Board cited the in-state preference “as its primary reasoning” for finding the project meets the public need, UNU Br. at 15, the Siting Board actually found that the in-state preference merely “add[ed] support to a finding” that the project met the public need. Order at 35, UNU Appx. at 46. A finding by this Court regarding the constitutionality of Section 4928.64(B) would therefore have no practical legal effect in this case. Accordingly, the issue of whether Ohio's modest in-state renewable energy resources preference violates the dormant Commerce Clause is moot, and the Court need not reach this constitutional issue.

C. Proposition of Law No. 3: Ohio's In-State Renewable Energy Resources Preference Is Constitutional Because It Is Not Protectionist and Serves Legitimate Local Police Power Purposes.

1. Ohio's In-State Renewable Energy Resources Preference Serves Legitimate Non-Protectionist Purposes of Protecting Local Public Health, Safety, and Welfare, and Improving Local Environmental Quality.

The Commerce Clause provides that “Congress shall have Power . . . [t]o regulate Commerce . . . among the several States.” U.S. Const., art. I, § 8, cl. 3. Courts have interpreted the Clause to also include a mirror image or dormant “aspect that denies the States the power unjustifiably to discriminate against or burden the interstate flow of articles of commerce.” *Or. Waste Sys. v. Dep’t of Envtl. Quality*, 511 U.S. 93, 98 (1994) (emphasis added).

The dormant Commerce Clause has a “cross purpose” of respecting a federalist system “favoring a degree of local autonomy,” in addition to rooting out “protectionism.” *See Dep’t of Revenue of Ky. v. Davis*, 553 U.S. 328, 337-38 (2008). Thus, “[t]he limitation imposed by the Commerce Clause on state regulatory power ‘is by no means absolute,’ and ‘the States retain authority under their general police powers to regulate matters of legitimate local concern, even though interstate commerce may be affected.’” *Maine v. Taylor*, 477 U.S. 131, 138 (1986) (quoting *Lewis v. BT Inv. Managers, Inc.*, 447 U.S. 27, 36 (1980)). Even a clearly discriminatory statute is constitutionally valid if it is “demonstrably justified by a valid factor unrelated to economic protectionism.” *Wyoming v. Oklahoma*, 502 U.S. 437, 454 (1992); *see also Gen. Motors Corp. v. Tracy*, 73 Ohio St. 3d 29, 31, 652 N.E.2d 188 (1995), *aff’d*, 519 U.S. 278 (1997). A discriminatory statute does not violate the dormant Commerce Clause if “the statute serves a legitimate local purpose, and that . . . purpose could not be served as well by available nondiscriminatory means.” *Maine v. Taylor*, 477 U.S. at 138 (internal quotation marks omitted).

Ohio’s in-state renewable energy resources preference serves several legitimate local purposes including providing cleaner air and cleaner water, reducing pollution, improving public

health, increasing local fuel diversity, and making Ohio's electricity grid more reliable. States have legitimate interests in protecting the health, safety, and welfare of their citizens, and they are "vested with the responsibility" to do so. *United Haulers Ass'n*, 550 U.S. at 342. Moreover, states have "a legitimate interest in guarding against . . . environmental risks." *Maine v. Taylor*, 477 U.S. at 148; *see also Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440, 442 (1960) ("Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power.").

The Siting Board concluded that "the renewable energy generation by the proposed [Buckeye II wind power] facility will benefit the environment and consumers." Order at 72, UNU Appx. at 83. By reducing pollution, Ohio's in-state renewable energy resources preference improves Ohio's environment and protects the health and welfare of Ohioans. The legislative history cited above explains that gaining these public health and environmental benefits for Ohio was a significant motivation for enacting Senate Bill 221's renewable energy resources preference. *See* Ohio Senate Session, Oct. 31, 2007 (third consideration of S.B. 221), <http://www.ohiochannel.org/MediaLibrary/Media.aspx?fileId=111367>; Press Release, Governor Strickland Proposes Energy, Jobs and Progress Plan (Aug. 29, 2007), *available at* <https://votesmart.org/public-statement/285489/governor-strickland-proposes-energy-jobs-and-progress-plan#.UxoAYT9dWy4>.

Ohio's in-state renewable energy resources preference also helps to strengthen Ohio's electricity grid and improves grid reliability by developing more distributed generation resources consistent with Ohio state policy. *See* R.C. § 4928.02(C); Ohio House Session – Part 2, Apr. 22, 2008 (third consideration of Sub. S.B. 221) (Rep. McGregor statements),

<http://www.ohiochannel.org/MediaLibrary/Media.aspx?fileId=112900>. States have “a legitimate interest in ensuring that [their] residents have available to them an adequate and reliable supply of electric energy.” *PPL Energyplus, LLC v. Nazarian*, Civil No. MJG-12-1286, 2013 U.S. Dist. LEXIS 140210, at *173-74 (D. Md. Sept. 30, 2013) (rejecting a dormant Commerce Clause challenge to an order by the Maryland Public Service Commission that limited the location of a new electricity generation facility to parts of Maryland or the District of Columbia). The Siting Board found that the Buckeye II wind power project “is consistent with the plans for expansion of the regional power grid . . . and that the proposed facility will serve the interests of electric system economy and reliability.” Order at 28. Rather than economic protectionism by Ohio, the Siting Board’s Order was focused on improving Ohio’s electric grid and reliability for Ohioans.

Ohio’s in-state renewable energy preference also creates new jobs in Ohio in the renewable energy resources sector. See Ohio Senate Session, Oct. 31, 2007 (third consideration of S.B. 221), <http://www.ohiochannel.org/MediaLibrary/Media.aspx?fileId=111367>; Press Release, Governor Strickland Proposes Energy, Jobs and Progress Plan (Aug. 29, 2007), available at <https://votesmart.org/public-statement/285489/governor-strickland-proposes-energy-jobs-and-progress-plan#.UxoAYT9dWy4>. Seeking to create new jobs in-state is a legitimate non-discriminatory purpose and is not *per se* protectionist.⁴ See *Philadelphia v. N.J.*, 437 U.S. 617, 627 (1978) (characterizing “creat[ing] jobs by keeping industry within the State” as “a presumably legitimate goal”); *Directv, Inc. v. Treesh*, 487 F.3d 471, 479 (6th Cir. 2007) (“States

⁴ To the extent statements were made that S.B. 221 will also protect existing Ohio jobs, those statements seem to be directed to portions of S.B. 221 other than the in-state renewable energy preference. See, e.g., Ohio Senate Session, Oct. 31, 2007 (statement by Sen. Wilson that S.B. 221 “protects our jobs, in particular in eastern Ohio, by emphasizing clean coal technology, and it ensures the bulk of all Ohio’s electricity that is produced comes from coal”); see also R.C. § 4928.01(A)(37) (defining renewable energy resources without including coal-fired power).

have wide latitude ‘to encourage the growth and development of intrastate commerce and industry.’” (quoting *Boston Stock Exch. v. State Tax Comm’n*, 429 U.S. 318, 336-37 (1977)).

Thus, the Ohio in-state renewable energy resources preference serves several legitimate local non-protectionist purposes. It is plainly different than a protective tariff that might violate the dormant Commerce Clause. “[A] protective tariff is so clearly problematic because its only possible purpose is to benefit in-state interest at the expense of out-of-state interests” *Directv, Inc.*, 487 F.3d at 480. Courts “must be cautious about applying the dormant Commerce Clause in cases,” such as this, “that do not present the equivalent of a protective tariff.” *Id.* at 481.⁵

In contrast to Ohio’s modest in-state renewable energy resources preference, none of the state actions in the cases cited by UNU served any comparable legitimate local purposes. UNU Br. at 14. In *Wyoming v. Oklahoma*, the Court struck down a law favoring in-state coal that could not “be characterized as anything other than protectionist.” 502 U.S. at 455; *see also id.* at 456-57 (rejecting Oklahoma’s argument that its in-state coal preference served legitimate local purposes). Similarly, in *New England Power Co. v. N.H.*, the Court invalidated a New Hampshire order prohibiting the export of hydroelectric energy because the order was clearly “designed to gain an economic advantage for New Hampshire citizens at the expense of New England Power’s customers in neighboring states,” without any discussion of possible legitimate local benefits served by the order. 455 U.S. 331, 339 (1982). Finally, in *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269 (1988), the Court invalidated an Ohio tax credit for ethanol produced

⁵ Even if the Ohio in-state renewable energy resources provision was motivated in some part by a discriminatory purpose, that motivation – among an array of motivations – would not be fatal to the provision. *See Directv, Inc.*, 487 F.3d at 480 (distinguishing a state tax statute from an invalid discriminatory tariff because, while a purpose of the tax statute might have been to aid in-state industry, “there were clearly many other purposes” to the tax statute).

in Ohio or in states providing similar tax advantages to Ohio ethanol because the state did not adequately justify the discrimination. The court found the relationship between a tax credit based on the location of ethanol production was too removed from the asserted benefit of improved health at the location of ethanol use. *Id.* at 279 & n.3. In contrast, the Ohio in-state renewable energy resources provision is directly related to improving Ohioans' health, safety, and welfare and Ohio's environmental quality by siting wind power and solar energy facilities in Ohio that displace and avoid pollution from other electricity generating plants.

Developing renewable energy resources in Ohio reduces local pollution and thus results in cleaner air and clean water, achieves a more diverse and distributed mix of energy supplies, strengthens and increases reliability of the electric grid, and creates new local jobs. These benefits could not be achieved by "available nondiscriminatory means." *See Maine v. Taylor*, 477 U.S. at 138. Building wind power projects in California will not as effectively reduce air pollution and protect public health in Ohio. Installing solar panels in New Jersey will not strengthen Ohio's electric grid and improve reliability. The Ohio renewable energy resources in-state preference provides legitimate local public health, safety, and welfare benefits for Ohioans that are financially supported solely by Ohio ratepayers. "[T]he regulation of utilities is one of the most important of the functions traditionally associated with the police power of the States." *Ark. Elec. Coop. Corp.*, 461 U.S. at 377.

The United States Supreme Court has cautioned that the Commerce Clause was "never intended to cut the States off from legislating on all subjects relating to the health, life and safety of their citizens, though the legislation might indirectly affect the commerce of the country." *Gen. Motors Corp. v. Tracy*, 519 U.S. at 306 (quoting *Huron Portland Cement Co.*, 362 U.S. at 443). Because there are legitimate local public health, safety, welfare and environmental goals,

wholly distinct from economic protectionism, Ohio's in-state renewable energy resources preference does not violate the dormant Commerce Clause.

2. Ohio's In-State Renewable Energy Resources Preference is Consistent with Modern and Evolving Principles of Federalism in which the Dormant Commerce Clause Is a "Mirror Image" of the Diminished Commerce Clause.

Recent trends toward a greater respect for federalism in the United States Supreme Court's Commerce Clause jurisprudence create more room for states to exercise their traditional police power authority to address legitimate local public health, safety, welfare, and environmental concerns. The dormant Commerce Clause is derived wholly from the Commerce Clause and is its "mirror image." They are each about the division of authority between federal and state governments. "There is no doubt that the Commerce Clause is a power-allocating provision," apportioning authority between the federal government and the states. *Dennis v. Higgins*, 498 U.S. 439, 447 (1991).

If the Commerce Clause is interpreted to allow Congress to act with broad federal authority to regulate economic activity, that leaves less room for state actions. If, on the other hand, Congress's authority under the Commerce Clause is interpreted more narrowly, then that creates more room for state regulation and experimentation without conflicting with federal authority and other states' interests. Public utilities regulation is a traditional area of state authority where Justice Brandeis's famous fifty laboratories of democracy are experimenting in different ways. See *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

Over the past twenty years, the Commerce Clause decisions have trended toward narrowing federal authority and, correspondingly, providing more room for state action. See *Nat'l Fed'n of Indep. Bus. v. Sebelius*, 132 S. Ct. 2566 (2012); *U.S. v. Morrison*, 529 U.S. 598 (2000); *U.S. v. Lopez*, 514 U.S. 549 (1995); but see *Gonzales v. Raich*, 545 U.S. 1 (2005).

Federalism has been a driving principle for a majority of the Court – not only in Commerce Clause cases, but also in preemption and 10th Amendment cases. *See, e.g., Arizona v. Inter Tribal Council of Ariz., Inc.*, 133 S. Ct. 2247, 2256 (2013) (acknowledging a presumption against preemption of states’ historic police powers); *New York v. United States*, 505 U.S. 144, 156-59 (1992) (discussing federalism and the 10th Amendment).

In *New York v. United States*, Justice O’Connor’s majority opinion views the Commerce Clause and the Tenth Amendment as “mirror images”:

In a case like these, involving the division of authority between federal and state governments, the two inquiries are mirror images of each other. If a power is delegated to Congress in the Constitution, the Tenth Amendment expressly disclaims any reservation of that power to the States; if a power is an attribute of state sovereignty reserved by the Tenth Amendment, it is necessarily a power the Constitution has not conferred on Congress.

505 U.S. at 156. The “mirror image” relationship between the Commerce Clause and the dormant Commerce Clause reflects similar values regarding the division of federal and state authority. If Congress has broad powers to reach and control economic activity under the Commerce Clause, then there is relatively less room for state regulation, innovation, and experimentation. Conversely, if Congress’s powers under the Commerce Clause are more constrained in their reach, then there should be more room for state police powers to be exercised without intruding on interstate interests.

As Supreme Court cases have trended to constrain federal Commerce Clause powers, they have also trended to uphold state actions as not violating the dormant Commerce Clause. For example, in 2007, the Court upheld state action preferring an in-state public waste disposal facility in *United Haulers Ass’n*, 550 U.S. 330, despite having previously invalidated a flow control ordinance favoring in-state facilities in *C & A Carbone v. Town of Clarkstown*, 511 U.S. 383 (1994). In 2008, the Supreme Court again acknowledged states’ broad authority under the

dormant Commerce Clause by upholding a state tax system favoring bonds issued by that state because the tax structure favored a traditional government function. *See Dep't of Revenue of Ky. v. Davis*, 553 U.S. 328 (2008). Last year, the Supreme Court again indicated that states have more room to regulate – this time explaining that the dormant Commerce Clause does not prevent states from favoring in-state interests where the state plays a central role in creating or facilitating the market in question (as in the case of state renewable energy resources laws). *See McBurney v. Young*, 133 S. Ct. 1709 (2013). Each of these rulings has expanded states' opportunities to regulate in ways that earlier dormant Commerce Clause cases could have been interpreted to constrain.

Two conclusions can be drawn from this recent evolution of the law. First, older dormant Commerce Clause cases, such as *Wyoming v. Oklahoma*, that are relied upon by the Appellants, should be applied carefully. Statutes that might have been found to violate the dormant Commerce Clause in 1992 are more likely to be held constitutionally sound today. Indeed, some members of the United States Supreme Court – in particular, Justice Scalia and Justice Thomas – have rejected the dormant Commerce Clause, contending that it does not exist or should not be applied at all. *See, e.g., Tyler Pipe Indus. v. Washington State Dep't of Revenue*, 483 U.S. 232, 259-65 (1987) (Scalia, J., concurring in part and dissenting in part) (explaining that the Framers did not intend a “negative” or “dormant” component of Commerce Clause); *United Haulers Assn.*, 550 U.S. at 349 (Thomas, J., concurring in judgment) (“The negative Commerce Clause has no basis in the Constitution and has proved unworkable in practice. . . . I would discard the Court’s negative Commerce Clause jurisprudence.”).

Second, consistent with the trends described above, the Court should respect Ohio’s authority and room to innovate to reduce pollution, clean its air and water, modernize its electric

grid, and create new jobs in the growing renewable energy development business sector. Rigid dormant Commerce Clause principles are inconsistent with current principles of federalism and would unreasonably constrain Ohio's ability to exercise its legitimate and constitutional police powers to protect public health, safety, and welfare and to improve environmental quality in the state.

3. Ohio's In-State Preference for Renewable Energy Resources, Which Involves One Percent or Less of Ohio's Electricity Supplies, Is Not "Substantial" Enough To Disrupt Interstate Commerce.

The Commerce Clause and its "mirror image" dormant Commerce Clause are only concerned with "substantial" impacts affecting interstate economic activity and commerce. *See Gonzales v. Raich*, 545 U.S. at 17 (explaining that Congress has power to regulate economic activities "that substantially affect interstate commerce"). Appellants' constitutional argument is based on a state statute, R.C. § 4928.64(B), that presently affects only one percent (or less) of Ohio's electricity supplies. Appellants cite no evidence in the record demonstrating that this relatively small amount of renewable energy resources is substantial enough to somehow interfere with regional electricity markets, nor is that plausible.

The facts of the Ohio law and the "one percent or less" reality of the situation do not rise to a sufficient level of constitutional concern. Appellants' constitutional argument is much ado about not-so-much in-state renewable energy resources development in the overall context of the Ohio electricity supply market, let alone the much larger regional market.⁶

⁶ Even if and when the in-state renewable energy resources benchmark hits its maximum point of 6.25% in 2024 and thereafter, R.C. § 4928.64(B)(2),(3), that percentage is still a modest share of the overall Ohio electricity supplies.

4. Ohio's In-State Renewable Energy Resources Preference Has A Stronger Constitutional Footing than Ohio's In-State Coal Use Preferences, Which Are Vulnerable If the Court Adopts Appellants' Dormant Commerce Clause Arguments.

As described above, Ohio has longstanding constitutional provisions, statutes, and other policies creating a strong preference for use of in-state coal energy resources. A ruling by this Court based on the dormant Commerce Clause striking down the modest in-state renewable energy resources preference – which has significant non-economic motivations including reducing pollution to protect public health and improve environmental quality – would likely endanger Ohio's in-state coal use provisions and preferential “unique arrangement” economic development discounted utility rates for certain Ohio manufacturers.⁷

Article VIII, § 15 of the Ohio Constitution sets forth Ohio's policy to “encourage the use of Ohio coal.” Ohio has also enacted a statutory “state policy to increase coal use,” especially the “sound use of Ohio coal.” R.C. § 1551.31. Likewise, the Ohio Coal Development Office's purposes include taking actions to: (1) “Encourage, promote, and support siting, financing, construction, and operation of commercially available or scaled facilities and technologies, including, without limitation, commercial-scale demonstration facilities . . . to more efficiently produce, beneficiate, market, or use Ohio coal”; (2) “Encourage, promote, and support the market acceptance and increased market use of Ohio coal through technology and market development”; and (3) “Encourage, promote, and support, in state-owned buildings, facilities, and operations, use of Ohio coal and electricity sold by utilities and others in this state that use Ohio coal for generation.” R.C. § 1551.32.

⁷ See, e.g., *In the Matter of the Application of Republic Steel for Approval of a Reasonable Arrangement for Republic Steel's Lorain Ohio Facility*, Pub. Util. Comm. No. 13-1913-EL-AEC, Opinion and Order, at 7-8 (Mar. 19, 2014); *In the Matter of the Joint Application of the Timken Company and the Ohio Power Company for Approval of a Unique Arrangement for the Timken Company's Canton, Ohio, Facilities*, Case No. 10-3066-EL-AEC, 2011 Ohio PUC LEXIS 507 (Apr. 27, 2011).

The purpose of these state policies is clear: they are specifically directed at encouraging, promoting, financing, and supporting the use of Ohio coal instead of Indiana, Kentucky, or Wyoming coal, regardless of the composition or cost of the coal. In short, these policies create a clear direction for Ohio utilities to burn Ohio coal in generating plants supplying electricity to Ohio consumers. These state policies create a distinct “geographical preference for in-state” energy resources and “discriminate[] against out-of-state” energy resources, which Appellants argue to be *per se* unconstitutional. UNU Br. at 13-16.

Courts have struck down in-state preferences where they “cannot be characterized as anything other than protectionist.” See *Wyoming v. Oklahoma*, 502 U.S. at 455 (striking down Oklahoma statute requiring utilities to burn a mixture containing at least 10% Oklahoma coal); see also *Dayton Power & Light Co. v. Lindley*, 58 Ohio St. 2d 465, 391 N.E.2d 716 (1979) (striking down state tax on low-sulfur coal).

There are both qualitative and quantitative differences, however, between the in-state coal use preference struck down in *Wyoming v. Oklahoma* and Ohio’s in-state renewable energy resources preference. First, as discussed above, the in-state renewable energy resources statute promotes several public health, safety, welfare, and environmental quality benefits that are not related to economic protectionism. Second, the Oklahoma law required utilities to burn a mix containing at least 10% Oklahoma-source coal in their power plants, a requirement that clearly displaced coal from Wyoming sources. By contrast, Ohio’s Senate Bill 221 provides for only one percent or less of Ohio’s electricity supply, as of 2013, to come from in-state renewable energy resources. Third, the Ohio in-state renewable energy resources are more likely to displace other Ohio electricity supply resources rather than out-of-state electricity supplies. Senate Bill 221 has provided wind power generators and solar energy producers from other states with an increased

market opportunity in Ohio – albeit, not that entire increased market. This reality is different than the situation where Oklahoma has sought to take away existing market share from Wyoming coal producers.

Therefore, Ohio's in-state renewable energy resources preference is constitutional and should survive dormant Commerce Clause review even if a court were to determine that Ohio's in-state coal use preferences and the "unique arrangement" preferential utility rates for certain Ohio manufacturers are unconstitutional. If the Court strikes down Ohio's in-state renewable energy resources preference, however, then some of Ohio's various in-state coal use preferences and the "unique arrangement" preferential utility rates would likely be unconstitutional as well under the dormant Commerce Clause.

IV. CONCLUSION

For the foregoing reasons, the Court should hold that the Appellants lack standing to raise their constitutional challenge to Ohio's in-state renewable energy resources preference in R.C. § 4928.64(B)(1)-(3) and that, in any event, Appellants' constitutional arguments and issue are moot. If Appellants overcome those threshold legal issues, the Court should then hold that Ohio's in-state renewable energy resources preference in R.C. § 4928.64(B)(1)-(3) is constitutional and does not violate the dormant Commerce Clause. The Appellants' arguments in this respect should be rejected by the Court.

Dated: March 25, 2014

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Brief of Amici Curiae, Environmental Law & Policy Center and Ohio Environmental Council*, submitted on behalf of the Environmental Law & Policy Center and Ohio Environmental Council, was served by electronic mail to the below listed parties, this 25th day of March, 2014.



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Appendix

1551.31 State policy to increase coal use.

The general assembly hereby finds and declares that:

- (A) Coal is one of the state's best, most abundant energy resources.
- (B) In recent years the coal industry in this state has experienced economic difficulties that have resulted in a loss of jobs in that industry.
- (C) Some coal users are reluctant to use coal from this state because of its high sulfur content.
- (D) The increased use of Ohio coal in this state could enable the state to be more energy self-sufficient.
- (E) It is therefore imperative for this state to have a strong, viable coal industry in order to create and preserve jobs and improve the economy of this state and that, in order to strengthen that industry, methods must be found to use Ohio coal in an environmentally acceptable, cost effective manner.

Accordingly, it is declared to be the public policy of the state, through operation of sections 1551.30 to 1551.35 of the Revised Code and other applicable laws and authority vested in the general assembly, to assist in the development of facilities and technologies that will lead to increased, environmentally sound use of Ohio coal.

Effective Date: 09-14-2000

1551.32 Ohio coal development office.

(A) There is hereby established within the department of development the Ohio coal development office whose purposes are to do all of the following:

- (1) Encourage, promote, and support siting, financing, construction, and operation of commercially available or scaled facilities and technologies, including, without limitation, commercial-scale demonstration facilities and, when necessary or appropriate to demonstrate the commercial acceptability of a specific technology, up to three installations within this state utilizing the specific technology, to more efficiently produce, beneficiate, market, or use Ohio coal;
- (2) Encourage, promote, and support the market acceptance and increased market use of Ohio coal through technology and market development;
- (3) Assist in the financing of coal development facilities;
- (4) Encourage, promote, and support, in state-owned buildings, facilities, and operations, use of Ohio coal and electricity sold by utilities and others in this state that use Ohio coal for generation;
- (5) Improve environmental quality, particularly through cleaner use of Ohio coal;
- (6) Assist and cooperate with governmental agencies, universities and colleges, coal producers, coal miners, electric utilities and other coal users, public and private sector coal development interests, and others in achieving these purposes.

(B) The office shall give priority to improvement or reconstruction of existing facilities and equipment when economically feasible, to construction and operation of commercial-scale facilities, and to technologies, equipment, and other techniques that enable maximum use of Ohio coal in an environmentally acceptable, cost-effective manner.

Amended by 129th General Assembly File No. 28, HB 153, §101.01, eff. 6/30/2011.

Effective Date: 06-26-2003

4905.31 Reasonable arrangements allowed - variable rate.

Chapters 4901., 4903., 4905., 4907., 4909., 4921., 4923., 4927., 4928., and 4929. of the Revised Code do not prohibit a public utility from filing a schedule or establishing or entering into any reasonable arrangement with another public utility or with one or more of its customers, consumers, or employees, and do not prohibit a mercantile customer of an electric distribution utility as those terms are defined in section 4928.01 of the Revised Code or a group of those customers from establishing a reasonable arrangement with that utility or another public utility electric light company, providing for any of the following:

- (A) The division or distribution of its surplus profits;
- (B) A sliding scale of charges, including variations in rates based upon stipulated variations in cost as provided in the schedule or arrangement.
- (C) A minimum charge for service to be rendered unless such minimum charge is made or prohibited by the terms of the franchise, grant, or ordinance under which such public utility is operated;
- (D) A classification of service based upon the quantity used, the time when used, the purpose for which used, the duration of use, and any other reasonable consideration;
- (E) Any other financial device that may be practicable or advantageous to the parties interested. In the case of a schedule or arrangement concerning a public utility electric light company, such other financial device may include a device to recover costs incurred in conjunction with any economic development and job retention program of the utility within its certified territory, including recovery of revenue foregone as a result of any such program; any development and implementation of peak demand reduction and energy efficiency programs under section 4928.66 of the Revised Code; any acquisition and deployment of advanced metering, including the costs of any meters prematurely retired as a result of the advanced metering implementation; and compliance with any government mandate. No such schedule or arrangement is lawful unless it is filed with and approved by the commission pursuant to an application that is submitted by the public utility or the mercantile customer or group of mercantile customers of an electric distribution utility and is posted on the commission's docketing information system and is accessible through the internet. Every such public utility is required to conform its schedules of rates, tolls, and charges to such arrangement, sliding scale, classification, or other device, and where variable rates are provided for in any such schedule or arrangement, the cost data or factors upon which such rates are based and fixed shall be filed with the commission in such form and at such times as the commission directs. Every such schedule or reasonable arrangement shall be under the supervision and regulation of the commission, and is subject to change, alteration, or modification by the commission.

Effective Date: 10-29-1993; 2008 SB221 07-31-2008

4928.02 State policy.

It is the policy of this state to do the following throughout this state:

- (A) Ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service;
- (B) 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;
- (C) Ensure diversity of electricity supplies and suppliers, by giving consumers effective choices over the selection of those supplies and suppliers and by encouraging the development of distributed and small generation facilities;
- (D) Encourage innovation and market access for cost-effective supply- and demand-side retail electric service including, but not limited to, demand-side management, time-differentiated pricing, waste energy recovery systems, smart grid programs, and implementation of advanced metering infrastructure;
- (E) 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;
- (F) 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;
- (G) Recognize the continuing emergence of competitive electricity markets through the development and implementation of flexible regulatory treatment;
- (H) 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, including by prohibiting the recovery of any generation-related costs through distribution or transmission rates;
- (I) Ensure retail electric service consumers protection against unreasonable sales practices, market deficiencies, and market power;
- (J) Provide coherent, transparent means of giving appropriate incentives to technologies that can adapt successfully to potential environmental mandates;
- (K) Encourage implementation of distributed generation across customer classes through regular review and updating of administrative rules governing critical issues such as, but not limited to, interconnection standards, standby charges, and net metering;
- (L) Protect at-risk populations, including, but not limited to, when considering the implementation of any new advanced energy or renewable energy resource;
- (M) Encourage the education of small business owners in this state regarding the use of, and encourage the use of, energy efficiency programs and alternative energy resources in their

businesses;

(N) Facilitate the state's effectiveness in the global economy.

In carrying out this policy, the commission shall consider rules as they apply to the costs of electric distribution infrastructure, including, but not limited to, line extensions, for the purpose of development in this state.

Amended by 129th General Assembly File No.125, SB 315, §101.01, eff. 9/10/2012.

Effective Date: 10-05-1999; 2008 SB221 07-31-2008

Ohio Constitution, Article VIII, Section 15: State assistance to development of coal technology

Laws may be passed authorizing the state to borrow money and to issue bonds and other obligations for the purpose of making grants and making or guaranteeing loans for research and development of coal technology that will encourage the use of Ohio coal, to any individual, association, or corporation doing business in this state, or to any educational or scientific institution located in this state, notwithstanding the requirements, limitations, or prohibitions of any other section of article VIII or of sections 6 and 11 of article XII of the constitution. The aggregate principal amount of the money borrowed and bonds and other obligations issued by the state pursuant to laws passed under this section shall not exceed one hundred million dollars outstanding at any time. The full faith and credit of the state may be pledged for the payment of bonds or other obligations issued or guarantees made pursuant to laws passed under this section.

Laws passed pursuant to this section also may provide for the state to share in any royalties, profits, or other financial gain resulting from the research and development.

(Adopted November 5, 1985.)

Renewable Resources and Wholesale Price Suppression

August 2013

INTRODUCTION

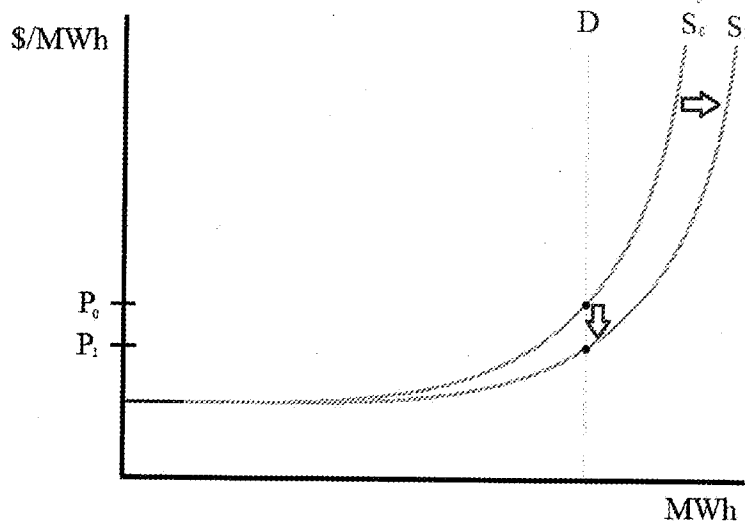
The study examines the relationship between renewable resource additions and wholesale electricity markets in Ohio. The Staff of the Public Utilities Commission of Ohio has conducted this study in an attempt to quantify the changes in *wholesale electricity prices* and *generator emissions* that are likely to occur as a result of the state's Alternative Energy Portfolio Standard (AEPS) requirements. Using the PROMOD IV production cost modeling software, Commission Staff is able to simulate electricity market outcomes and analyze the performance of the grid under various scenarios.

Two scenarios were developed for the purposes of this study. The first scenario considers only the utility-scale renewable resources that have been approved by the Ohio Power Siting Board *and* are currently operational. The second scenario considers all projects that have received a certificate of environmental compatibility and public need from the OPSB.

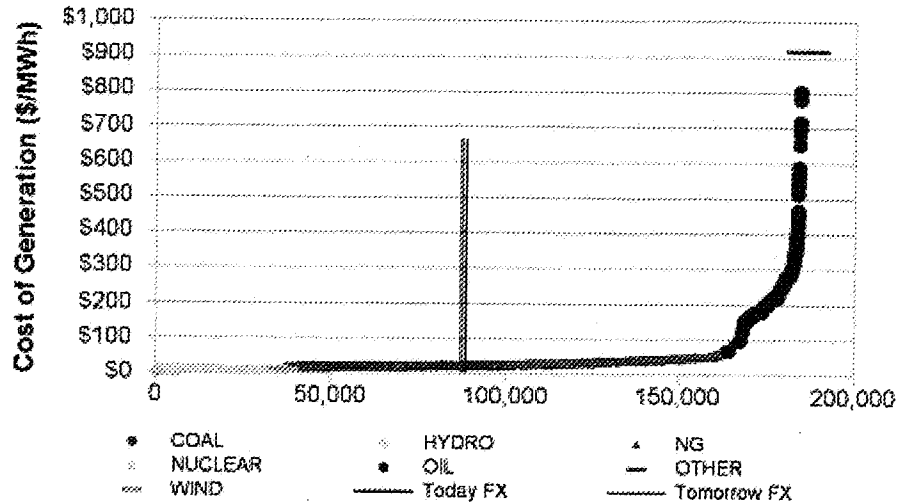
WHAT IS "PRICE SUPPRESSION"?

Price suppression is a widely recognized phenomenon by which renewable resources produce lower wholesale market clearing prices. The economic theory that drives price suppression is actually quite simple. Renewable resources such as solar and wind are essentially zero marginal cost generators, as their "fuel" costs (sunlight and wind) are free. As such, they will always be dispatched first by the grid operator, thereby displacing units with higher operating costs. This results in lower wholesale market clearing prices than would have been experienced in the absence of the renewable resources.

A simple graphical representation appears below. The new renewable resources (depicted by the red line) are added to the dispatch stack, shifting the supply curve out and to the right. This results in a lower cost unit setting the market clearing price, shifting the equilibrium price down from P_0 to P_1 .



For reference, an example of a real PJM dispatch curve appears below, with fuel types identified. Notice that Hydro, Nuclear, and Wind resources are all dispatched first on the supply stack.



source: Genscape

METHODOLOGY

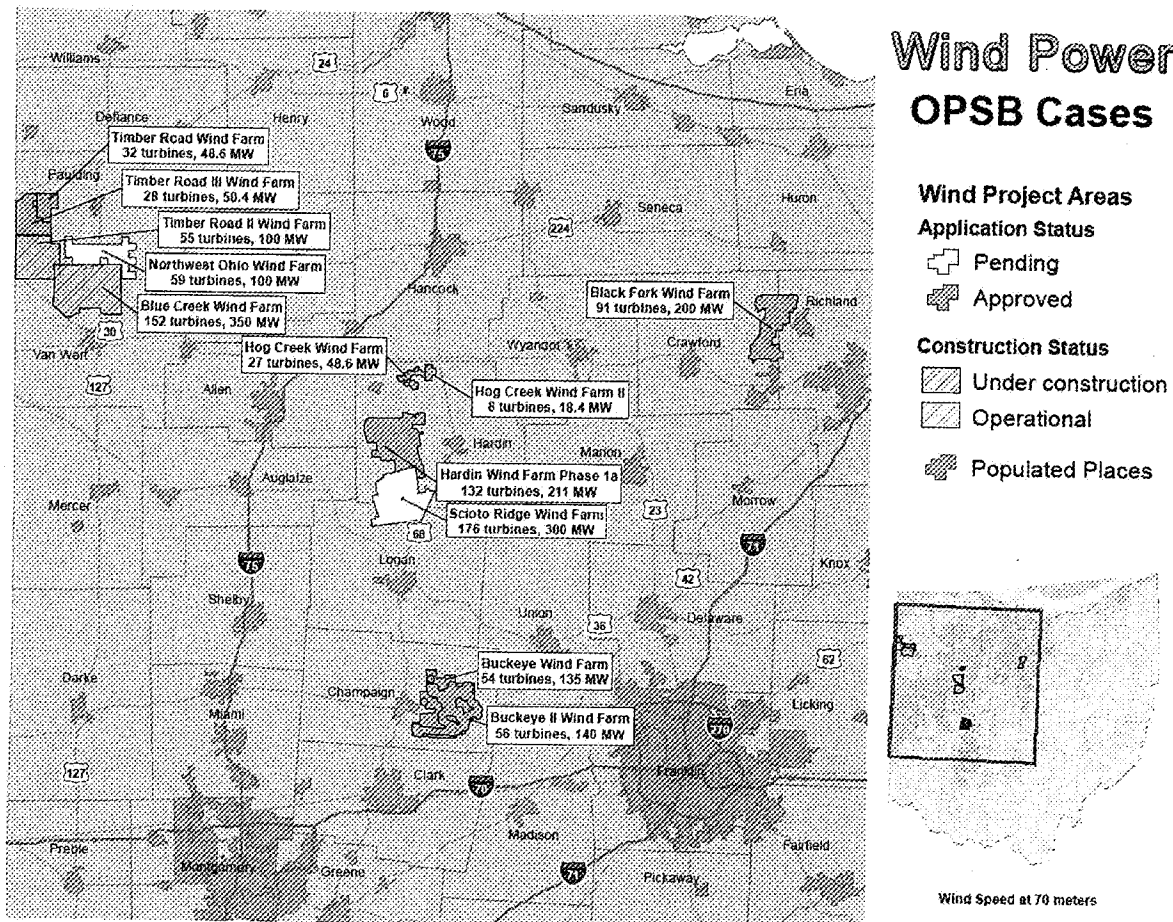
This analysis was performed with Ventyx's PROMOD IV electricity market modeling software. PROMOD IV is a detailed nodal market simulation tool that utilizes a security constrained unit commitment and dispatch algorithm to model generation, transmission, and market settlement across the Eastern Interconnection. The PROMOD IV software is one of the most powerful tools available to Commission Staff to analyze wholesale electricity markets and has been utilized by Staff and its consultants in various proceedings before the Commission.

Wholesale energy prices, known as locational marginal prices (LMPs), are calculated hourly for each transmission zone within Ohio and include generation, transmission congestion and loss components. To the extent that new renewable projects contribute to (or alleviate) transmission congestion or energy losses, these costs (or benefits) are captured by the model. For each scenario, total load costs are calculated using hourly price and load data and are aggregated to an annual value. This annual load cost is compared to a base case scenario in which no RPS mandate is in effect and therefore no utility-scale renewable projects are assumed to have been built in Ohio.

It is important to note that this study only attempts to quantify the price suppression effects that are associated with new utility-scale renewable projects and does not purport to comprise an overall cost-benefit analysis of these projects. While PROMOD IV is the industry standard in modeling production cost scenarios, it is not the proper tool to use when conducting least-cost capacity expansion analysis or integrated resource planning. To conduct such an analysis, it would be necessary to consider additional variables such as capital and capacity costs, renewable energy credit (REC) prices, and transmission upgrade expenses.

ASSUMPTIONS

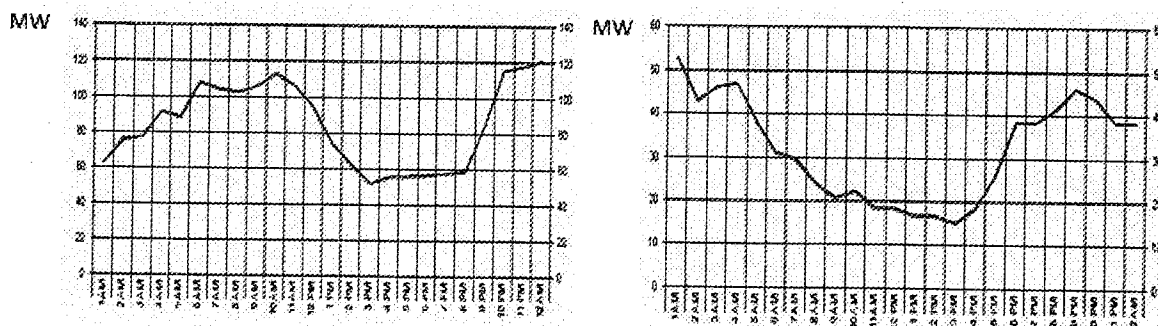
As described above, two scenarios are considered. The first scenario includes only the utility-scale renewable resources in Ohio that are approved and operational. The second scenario includes all projects that have received a certificate of environmental compatibility and public need from the OPSB, which includes some projects that are not yet operational. The results are then compared to a base case in which it is assumed that no utility-scale renewable resources are developed within Ohio. The projects associated with both scenarios are depicted in the map below, provided courtesy of the Ohio Power Siting Board.



All simulations were modeled for calendar year 2014. Model input assumptions, such as hourly loads and fuel prices, are developed semi-annually by an independent third party. Staff did not make any adjustments to these assumptions.

Great care was taken to accurately incorporate new facilities into the powerflow model. Approved but not yet operational projects were modeled to conform to applications filed with the OPSB and to be consistent with generation interconnection requests submitted to PJM, the regional transmission organization.

Representative hourly profiles were included in the model to capture the intermittent nature of renewable generation. Capacity factors are based upon the geospatial coordinates of each project. For illustrative purposes, examples of these hourly output profiles appear below.



RESULTS – PRICE SUPPRESSION

The model demonstrates that wholesale electricity market prices in Ohio are reduced in both scenarios as a result of incorporating the renewable generation resources. Hourly LMPs are aggregated into a load-weighted average annual price in the tables below.

In the first scenario, which considers only those projects that are already operational, wholesale prices are reduced by approximately 0.15%.

| | Load Weighted LMPs (\$/MWh) | | | | |
|---------------------------------------|-----------------------------|-------------|---------|---------|---------|
| | AEP | FirstEnergy | Dayton | Duke | Ohio |
| Base Case (no RPS) | \$31.91 | \$32.42 | \$32.87 | \$32.22 | \$32.25 |
| Scenario 1: Operational Facilities | \$31.85 | \$32.37 | \$32.82 | \$32.18 | \$32.20 |
| | -0.16% | -0.15% | -0.16% | -0.12% | -0.15% |

In the second scenario, which considers all OPSB-approved projects, wholesale prices are reduced by approximately 0.51%, or just over one half of one percent.

| | Load Weighted LMPs (\$/MWh) | | | | |
|------------------------------------|-----------------------------|-------------|---------|---------|---------|
| | AEP | FirstEnergy | Dayton | Duke | Ohio |
| Base Case (no RPS) | \$31.91 | \$32.42 | \$32.87 | \$32.22 | \$32.25 |
| Scenario 2: Approved Facilities | \$31.75 | \$32.25 | \$32.67 | \$32.07 | \$32.08 |
| | -0.50% | -0.52% | -0.61% | -0.47% | -0.51% |

The total load cost benefits that arise from lower wholesale clearing prices are calculated below for each utility transmission area and the state as a whole. For these savings to be ultimately realized by customers, one must assume that retail rates are themselves a function of wholesale prices, an assumption that is consistent with Ohio's transition towards a competitive model of generation procurement.

These benefits can be considered a partial offset to the costs incurred by utilities to comply with alternative energy mandates. According to data contained within the 2011 Alternative Energy Portfolio Standard Report to the General Assembly, Ohio investor owned utilities procured 518,992 Ohio non-solar renewable MWHs at an average price per REC of \$110.55. The price suppression effect therefore offsets 14.7% of the cost of procuring in-state non-solar RECs for investor owned utilities in scenario 1, and 49.8% of the cost of in-state non-solar compliance in scenario 2.

| Total Load Savings (2014) | | | | | |
|---------------------------------------|--------------|--------------|-------------|-------------|--------------|
| | AEP | FirstEnergy | Dayton | Duke | Ohio |
| Scenario 1: Operational Facilities | \$3,355,033 | \$3,213,389 | \$934,960 | \$926,272 | \$8,429,653 |
| Scenario 2: Approved Facilities | \$10,216,471 | \$11,114,557 | \$3,656,707 | \$3,605,089 | \$28,592,824 |

RESULTS: CARBON EMISSIONS

The model demonstrates that additional renewable generation resources in Ohio also reduce CO2 emissions. PROMOD IV does account for the fact that intermittent resources can cause traditional fossil-fired plants to be ramped up and down more frequently and therefore run less efficiently. However, this effect does not seem to significantly impede overall emission reductions. It is likely that this outcome is facilitated in part by the membership of Ohio utilities in the PJM regional transmission organization, which provides the centralized unit dispatch and flexibility required to avoid significant negative consequences for the efficiency of existing fossil-fired generators. The carbon dioxide emissions reductions for both scenarios are depicted below.

| | CO2 Emissions (Metric Tons) | % Change |
|---------------------------------------|--------------------------------|----------|
| Base Case (No RPS) | 116,364,317 | |
| Scenario 1: Operational Facilities | 116,162,271 | -0.17% |
| Scenario 2: Approved Facilities | 115,787,677 | -0.50% |

CONCLUSION

The model simulations indicate that, consistent with theoretical expectations, Ohioans are already benefiting from renewable resource additions through downward pressure on wholesale market prices and reduced emissions. No severe congestion issues or emergency curtailments were observed, even after incorporating all approved projects, which suggests that the electric grid in Ohio is sufficiently robust to support the continued development of utility-scale renewable projects. The modeling demonstrates that Ohio's Alternative Energy Portfolio Standard has already successfully reduced carbon dioxide emissions below a baseline level.

As renewable generation requirements escalate and new projects are required, future model runs can be made to assess the extent to which these outcomes persist. This analysis can be conducted by Commission Staff through PROMOD IV simulation, a powerful, well respected and unbiased tool that is currently at our disposal.

The Public Utilities Commission of Ohio
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Todd A. Snitchler, Chairman

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