

State of Michigan
The Michigan Public Service Commission
Case No. U-17321

Analysis of Michigan's Renewable Portfolio Standard
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Introduction

Michigan's Clean, Renewable, and Efficient Energy Act 295 was signed into law on October 6, 2008. It established a Renewable Energy Standard for the state of Michigan. The Renewable Energy Portfolio Standard (RPS) compels utility companies doing business in Michigan to provide to Michigan residents and businesses electricity that is produced from renewable sources. The amount of electricity produced from renewable sources must be 10% or greater by 2015.

The RPS provides for the granting of a series of credits for each megawatt-hour of electricity generated by certain types of renewable energy systems.

Additional renewable energy credits, known as Michigan incentive renewable energy credits (bonus credits), are granted for each megawatt-hour generated from a renewable energy system built using equipment made in Michigan. Similarly, a renewable energy system constructed by a workforce composed of residents of the state receives additional bonus credits for each megawatt-hour of electricity generated.

Bonus credits are added to the single credit a renewable energy facility receives for producing 1 megawatt of electricity from a qualified renewable resource (Mich. Comp. Laws, Sec. 460.1039 (2)).

Facts

*In the United States Court of Appeals for the Seventh Circuit, Case Nos. 11-3421, 11-3430, 11-3584, 11-3585, 11-3586, 11-3620, 11-3787, 11-3795, 11-3806, 12-1027; Illinois Commerce Commission, et al., (Petitioners), v. Federal Energy Regulatory Commission, (Respondent), decided June 7, 2013, Judge Richard Posner found Michigan's Comp. Law 460.1029 forbids Michigan utilities to count renewable energy generated outside the state towards satisfying the requirement in the "Clean, Renewable, and Efficient Energy Act 295". In this case the state of Michigan admitted "its law forbids it to credit wind power from out-of-state against a state's required use of renewable energy to its utilities". Judge Posner opined in dicta that the Michigan argument "trips over an insurmountable constitutional objection. Michigan cannot, without violating the Commerce Clause of Article 1 of the Constitution, discriminate against out-of-state renewable energy." The court cited *Oregon Waste Systems, Inc. v. Department of Environmental Quality*, 511 U.S. 93 (1994); *Wyoming v. Oklahoma*, 502 U.S., 437 (1992) and *Alliance for Clean Coal v. Miller*, 44 Fd3d 591 (7th Cir. 1995).*

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The findings of the court and the admission on behalf of the state of Michigan confirms the inherent discriminatory application of the RPS against out-of-state suppliers of renewable energy. If renewable energy generated outside the state of Michigan may not be used as a “renewable energy credit” by a Michigan utility to meet its 10 percent mandate under the RPS, an economic barrier to the interstate sale and transmission of renewable energy to the state of Michigan is created.

Clearly, Mich. Comp. Law 460.1029 discriminates against renewable energy generated outside the state, and Mich. Comp. Law, Sec. 460.1039 (2) discriminates against the use of equipment not manufactured in Michigan, and furthe discriminates against a non Michigan resident workforce used in the construction of a renewable energy system located in the state.

Part A Commerce Clause

Questions Presented

Does Michigan’s Clean, Renewable, and Efficient Energy Act 295 of 2008, violate Article 1, Sec. 8, Clause 3 of the United States Constitution, that grants Congress the power to regulate “Commerce Among the Several States” because the Act:

- a. Discriminates against nonrenewable energy produced instate and in other states by eliminating nonrenewable energy sources from 10% of the available energy market in Michigan, and therefore creates an unreasonable restraint on interstate competition and commerce in all types of nonrenewable energy, and
- b. Discriminates against out-of-state resources (equipment and labor) used in the construction of renewable energy systems by granting bonus renewable energy credits to renewable energy facilities constructed in Michigan provided said facilities only use materials manufactured in Michigan or a workforce composed of Michigan residents. This is an unreasonable restraint on interstate competition and commerce pertaining to manufactured goods and services, and
- c. Discriminates against out-of-state production of renewable energy by denying Michigan utilities the right to count renewable energy generated out-of-state towards meeting the requirements of the RPS to obtain at least 10 percent of their electrical power needs from renewable sources by 2015. This is an unreasonable restraint on interstate competition and commerce in all types of renewable energy, and
- d. Does the discrimination alleged in paragraphs (a), (b), and (c) advance a legitimate state interest under the Supreme Court’s “strict scrutiny test”?

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Statement of the Law

Article 1, Section 8, Clause 3 of the U.S. Constitution states, “The Congress shall have Power...To regulate Commerce...among the several states...”. The scope of commerce among the states is broadly defined, and all objects of interstate trade merit Commerce Clause protection.

The Commerce Clause is an exclusive grant of power to Congress which is relevant when state’s enact legislation to promote their renewable energy efforts. The Supreme Court has infused this clause with an implicit “negative” aspect that limits the states authority to regulate in a way that might have an effect, directly or indirectly, on interstate commerce. When a conflict arises between a state statute and the Commerce Clause the court will first determine whether the regulation or legislation is facially discriminatory against interstate commerce, and will only uphold the law if a legitimate local purpose can be found *Dep’t of Revenue v. Davis*, 533 U.S. 328 (2008); *Oregon Waste Systems, Inc. v. Department of Environmental Quality*, U.S. 93, (1984).

Discriminatory statutes are subject to “strict scrutiny” and for such a statute or regulation to be valid the state must establish that there is a compelling state interest for which the statute is the least intrusive means to achieve that interest. If the statute is found to discriminate against out-of-state interests based on geographic limitations, or favoring local interests to the detriment of interstate commerce, the court will find the statute to be *per se* invalid *City of Philadelphia v. New Jersey*, 437 U.S. 617 (1978).

Commerce is defined as the “trafficking and trading of economic commodities and their mode of transportation”. Electricity is a commodity that flows (is wheeled) in interstate commerce to ensure a reliable and cost effective supply of electric power wherever it is needed. The Constitution and Supreme Court decisions interpreting the scope of the Commerce Clause are clear. The power to regulate the interstate flow of electricity includes the power to regulate all instate production, supply, and distribution of electricity to the extent such activity, wherever located, has a direct or indirect effect on interstate commerce.

The U.S. Supreme Court held in *FERC v. Mississippi*, 456 U.S. 742 (1982), “It is difficult to conceive of a more basic element of interstate commerce than electric energy, a product used in virtually every home and every commercial or manufacturing facility. No State relies solely on its own resources in this respect.”

In *Wickard v. Filburn*, 317 U.S. (1942) the court found that any local activity (for example instate production of renewable energy), taken either separately or in the aggregate, always had a sufficiently substantial effect on interstate commerce to justify Commerce Clause protection.

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The Commerce Among the States Clause operates as an extrinsic restraint on the legislative powers of the states *Tyler Pipe Industries v. Department of Revenue*, 483 U.S. 232 (1987).

The Federal Power Act, Sections 205 and 206, 16 U.S.C., Sec 824 (d)-(e) (1964), exclusively empowers the Federal Energy Regulatory Commission (FERC) to regulate the rates for the interstate sale; transmission and distribution of electricity in interstate commerce. When a transaction is subject to exclusive federal FERC jurisdiction and regulation, state regulation is preempted as a matter of federal law and the U.S. Constitution's Supremacy Clause, "*This Constitution, and the Laws of the United States which shall be made in Pursuance thereof:...shall be the supreme Law of the Land...*", Article VI, Clause 2. The U.S. Supreme Court articulated in *Northern Natural Gas Co. v. State Corp. Commission*, 372 U.S. 84, (1963) and *Nantahala Power & Light Co. v. Thornburg*, 476 U.S. 953 (1986), that the exclusive federal jurisdiction over the interstate sale of electric power is not limited to rates *per se*. Their inquiry is not at an end because the commission order does not deal with prices or volumes (of electric power) purchased.

It is clear from the decided cases of the Supreme Court and legislation adopted by Congress that they intended to create a bright line between state and federal jurisdiction pertaining to the transmission and sale of electric power in interstate commerce *Federal Power Commission v. Southern California Edison Co.*, 376 U.S. 205 (1964).

The Commerce Clause prohibits actions that are facially discriminatory against interstate commerce *Dep't of Revenue v. Davis and Oregon Waste Systems (supra)*. If the statute is found to discriminate against out-of-state interests based on geographic limitations or favoring local interests to the detriment of interstate commerce, the court will hold the statute *per se* invalid *City of Philadelphia v. New Jersey (supra)*.

Commerce Clause Violations

A state statute may violate the Commerce Clause in three ways:

First, a statute that clearly discriminates against interstate commerce in favor of intrastate commerce is invalid *per se* and can survive only if the discrimination is demonstrably justified by a valid factor unrelated to economic protectionism.

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Second, if the statute does not discriminate against interstate commerce, it will nevertheless be invalidated under the *Pike v. Bruce Church Inc.*, 397 U.S. 137, (1970), balancing test if it imposes a burden on interstate commerce not commensurate with the local benefits secured.

Third, a statute will be invalid *per se* if it has the practical effect of extraterritorial control of commerce occurring entirely outside the boundaries of the state in question. "In this context, 'discrimination' simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter" *Pryor*, 425 F.3d at 168; *United Haulers*, 127 S.Ct. at 1793; *American Trucking Ass'n, Inc. v. Mich. Pub. Serv. Comm'n*, 545 U.S. 429 (2005).

The Commerce Clause restriction is driven by concern about economic protectionism, namely regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors with higher costs of production or regulatory compliance. Statutes that provide in-state producers of renewable energy with bonus incentives such as Renewable Energy Credits whose economic value is enhanced by using in-state sourced materials and labor in the construction of renewable energy systems, and comparable bonus incentives are not available to those producers of renewable energy systems who do not use in-state sourced materials and labor evidence in-state economic protectionism the Commerce Clause rejects as discriminatory. In order for a discriminatory statute or regulation to be valid, the state must establish that the statute serves a compelling state interest through the least restrictive means to achieve that interest *Oregon Waste Systems, Inc. (supra)*.

Michigan's RPS compels all utility companies doing business in Michigan to provide to Michigan residents and businesses electricity that is produced from renewable sources. The amount of electricity produced from renewable sources must be 10% or greater by 2015 and must be produced from renewable sources located in Michigan. This is an unlawful restraint of trade in the production, transmission and distribution of electricity in interstate commerce. The statute clearly discriminates against interstate commerce by favoring intrastate commerce and creating economic preferences for intrastate renewable energy. This directly discriminates against interstate renewable energy and indirectly against interstate nonrenewable energy (*See discussion below on the discriminatory effects of Mich. Comp. Laws Sections 460.1029 and 460.1039 (2)*).

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Economic Coercion

The RPS places economic pressure, bordering on coercion, on all utility companies doing business in Michigan to supplement their energy portfolio with energy produced from renewable sources to comply with the 10% mandate irrespective of whether the utility has the capability or facilities to supply electricity produced from renewable sources. The mandate, in combination with Mich. Comp. Law 460.1029 that denies Michigan utilities the right to count renewable energy generated out-of-state towards meeting the 10% mandate by 2015, compels out-of-state suppliers of electric power to buy and redistribute to its Michigan customers renewable energy produced in Michigan.

The alternative is to construct facilities in Michigan to supplement its energy portfolio to meet the 10% mandate with Michigan sourced renewable energy. This will force out-of-state providers of electricity, who do not have the capital or customer base to justify investment in a renewable energy system in Michigan, to become captive buyers of intrastate renewable energy from in-state utilities who do have the resources and capability to provide electricity produced from renewable sources in Michigan. This is without doubt geographic discrimination against out-of-state renewable energy and economic protectionism that the Commerce Clause was intended to prevent.

Lessened Competition

There are limited opportunities in Michigan where renewable energy systems may be constructed as determined by an analysis of favorable geographical locations for available and reliable wind power. The locations for new renewable energy systems are limited. What is available may not provide economic parity with other utilities who have acquired more favorable locations for their source of wind power. Limited availability of wind power locations to construct renewable energy systems will cap the number of renewable energy systems competing within Michigan. This will reduce competition and may lead to either a monopoly or oligopoly in renewable energy absent competition from out-of-state renewable energy providers resulting from the discriminatory effects of the RPS.

The United States Department of Energy's Renewable Energy Laboratory (NREL) has determined that Michigan's wind potential is marginal. They found only 24% of Michigan's land mass has enough wind capacity suitable for wind farm development (wind speeds of 6.5 meters/sec.{14 m.p.h} at heights greater than 80 meters {262 feet}). In their study available land mass excluded protected lands (national and state parks) and incompatible land use (airports). However, it did not consider the unavailability of land that would be excluded because of local zoning regulations. Consequently, Michigan's available land mass for wind turbine development is less than the 24% availability cited in NREL's study.

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Reduced competition and an increased demand for electricity will affect, directly or indirectly, intrastate and interstate competition for electricity produced from renewable and nonrenewable sources. As the demand for nonrenewable energy is increased so is the demand to produce more renewable energy to comply with the mandate. The 10% mandate is a function of the total energy demand of the state. It is not an ascertainable or fixed amount of megawatt hours. Limited availability of renewable energy and an increased demand for energy in general will result in price increases on Michigan residents and businesses (*See discussion under Economic Commentary*).

In *New England Power Co. v. New Hampshire*, 455 U.S. 331 (1982), the court held that an order of the New Hampshire Public Utilities Commission that restrained within the state, for the financial advantage of in-state rate payers, low cost hydroelectric energy produced in the state was an impermissible violation of the Commerce Clause.

The court concluded that the Commerce Clause precludes a state from mandating that its residents be given a preferred right of access, over out-of-state consumers, to natural resources located within its borders or to the products derived therefrom. Wind power is a transient natural resource and when it is located and transformed within the state of Michigan into “renewable energy” it may not be given a discriminatory preferred economic status over “renewable energy” or nonrenewable energy produced out-of-state without violating the Commerce Clause.

Per Se Violation

Mich. Comp. Law 460.1029 is a *per se* violation of the Commerce Clause because it discriminates against renewable energy generated outside the state. It facilitates this discrimination by denying Michigan utilities the right to count renewable energy generated out-of-state towards meeting the requirements of the RPS to obtain 10 percent of their electrical power needs from renewable sources by 2015. The findings of the court in *The United States Court of Appeals for the Seventh Circuit (supra)*, and the admission on behalf of the state of Michigan in said case, confirms the inherent discriminatory nature of the RPS against out-of-state suppliers of renewable energy. The statute is an economic barrier to the interstate sale and transmission of renewable energy and discriminates against out-of-state utilities providing renewable energy in favor of in-state utilities.

The value of a megawatt-hour of renewable power in the regional grid is identical and indistinguishable from another megawatt-hour of renewable power produced within Michigan. There is no rationale given in the Michigan statute why renewable power produced out-of-state must be treated differently than renewable power generated in Michigan when valued for purposes of granting a REC. Statutory authority that discriminates on the value of a REC of an identical unit of power, whether generated in

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Michigan or within a regional grid across state borders before it is traded, marketed, sold or used in Michigan discriminates solely based on geography. The state can regulate RECs but is prohibited by the Commerce Clause to discriminate on their value based on geography. The Commerce Clause requires a state, when enacting legislation which burdens interstate commerce to demonstrate that there are no less burdensome alternatives to achieve the state's purpose *Dean Milk Co. v. City of Madison*, 340 U.S.349 (1951). A state cannot discriminate against articles of commerce originating in other states unless there is a reason apart from their origin to treat them differently *City of Philadelphia v. New Jersey*, (*supra*).

Mich. Comp. Law, Sec. 460.1039 (2) is a *per se* violation of the Commerce Clause because it discriminates against the use of equipment not manufactured in Michigan and discriminates against the employment of a non Michigan resident workforce in the construction of any renewable energy system located in the state. It facilitates this discrimination by granting bonus renewable energy credits to renewable energy facilities constructed in Michigan that only use materials manufactured in Michigan or a workforce composed of Michigan residents. Clearly, this statute discriminates against out-of-state manufacturers of renewable energy system equipment and out-of-state (nonresident) labor. The statute discriminates against out-of-state interests and favors local interests to the detriment of interstate commerce that the Supreme Court found to be *per se* invalid in *City of Philadelphia v. New Jersey*, (*supra*).

Strict Scrutiny Test

Discriminatory statutes are subject to "strict scrutiny" and for such a statute or regulation to be valid the state must establish that there is a compelling state interest for which the statute is the least intrusive means to achieve that interest. If a statute is found to discriminate against out-of-state interests based on geographic limitations or by favoring local interests to the detriment of interstate commerce, the court will find the statute to be *per se* invalid *City of Philadelphia* (*supra*). Where a state statute or regulation imposes a cost disadvantage on certain out-of-state articles (goods or services) in the regulating state, the statute is subject to the strict scrutiny test *Chem. Waste Management v Hunt*, 504 U.S 334 (1992).

In *C & A Carbone, Inc. v. Town of Clarkstown, N.Y.*, 511 U.S. 383 (1994) the court held "discrimination against interstate commerce to be *per se* invalid, save in a narrow class of cases in which the municipality can demonstrate, under rigorous scrutiny, that it has no other means to advance a legitimate local interest". The court found in this case that a plan to generate more revenue is not such a local interest that can justify discrimination against interstate commerce.

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If the generation of more revenue is not such a strong local interest to justify discrimination against interstate commerce, then discrimination against interstate commerce cannot be sustained to: (a) advance a state's interest to improve its economy by providing discriminatory economic incentives to encourage in-state manufacturing of materials and employment of resident labor to be used in the construction of renewable energy systems, or (b) encourage the construction of renewable energy systems in the state by denying Michigan utilities the right to count renewable energy generated out-of-state towards meeting their requirements under the RPS to obtain 10 percent of their electrical power needs from renewable sources.

Legitimate Public Interest

In Pike v. Bruce Church, Inc. 397 U.S. 137 (1970), the court held, "Where the (state) statute regulates evenhandedly to implement a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive compared to the putative local benefits." In response to this decision the courts established a set of principles to determine whether a state statute infringes on Congress' sole and exclusive power to regulate interstate commerce.

The principles established, (a) the statute must have a legitimate and public purpose. It must be within the state's police power, and not designed either to regulate interstate commerce as such, and (b) it must not discriminate against out-of-state economic interests in favor of private in-state interests.

Even when a state regulates in pursuit of a legitimate interest, the state may not discriminate against out-of-state interests. The statute must satisfy a compelling state interest. If there is little evidence of such an effect, the court may infer that the discriminatory effect on out-of-state interests was intentional, and therefore an unreasonable burden on interstate commerce.

A court will ultimately determine whether the statutes are facially discriminatory against interstate commerce, and will uphold them only if a legitimate local purpose can be found. Absent discrimination based on geographic limitations the courts will determine whether the statute has a legitimate public purpose that promotes a compelling state interest, and its effect on interstate commerce is incidental. State and local laws are deemed unconstitutional under the Commerce Clause if they unduly burden or discriminate against interstate commerce *Oregon Waste Systems, Inc. (supra)*.

The alleged purpose of the RPS is to reduce greenhouse gases and carbon dioxide emissions by replacing power plants that use fossil fuel with systems that use wind

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energy to produce electric power. There is no credible scientific or empirical evidence that the use of wind power to produce electricity in Michigan will significantly reduce greenhouse gases and carbon dioxide emissions; that carbon dioxide is harmful to man, and that the use of renewable energy will improve Michigan's economy or environment absent the discriminatory effect the RPS has on interstate commerce. On balance there is more empirical evidence that the use of wind power to produce electricity will increase greenhouse gases and carbon dioxide emissions (*see discussion under Public Interest below*).

The ultimate questions for the court and policy makers are these, in the presence of the RPS's discriminatory effect and unlawful restraint of trade on interstate commerce: (a) does the statute pass the Supreme Court's "strict scrutiny test"; (b) does the RPS advance a legitimate state interest or is the interest illusory; (c) does the RPS protect the residents of the state from irreparable harm; prevent a serious risk of endangerment to the public health, safety or welfare of its residents; (d) does the RPS improve the availability and access to electricity within the state at reasonable prices to justify a preferential market position for electricity produced from in-state renewable sources over interstate renewable sources; (e) does the RPS improve the availability and access to electricity within the state at reasonable prices to justify the state's preferential market position over in-state or interstate nonrenewable sources, to justify the RPS's discriminatory effect and unlawful restraint of competition in the interstate energy market?

In *West Lynn Creamery v. Healy*, 512 U.S. 186 citing *Philadelphia v New Jersey*, 437 U.S. 617 the Supreme Court found "even if environmental preservation were the central purpose of the regulation, it would not be sufficient to uphold a discriminatory regulation". Consequently, the alleged purpose of the RPS to reduce greenhouse gases and carbon dioxide emissions by replacing power plants that use fossil fuel with systems that use wind energy to produce electric power may not pass the Supreme Court's "strict scrutiny" test.

Conclusion

The RPS is an unlawful intervention by the state of Michigan in the regulation of electricity in interstate commerce. The RPS unlawfully discriminates against the production, distribution and sale of electricity that is produced from nonrenewable sources (fossil fuels and nuclear reactors) both in-state (intrastate) and out-of-state (interstate) by restricting to 90% the amount of intrastate and interstate electricity sold in Michigan that is produced from nonrenewable sources without justifiable cause.

The RPS discriminates against out-of-state production of renewable energy by granting bonus economic incentives to renewable energy facilities constructed in Michigan that

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use materials manufactured in, and resident labor from, Michigan. It is an unreasonable restraint on interstate competition and commerce on goods and services used in the construction, maintenance and operation of renewable energy production facilities in Michigan without justifiable cause.

The RPS discriminates against out-of state production of renewable energy by denying Michigan utilities the right to count renewable energy generated out-of-state towards satisfying the requirements of the RPS to obtain at least 10 percent of their electrical power needs from renewable sources by 2015. It is an unreasonable restraint on interstate competition and commerce in the renewable energy market without justifiable cause.

PART B STATE INTEREST

Question Presented

Can the state of Michigan justify under either *Pike v. Bruce Church, Inc.* 397 U.S. 137 (1970) or the “strict scrutiny test” *City of Philadelphia v. New Jersey*, 437 U.S. 617 (1978) the RPS’s discriminatory effect on out-of-state energy interests when the discrimination is based on economic incentives the RPS grants instate interests that are not available to out-of-state competitors and to geographic preferences that have an adverse affect on interstate commerce?

Specifically, (a) does the RPS advance a legitimate state interest or is the interest illusory; (b) does the RPS protect the residents of the state from irreparable harm; prevent a serious and apparent risk of endangerment to the public health, safety or welfare of its residents; (c) does the RPS improve the availability and access to electricity within the state at reasonable prices to justify a preferential market position for electricity produced from instate renewable sources; (d) does the RPS improve the availability and access to electricity within the state at reasonable prices to justify the state’s preferential market position over electricity produced from interstate renewable sources or instate or interstate nonrenewable sources, to justify the RPS’s discriminatory effect and unlawful restraint of competition in the interstate energy market?

Statement of the Law

In Pike v. Bruce Church, Inc. 397 U.S. 137 (1970), the court held, “Where the (state) statute regulates evenhandedly to affect a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive compared to the putative local benefits.” This decision has lead the courts to establish a set of principles to determine

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whether a state statute infringes on Congress' sole and exclusive power to regulate interstate commerce. The principles established by the courts are the following:

- a). The statute must have a legitimate and public purpose. It must be within the state's police power, and not designed to regulate interstate commerce as such, and
- b). It must not discriminate against out-of-state economic interests in favor of private in-state interests.

When a state regulates in pursuit of a legitimate interest, the state may not discriminate against out-of-state interests without compelling reasons. The statute must have an affect on its local interests. If there is little evidence of such a result, the court may infer that the discriminatory interstate effect was intentional, and therefore conclude that the statute is an unreasonable burden on interstate commerce.

Absent discrimination based on geographic limitations the courts will apply the balancing principles established in *Pike (supra)* to determine whether the state has a compelling interest that justifies the statute's adverse effect on interstate commerce. State and local laws are deemed unconstitutional under the Commerce Clause if they unduly burden or discriminate against interstate commerce *Oregon Waste Systems, (supra)*.

Discriminatory statutes are subject to "strict scrutiny" and for such a statute or regulation to be valid the state must establish that there is a compelling state interest for which the statute is the least intrusive means to achieve that interest. If a statute is found to discriminate against out-of-state interests based on geographic limitations or by favoring local interests to the detriment of interstate commerce, the court will find the statute to be *per se* invalid *City of Philadelphia (supra)*. Where a state imposes a greater cost disadvantage on certain out-of-state articles in commerce (goods or services) in the regulating state, it was found to be subject to the strict scrutiny test *Chem. Waste Management v Hunt, 504 U.S 334 (1992)*.

In *West Lynn Creamery v. Healy, 512 U.S. 186* citing *Philadelphia v New Jersey, 437 U.S. 617* the Supreme Court found "even if environmental preservation were the central purpose of the regulation, it would not be sufficient to uphold a discriminatory regulation". This is especially so if the statute is *per se* invalid. Consequently, the alleged purpose of the RPS to reduce greenhouse gases and carbon dioxide emissions by replacing power plants in Michigan that use fossil fuel with systems that use wind energy to produce electric power does not survive the Supreme Court's "strict scrutiny" test to justify the discriminatory effects of the statute.

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Conclusion

We have established that Michigan's Clean, Renewable, and Efficient Energy Act 295 of 2008, and the Renewal Energy Portfolio Standard (RPS) is an unlawful intervention by the state of Michigan in the regulation of electricity in interstate commerce.

The RPS unlawfully discriminates against the production, distribution and sale of electricity that is produced from nonrenewable sources (fossil fuels and nuclear reactors) both in-state (intrastate) and out-of-state (interstate) by restricting to 90% the amount of intrastate and interstate electricity sold in Michigan that is produced from nonrenewable sources.

The RPS discriminates against out-of-state production of renewable energy by granting bonus economic incentives to renewable energy facilities constructed in Michigan that use materials manufactured in, and resident labor from, Michigan. It is an unreasonable restraint on interstate competition and commerce in the goods and services used in the construction, maintenance and operation of renewable energy production facilities in Michigan.

The RPS discriminates against out-of-state production of renewable energy by denying Michigan utilities the right to count renewable energy generated out-of-state towards satisfying the requirements of the RPS to obtain at least 10 percent of their electrical power needs from renewable sources by 2015. It is an unreasonable restraint on interstate competition and commerce in the renewable energy market.

Discriminatory statutes are subject to "strict scrutiny" and for such a statute or regulation to be valid the state must establish that there is a compelling state interest for which the statute is the least intrusive means to achieve that interest.

Applying the "strict scrutiny" test we must evaluate what the state interest is; the intent and purpose of the RPS, and whether the RPS is the least intrusive means to protect the alleged state interest.

Public Interest Argument

The alleged state interest is to protect the residents of the state from irreparable harm; prevent a serious and apparent risk of endangerment to the public health, safety or welfare of its residents. The alleged purpose of the RPS is to reduce greenhouse gases and carbon dioxide emissions by replacing power plants that use fossil fuels with systems that use wind energy to produce electric power. Whether this is the least intrusive means to protect the public health, safety or welfare of its residents depends on creditable scientific evidence that substantiates the premise that a reduction in

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greenhouse gases and carbon dioxide emissions will protect Michigan residents from irreparable harm.

There is no credible scientific or empirical evidence that the use of wind power to produce electricity in Michigan will reduce greenhouse gases and carbon dioxide emissions; that carbon dioxide is harmful to man, and that the use of renewable energy will improve Michigan's environment and economy notwithstanding the de facto discriminatory effect the RPS has on out-of-state interests and interstate commerce.

For years the wind energy industry and numerous state and federal politicians have claimed that increasing the use of wind power to produce electricity will result in huge reductions in carbon dioxide and other emissions. These claims rest on the results of dispatch models that predict not only emissions, but also fuel costs and generation levels for individual utilities and utility grids. A growing number of empirical scientific studies have refuted the conclusions and claims that are based on computer and dispatch modeling studies.

Studies Based On Empirical Data

Two studies are selected and summarized below to rebut the premise that a reduction in greenhouse gases and carbon dioxide emissions will be achieved by replacing power plants that use fossil fuels with systems that use wind energy to produce electric power.

The first is a study from Bentek Energy, (*The Wind Power Paradox*, July 19, 2011) presents findings that show that claims based on dispatch models to be significantly overstated, and that actual carbon dioxide reductions are either so small as to be insignificant or too expensive to be practical.

The Bentek study is the first to systematically assess the emission reduction performance of wind generation based on hourly generation and emissions data. The analysis finds state and federal programs that support wind generation with a goal of substantially reducing pollution instead lead to slight or no emissions savings, along with increased costs for utilities and ultimately ratepayers. When power plants on a regional power grid are "cycled" to accept intermittent wind energy, the plants run less efficiently, leading to significant emissions and higher plant maintenance costs. The study reveals that equal or greater emissions reductions could be achieved at lower cost and with greater reliability by replacing existing coal-fired power generation with natural gas-fired generation.

The study used actual hourly wind generation and emissions data to test the hypothesis that wind energy is an effective tool to control carbon dioxide and other air emissions.

The study uses detailed hourly data on wind generation and emissions from plants in four regional power areas across the United States. The modeling, done in conjunction with Dr. Daniel Kaffine of the Colorado School of Mines, examines the interaction

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among wind, coal and natural gas-fired generation within each region and the resulting changes in emissions in response to wind generation.

The study consists of more than 300,000 data points, including actual wind, coal and gas generation and emissions data for the years 2008, 2009 and 2010. All emissions data are taken directly from the Environmental Protection Agency, while wind generation data comes from the regional power areas. It differs from traditional analyses of wind power that are based on dispatch models. Dispatch models optimize or otherwise analyze generation options based on numerous unit level assumptions about such things as generation costs, demand and emissions rates. This new analysis does not rely on such assumptions; its conclusions reflect what happened (empirical data) in each system. This analysis also takes into account both exporting wind to other regions and any power plant dispatch changes in response to wind generation.

Policy makers should take note: the actual emissions data over a three-year period refutes prior claims based solely on computer and dispatch modeling. This study compels legislative reassessment of wind as an emission control strategy.

Another study by Bentek, "*How Less Became More: Wind, Power and Unintended Consequences in the Colorado Energy Market, April 16, 2010*" analyzed actual emissions data from electric generation plants located in four regions: the Electric Reliability Council of Texas; Bonneville Power Administration; California Independent System Operator; and the Midwest Independent System Operator. Those four system operators serve about 110 million customers, or about one-third of the U.S. population.

The study concluded that Colorado's Renewable Portfolio Standard had no effect in reducing greenhouse gas emissions, or more specifically, carbon dioxide emissions. The study confirmed that the use of wind turbines as a source of producing electricity will cause a net increase in greenhouse gases and carbon dioxide. Fossil fuel back-up generation is required (spinning reserve) to alleviate the problem of wind generation intermittency. The inefficient use of fossil fueled spinning reserve (ramping up and down) to address the problem of wind intermittency produces more greenhouse gases and carbon dioxide emissions when compared to running a fossil fuel electricity generating plant at full cycle load capacity. There is no credible scientific empirical evidence that the use of wind turbines, solar or biomass in the production of electricity significantly reduces greenhouse gases or carbon dioxide emissions.

Greenhouse Gases

There is no credible scientific or empirical evidence that greenhouse gases that contain carbon dioxide presents an imminent threat or are hazardous to the public health, safety or welfare of the residents of Michigan that would justify the state's exercise of its plenary power to indirectly attempt to regulate the emissions of greenhouse gases or

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carbon dioxide by mandating the production of electricity by using wind turbines, solar energy or biomass.

The dominant natural greenhouse gases are water, carbon dioxide, methane, and nitrous oxide. These gases block outgoing long-wave infrared from easily leaving our atmosphere. They determine how much heat we retain within the earth's atmosphere to make it a livable biosphere. Without greenhouse gases the earth would be a frozen planet and incapable of sustaining life. Greenhouse gases are necessary to capture and hold heat from the sun and warm the earth to sustain life.

The dominant natural greenhouse gas is water vapor followed by carbon dioxide, methane, and nitrous oxide. Carbon dioxide comprises only 0.0360 % of atmospheric gases (*Atmospheric Composition Data & Information Service Center*). Data from the Mauna Loa Observatory in Hawaii reports that the average concentration of carbon dioxide in the atmosphere is 399 parts per million, or for every 100,000 molecules of air 39.9 are carbon dioxide. That is why carbon dioxide is called a "trace gas".

Water vapor, the predominant component of greenhouse gases is innocuous. Carbon dioxide is a colorless, odorless, non-toxic atmospheric trace gas that humans and all living creatures exhale as a byproduct of metabolism. Carbon dioxide is an essential component of plant photosynthesis. Plants use carbon dioxide to produce organic matter, which they use to produce food for men and animals and give off oxygen and water vapor as byproducts to create a habitable terrestrial biosphere. There are other scientifically proven and economical methods to reduce the trace concentrations of methane and nitrous oxide contained in greenhouse gas emissions produced by fossil fuel powered electric generation facilities. Many are currently in use and have significantly reduced further the trace concentrations of methane and nitrous oxide in the atmosphere.

Carbon dioxide is a minor green house gas and is a "third string" player in the greenhouse effect behind water vapor and high clouds. Satellite data indicates water vapor produces "dimers" (double water molecules) that absorb incoming solar radiation. This creates a cooling effect as water vapor concentration increases in the atmosphere as a result of increasing temperatures. Water vapor, the most significant greenhouse gas, comes from natural sources (evaporation from the earth's surface) and is responsible for 95% of the earth's greenhouse effect. (*Unstoppable Global Warming*, S. Fred Singer and Dennis T. Avery; *Climate Confusion*, Roy W. Spencer; *Red Hot Lies*, Christopher C. Horner)

The use of the RPS to indirectly regulate greenhouse gases and carbon dioxide emissions in the state is not only arbitrary and capricious it is scientifically unsound and fails to advance a legitimate state interest. The RPS is discriminatory and places unreasonable restrictions and undue restraints on intrastate and interstate competition

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for electricity in Michigan. There is no reliable data that supports an allegation that the RPS protects the public health, safety and welfare of the residents of the state to meet the “strict scrutiny” test to justify the discriminatory effects the RPS has on intrastate and interstate commerce in violation of the Commerce Clause.

Conclusion

To escape the confines of the Commerce Clause the state must advance a specific and lawful state interest. The RPS must be within the state’s general police power to protect its residents from irreparable harm, or prevent a serious and apparent risk of endangerment to the public health, safety or welfare of its residents.

The state has failed to establish a prima facie case to escape the constitutional confines of the Commerce Clause. The potential for harm or endangerment to Michigan residents must be real, not ethereal or hypothetical. There is no compelling empirical evidence that the RPS protects the public health, safety or welfare of Michigan residents and none has been offered.

Health and Economic Commentary

The RPS does not provide a reasonable standard to evaluate or measure whether the current 10% renewable energy mandate, since its implementation in 2008, presently or in the future, has or will reduce the amount of greenhouse gases or carbon dioxide emissions in Michigan. The RPS does not provide a method to measure any reduction or increase in greenhouse gases and carbon dioxide emissions that can be proven with empirical data, and whether any reduction or increase has a statistically significant effect on the public health, safety or welfare of Michigan residents.

The absence of standards to measure the effect the RPS has or will have in either reducing or increasing the amount of greenhouse gases or carbon dioxide emissions in Michigan, and the lack of standards to compare this data with the public health benefits expected (benefit / cost analysis) raises a rebuttable presumption that the RPS is arbitrary, and that the public health, safety or welfare the RPS is intended to protect is illusory.

The RPS significantly increases the cost of electricity to industrial businesses doing business or desiring to do business in the state and to all other businesses; to the public, and to a greater extent, to residents of the state on a fixed income.

Robert Bryce, Senior Fellow, Manhattan Institute, reported in “The High Cost of Renewable-Electricity Mandates”, published in Energy Policy and the Environment Report, No. 10, February 2012, “...there is growing evidence that the price tag for purchasing renewable energy, and the building of new transmission lines to deliver it, may not only outweigh any environmental benefits but may also be detrimental to the

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economy, costing jobs rather than adding them”. Also he said, “ the higher cost of electricity is essentially a de facto carbon-reduction tax, one that is putting a strain on a struggling economy and is falling most heavily, in a way regressive taxes do, on the least well-off among residential users”.

The Mackinac Center for Public Policy published in Policy Brief for September 21, 2012 an article entitled “The Projected Economic Impact of Proposal 3 and Michigan’s Renewable Energy Standard”. In the article the authors from the Beacon Hill Institute used its State Tax Analysis Modeling Program to project the economic effects of Michigan’s Clean, Renewable and Efficient Energy Act 295 of 2008. Their findings are:

*The cost for electricity for the state’s consumers will be \$950 million higher than it would have been otherwise.

*Michigan’s electricity prices will be 7.9 percent higher than they would have been otherwise.

These increased prices will:

- * Lower employment opportunities (increase unemployment).
- * Reduce disposable income by \$600 million.
- * Reduce net investment in the state by \$83 million.
- * Increase the average household’s electricity bill by \$70.
- * Increase the average commercial business’ annual electricity bill by \$650.
- * Increase the average industrial business’ annual electricity bill by \$21,470.

The RPS will adversely effect Michigan’s economy contrary to public and legislative perceptions. It has or will increase the cost of electricity to industrial enterprises doing business in the State.

Manufacturing employment in Michigan has fallen from 896,000 in 2000 to 497,000 as of June 2011. Michigan’s real gross domestic product has fallen from \$377 billion in 2003 to less than \$345 billion in 2010. Any increase in the cost of electricity will cause a further deterioration in Michigan’s manufacturing economy.

The increase in the cost of electricity also has a disproportionate adverse effect on those with fixed incomes (senior citizens and the poor). Michigan was the only state in the nation to lose population in the last census. This significantly reduces the taxable base further thereby reducing taxable revenue for the State.

Call to Action

Michigan’s RPS violates the Commerce Clause and is an unlawful restraint on competition in interstate commerce. Absent compelling and overwhelming evidence that

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the RPS serves a legitimate public interest, or prevents a serious and apparent risk of endangerment to the public health, safety or welfare of the residents of the state, the RPS should either be repealed by the Legislature or its validity challenged on behalf of the state's residents by the Attorney General.

If the Legislature and the Attorney General fail to take action the electric cooperatives doing business in the state should challenge the validity of the RPS on behalf of its members and customers. The officers of the cooperatives are invested with the power and trust of its members to protect their interests. The officers have a fiduciary responsibility to their members and customers to ensure a reliable and cost effective supply of electricity unencumbered by legislative economic protectionism that serves no legitimate state interest, nor provides any discernible benefits to the cooperative's members or customers.

An electric cooperative's failure to take appropriate action when the RPS is clearly a *per se* violation of the Commerce Clause is a breach of its fiduciary trust and responsibility to its members. A failure to challenge the validity of the RPS on behalf of its members also raises a strong presumption of an implicit conspiracy among all cooperatives and their providers of renewable energy in Michigan to willfully engage in an unlawful restraint of trade in intrastate and interstate commerce for electric power.

The purpose of the conspiracy is to perpetuate a market share monopoly or oligopoly in intrastate electricity produced solely from intrastate renewable energy systems. The quantity of megawatts and its value within the 10% market share for renewable energy will increase as the demand for nonrenewable energy increases. The current 10% cap on renewable energy required by the RPS to be provided by 2015 is scheduled to increase by law. This monopoly or oligopoly power authorized by the RPS combined with the intrastate economic protectionism established in the RPS that discourages, if not prevents, out-of-state competition in renewable energy is causing an increase in the price for electricity to all consumers of electric power within the state. This unlawful restraint of trade and competition in the renewable energy market is without any apparent and measurable environmental or economic benefit to the public.

If we consider the renewable energy market as a distinct and separate submarket, comprising energy produced from wind, solar, biomass or hydroelectric, wind clearly has 97% or greater of the market share for renewable energy in Michigan. This market share and the limited number of renewable energy systems participating in this market presents a prima facie case that the RPS authorizes and mandates conduct that constitutes a violation of the United States Antitrust Laws (*Sherman Act, 15 U.S. Code, Section 1*). A state statute should be struck down on preemption grounds if it mandates or authorizes conduct that necessarily constitutes a violation of the antitrust laws, or if it places irresistible pressure on a private party (electric cooperatives) to

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violate the antitrust laws to comply with the statute *Fisher v. City of Berkeley*, 475 U.S. 260.

Lastly, public interest groups concerned about the increased costs of electric power and the adverse effect the RPS has on their personal lives and Michigan's economy should consolidate their efforts in a class action law suit against the utility companies who are benefitting from their monopolistic or oligopolistic power granted them by the RPS.

In addition the public's remedy for bad policy and legislation is at the ballot box. Repeal of Michigan's Clean, Renewable, and Efficient Energy Act 295 of 2008 must become a bipartisan campaign issue in the next state election. Michigan's Clean, Renewable, and Efficient Energy Act 295 of 2008 is nothing more than disguised Leviathan economic tyranny masquerading as a serious environmental solution to a non-existing problem.

***About the Author:** The author is a retired attorney with degrees in law and science. The author has a Bachelor of Science in Pharmacy from Drake University in Des Moines, Iowa, and a Juris Doctorate in Law from John Marshall Law School in Chicago, Illinois.

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