

**CHALLENGING STATE TAXATION OF RENEWABLE ENERGY:
WILL WYOMING BE THE BATTLEGROUND?**

by
Walter Wang*

The push for renewable energies has increased over the last few decades as a result of several state and federal measures, such as the passage of the Public Utilities Regulatory Policy Act, state-mandated goal-setting, and tax credits. Federal tax incentives for wind-generated electricity, however, provide for uncertain investment opportunities due to their on-again off-again nature. In 2010, Wyoming became the first state to impose a tax on wind energy production. The new law allocates the proceeds from the tax between the counties where the turbines are located and the state's general fund. Not surprisingly, wind producers have voiced significant opposition to the tax.

This Essay examines how the Supreme Court has applied the Dormant Commerce Clause to state taxation of natural resources to predict how the Court would rule, if given the opportunity, on Wyoming's wind production tax. The Essay concludes that the law would likely survive such a challenge and explores reasons why such a tax may be necessary to counteract other problems that arise from wind projects.

I.	INTRODUCTION	452
II.	THE WIND OVER WYOMING.....	455
III.	THE DORMANT COMMERCE CLAUSE	457
	A. <i>The Dormant Commerce Clause as Applied to State Taxes</i>	459
	B. <i>Abandoning Old Habits and Creating a Four-Part Test</i>	460
	C. <i>State Taxation of Natural Resources and the Four-Part Test</i>	460
IV.	CHALLENGING WYOMING'S TAX ON WIND ENERGY PRODUCTION.....	463
V.	ALTERNATIVE THEORIES ON THE WYOMING WIND PRODUCTION TAX.....	465
	A. <i>Resolving NIMBY Problems</i>	465
	B. <i>Tax on Economic Rents</i>	467
VI.	CONCLUSION.....	467

* Adjunct Professor of Law at the University of San Diego School of Law. The author thanks Professor John A. Bogdanski for the invitation to present at the forum. The author would also like to thank forum participants for their highly insightful comments.

I. INTRODUCTION

*And those big winds still blow across Wyoming
To old cowboys, it's all they've ever known
How those big winds still blow across Wyoming
From Cheyenne clear to Yellowstone¹*

The power of the wind has been harnessed for various purposes since early recorded history. From powering boats across the water to pumping water and grinding grain, energy from the wind helped build and develop civilization. The first windmill to generate electricity was built in July of 1887 in Scotland by Professor James Blyth.² Blyth erected a 33 foot, cloth-sailed turbine to power the lights in his home.³ The wind turbine operated for 25 years.⁴ He offered to sell the excess electricity to the people of his town to power the lighting down the town's main street, but the town refused.⁵ Blyth's experiment with wind-generated electricity was a novel concept when he developed it, but, since then, it has become one of a number of solutions to reduce the global reliance on fossil fuels and reduce carbon emissions. What Blyth tried to do, in selling the excess electricity back to his town, resembles many modern methods, though now we call it net metering or feed-in tariffs depending on the structure of the sale.

During his time, Blyth was not able to sell his excess electricity because of the perception that electricity was "the work of the devil."⁶ Today, wind projects face a more complex range of issues including land siting, proximity to transmission lines and substations, financing, and local claims often referred to as "not in my backyard" (NIMBY). Once these and other hurdles have been resolved, the electricity from completed wind projects, whether the entire capacity or merely the excess, is welcomed with open arms.

Two key regulatory developments helped spur growth in the wind energy market. First, the early adoption of wind-generated electricity in the late 1970s and early 1980s was spurred, in part, by the passage of the Public Utilities Regulatory Policy Act (PURPA) of 1978.⁷ Under PURPA, electric utilities are required to purchase available electricity from

¹ YONDER MOUNTAIN STRING BAND & BENNY GALLOWAY, *Winds O' Wyoming, on OLD HANDS* (Frog Pad Records 2003).

² *History of Wind Power*, WIND TURBINES NOW, <http://www.windturbinesnow.com/history-wind-power.htm>.

³ *Renewable Energy and Role of Marykirk's James Blyth*, THE COURIER.CO.UK, <http://www.thecourier.co.uk/Community/Heritage-and-History/article/2332/renewable-energy-and-role-of-marykirk-s-james-blyth.html>.

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117.

qualifying cogeneration and small power production facilities.⁸ The other major development was the establishment by various states of a renewable portfolio standard (RPS) or other goal-setting policies. Under an RPS or similar state-mandated goal, electric utilities are required to supply a certain minimum amount of electricity to their customers with electricity from renewable resources. Although not every state has an RPS or similar goal, a growing number of states have enacted such policies. As of September 2010, 29 states, plus the District of Columbia and Puerto Rico, have an RPS, while seven states have adopted a goal.⁹ The minimum amount and the target date vary from state to state, however.¹⁰

Regulatory power has not been the only channel utilized by the government, both federal and state, to stimulate the investment in and use of energy from renewable sources such as wind and solar. Financial incentives such as tax credits or government subsidies are used to bring the cost of renewable energy down to levels that are comparable to more traditional forms of energy such as coal. Since 1992, the federal government has provided an income tax credit for “electricity produced by the taxpayer from qualified energy resources,”¹¹ including electricity generated from wind.¹² This production tax credit (PTC) can be claimed for ten years beginning on the date the facility was originally placed into service.¹³ The credit rate is adjusted annually for inflation and currently

⁸ 16 U.S.C. § 824a-3(a) (2006); 18 C.F.R. § 292.303(a) (2010).

⁹ *RPS Policies Map*, DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY, http://www.dsireusa.org/documents/summarymaps/RPS_map.pptx.

¹⁰ In California, the RPS was originally adopted in 2002 with the passage of Senate Bill 1078, which required electric utilities to increase total procurement of renewable energy by 1% annually such that 20% of its retail sales are procured by renewable energy by December 31, 2017. S.B. 1078, 2002 Leg., Reg. Sess. (Cal. 2002). In 2006, Senate Bill 107 accelerated the 20% goal to December 31, 2010. S.B. 107, 2006 Leg., Reg. Sess. (Cal. 2006). Governor Arnold Schwarzenegger, by executive order, directed the California Air Resources Board to develop regulations to implement a 33% RPS under authority that the Air Resources Board has under Assembly Bill 32, California’s Global Warming Solutions Act. Cal. Exec. Order No. S-14-08 (Nov. 17, 2008), *available at* <http://gov.ca.gov/executive-order/11072/>; California Global Warming Solutions Act of 2006, CAL. HEALTH & SAFETY CODE §§ 38550–38599 (West Supp. 2010). Compare the time-line and minimum amounts to Oregon’s renewable portfolio standard established by Senate Bill 838 in 2007, which set a target of 25% by 2025 for certain large utilities and between 5% and 10% for certain small utilities depending on sales. S.B. 838, 74th Leg. Assemb., Reg. Sess., 2007 Or. Laws 843.

¹¹ I.R.C. § 45(a)(2)(A)(i) (West 2010) (statutory structure omitted).

¹² *Id.* § 45(c)(1)(A). *See also* Energy Tax Act of 1978, Pub. L. No. 95-618, 92 Stat. 3174 (codified as amended in scattered sections of 26 U.S.C.); Jeffrey S. Hinman, *The Green Economic Recovery: Wind Energy Tax Policy After Financial Crisis and the American Recovery and Reinvestment Tax Act of 2009*, 24 J. ENVTL. L. & LITIG. 35, 48–49 (2009) (discussing the Energy Tax Act of 1978, which provided tax incentives for investment in renewable energy technology).

¹³ I.R.C. § 45(a)(2)(A)(ii).

stands at 2.2 cents per kilowatt hour.¹⁴ Like many other tax credits contained within the Internal Revenue Code, the PTC has expired on numerous occasions only to be extended retroactively. This on-again off-again applicability has created periods of robust investment and periods of minimal growth.¹⁵ The current PTC provision for wind expires at the end of 2012.¹⁶ Taxpayers who place into service qualifying small wind energy property are eligible for a 30% federal investment tax credit.¹⁷ Wind energy facilities that qualify for the PTC may elect to claim the investment tax credit for taxable years 2009 to 2012.¹⁸ In addition to the tax credits that may be claimed, investors in wind energy producing equipment are also eligible to claim accelerated depreciation allowances on such equipment.¹⁹

States have provided for various types of incentives for wind energy. Hawaii, for example, provides a state tax credit in the amount of the lesser of 20% of the actual cost or \$500,000 for commercial wind installations.²⁰ By comparison, California has moved away from income tax credits in favor of utility incentives for self-generation equipment only. For wind turbines that are between 30 kilowatts and five megawatts, the incentive offered is \$1.50 per watt up to a one megawatt limit.²¹

As the 2012 deadline for the federal PTC creeps closer and closer, it is likely that members of Congress will feel pressure from industry groups such as the American Wind Energy Association to extend the credit. Meanwhile, states continue to provide more tax and other financial incentives to encourage the implementation of wind energy. Why, amidst regulatory changes and stimulus, would Wyoming become the lone wolf and impose a production tax on wind energy? What effect will this have on the growth of the wind industry in Wyoming? More importantly, and the focus of this Essay, can the Wyoming statute be challenged on constitutional grounds?

¹⁴ I.R.S. Notice 2010-37, 2010-18 I.R.B. 654, available at <http://www.irs.gov/pub/irs-irbs/irb10-18.pdf>.

¹⁵ Martin A. Sullivan, *Wind Credits and Clean Air*, TAX NOTES, Oct. 20, 2006, at 405, 414 fig. 4.

¹⁶ I.R.C. § 45(d)(1).

¹⁷ *Id.* § 48(a)(2).

¹⁸ *Id.* § 48(a)(5). Also see section 48(d) of the I.R.C., which addresses the election of a grant in lieu of the tax credit pursuant to section 1603 of the American Recovery and Reinvestment Act of 2009. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 1603, 123 Stat. 11, 364-66.

¹⁹ I.R.C. § 168(e)(3)(B)(vi) (2006).

²⁰ HAW. REV. STAT. §§ 235-12.5(a)(2), (b)(3)(C) (Supp. 2009).

²¹ S. CAL. EDISON ET AL., SELF GENERATION INCENTIVE PROGRAM HANDBOOK 22 (2010), available at http://www.sce.com/NR/rdonlyres/771A067D-79A2-4F33-88B2-D584CAEF199D/0/2010_SGIPHandbook.pdf.

II. THE WIND OVER WYOMING

In many ways, the lyrics to *Winds O' Wyoming* ring true.²² Wyoming is ranked seventh in the nation in terms of wind energy potential and thirteenth in existing (installed) wind capacity.²³ Currently, Wyoming has the capacity to produce 1,101 megawatts of power per year.²⁴ According to the Western Electricity Coordinating Council, Wyoming could produce nearly 139,000 megawatts of power from wind.²⁵ When taking into account cost and regulatory issues, environmentally sensitive lands, culturally significant lands, and other factors, the estimate looks more like 15,000 megawatts.²⁶ Wyoming is a net exporter of energy, so much of the growth in wind-generated electricity could be sold to energy markets in California, Arizona, and Nevada, which have renewable portfolio standards.²⁷

Wyoming became the first state to impose a tax on wind energy production on March 5, 2010, when Governor Dave Freudenthal signed House Bill 101 into law.²⁸ The bill, originally introduced in February 2010,²⁹ proposed an excise tax “upon the privilege of producing electricity from wind resources” in Wyoming.³⁰ As enacted, the tax rate is set at one dollar per megawatt-hour of electricity produced from wind resources for sale or trade on or after January 1, 2012.³¹ The electricity production will not be taxed until three years after the turbine first

²² YONDER MOUNTAIN STRING BAND & GALLOWAY, *supra* note 1.

²³ U.S. Wind Energy Projects—Wyoming, AM. WIND ENERGY ASS'N, <http://archive.awea.org/projects/Projects.aspx?s=Wyoming>.

²⁴ *Id.*

²⁵ Tom Morton, *Wyoming's Wind Potential Seen as Huge*, THE BILLINGS GAZETTE, Aug. 27, 2009, available at http://billingsgazette.com/news/state-and-regional/wyoming/article_c8bf0160-92bc-11de-8d79-001cc4c002e0.html. But the U.S. Department of Energy, through its Wind Powering America initiative and together with the National Renewable Energy Laboratory, has published a new wind resource map showing a capacity of 552,072 megawatts, with gross capacity at 30% and wind speed at a height of 80 meters. *Estimates of Windy Land Area and Wind Energy Potential by State for Areas >= 30% Capacity Factor at 80m*, WIND POWERING AM., http://www.windpoweringamerica.gov/docs/wind_potential_80m_30percent.xls. The difference between these two estimates of potential power in Wyoming reflects the fact that these values are dependent on several variables such as turbine density and height. It is the author's opinion that the parameters used in the U.S. Department of Energy estimate are overly optimistic and therefore less realistic.

²⁶ Morton, *supra* note 25.

²⁷ Henry Sweets, *Cashing in on Wyoming Wind*, PLANET JH WEEKLY, Aug. 13, 2008, available at http://www.planetjh.com/news/A_104040.aspx (citing a study conducted by London-based National Grid and Energy Strategies).

²⁸ BILL JOURNAL DIGEST, H.B. 101, 60th Leg. (Wyo. 2010), <http://legisweb.state.wy.us/2010/Digest/HB0101.htm>.

²⁹ *Id.*

³⁰ H.B. 101, 60th Leg. § 1 (Wyo. 2010).

³¹ WYO. STAT. ANN. §§ 39-22-103 to -104 (2010).

produces electricity for sale.³² Sixty percent of the proceeds from the tax will be distributed to the counties where the wind turbines are located and will be allocated based on the percentage of the assessed value of the wind facilities within the county compared to the total value state-wide.³³ The remaining 40% of revenue will be deposited in the state's general fund.³⁴

The tax faces significant opposition from groups such as the Wyoming Power Producers Coalition ("Coalition"), which represents 15 wind development companies.³⁵ The Coalition claims that, assuming all pending taxes take effect, Wyoming will have the highest taxes on wind energy among Rocky Mountain states.³⁶ Based on the models generated by the Coalition, a 99 megawatt wind project would pay 37% more in taxes.³⁷ However, supporters of the law and similar bills before it argue that wind development creates costs for government, including road maintenance, emergency services, and preservation of various forms of wild-life whose habitats may overlap with the development of utility-scale wind farms.³⁸

Under the original proposal, the tax was to be imposed at a rate of three dollars per megawatt-hour of electricity produced by wind power.³⁹ Additionally, the distribution of the revenue, as originally proposed, was 60% for the state's general fund and 40% to the counties.⁴⁰ As originally proposed, the tax was estimated to generate \$14.7 million in revenue.⁴¹ Based on a revised calculation, using the one dollar tax rate and revised rated capacity figures obtained from the American Wind Energy

³² *Id.* § 39-22-105(b).

³³ *Id.* § 39-22-111(a)(i).

³⁴ *Id.* § 39-22-111(a)(ii).

³⁵ Matt Joyce, *Talk of Wyoming Wind Tax Whips Up Debate*, SEATTLE TIMES (Nov. 16, 2009), http://seattletimes.nwsourc.com/html/business/technology/2010281911_apustaxingwind.html [hereinafter Joyce, *Talk of Wyoming*].

³⁶ Matt Joyce, *Industry Says Wyoming Wind Taxes Tops in Rockies*, TRIB.COM (June 23, 2010), http://trib.com/news/state-and-regional/article_ce268fb0-7cc7-5ced-a200-6c56444a8c79.html [hereinafter Joyce, *Industry Says*]. See also WYO. POWER PRODUCERS COAL., WIND TAXES: STATE BY STATE COMPARISON IN THE ROCKY MOUNTAINS, <http://www.wyopowerproducers.org/wp-content/uploads/2011/02/State-by-State-Comparison-6-15-10.pdf>. The report includes property taxes and sales taxes—the exemption of which is to expire January 1, 2012—in addition to the wind production excise tax. See also Joyce, *Industry Says*, *supra* note 36.

³⁷ Joyce, *Industry Says*, *supra* note 36.

³⁸ Joyce, *Talk of Wyoming*, *supra* note 35.

³⁹ H.B. 101, 60th Leg. § 1 (Wyo. 2010).

⁴⁰ *Id.*

⁴¹ Dan Noble, Dep't of Revenue, *Fiscal Note on HB0101: Electricity Generated From Wind-Taxation* (2010), <http://legisweb.state.wy.us/2010/Fiscal/HB0101.htm>. This estimate was determined by multiplying the rated capacity by 8,760 hours per year. The resulting number was then adjusted by a capacity factor of 40%, thus establishing the annual estimate of production of electricity from wind turbines located in Wyoming. The annual estimate was then multiplied by the tax rate to arrive at the estimated revenue. *Id.*

Association, the wind energy production tax is estimated to generate \$4.9 million in revenue in 2012.⁴² It should be noted, for purposes of comparison, that the Wyoming wind tax is determined at the megawatt-hour level while the federal production tax credit is determined at the kilowatt hour level.⁴³ Thus, in economic terms, the Wyoming wind tax is nominal when compared with the federal production tax credit. It is unlikely that the Wyoming wind tax will have a material effect on the time-line for the project investor of a wind farm to obtain the agreed-upon after-tax internal rate of return on their investment.⁴⁴

III. THE DORMANT COMMERCE CLAUSE

Under the Constitution, Congress has the power to regulate commerce “among the several States.”⁴⁵ The “dormant” aspect of the Commerce Clause lies in the fact that the Commerce Clause extends not only to positive laws enacted by Congress but also to state and local governments, which may not pass laws that place an undue burden on interstate commerce.⁴⁶ Thus, even in areas where Congress has not acted (i.e., Congress is silent or dormant), states are prohibited from enacting laws that place an undue burden on interstate commerce. The Dormant Commerce Clause has enjoyed a long history of interpretation in the courts, originating with *Gibbons v. Ogden*.⁴⁷ That case involved a monopoly granted by the state of New York to two individuals to operate a

⁴² According to the American Wind Energy Association, Wyoming has an existing power capacity of 1,101.06 megawatts and 311.2 megawatts under construction. *U.S. Wind Energy Projects—Wyoming*, AM. WIND ENERGY ASS'N, <http://archive.awea.org/projects/projects.aspx?s=Wyoming>. In arriving at the estimated revenue, it was assumed that the 311.2 megawatts under construction would be in operation before 2012 and would not otherwise qualify for any exemptions established pursuant to HB 101.

⁴³ Compare I.R.C. § 45 (West 2010), with WYO. STAT. ANN. § 39-22-104 (2010).

⁴⁴ An investment's internal rate of return is the “discount rate that equates the present value of the expected cash outflows with the present value of the expected inflows.” RONALD J. GILSON & BERNARD S. BLACK, *THE LAW AND FINANCE OF CORPORATE ACQUISITIONS* 73 (2d ed. 1995). In other words, the internal rate of return is the rate of discount that makes the present value equal to zero. RICHARD A. BREALEY, STEWART MYERS & FRANKLIN ALLEN, *PRINCIPLES OF CORPORATE FINANCE* 122 (9th ed. 2007). See also Rev. Proc. 2007-65, 2007-45 I.R.B. 967, available at <http://www.irs.gov/pub/irs-irbs/irb07-45.pdf> (detailing a safe harbor for wind farm partnerships), revised by I.R.S. Announcement 2009-69, 2009-40 I.R.B. 475, available at <http://www.irs.gov/pub/irs-irbs/irb09-40.pdf>.

⁴⁵ U.S. CONST. art. I, § 8, cl. 3.

⁴⁶ Trevor D. Stiles, *Renewable Resources and the Dormant Commerce Clause*, 4 ENVTL. & ENERGY L. & POL'Y J. 34, 58 (2009) (citing ERWIN CHEMERINSKY, *CONSTITUTIONAL LAW: PRINCIPLES & POLICIES* 419 (3d ed. 2006)).

⁴⁷ 22 U.S. (9 Wheat.) 1 (1824).

steamboat in New York waters.⁴⁸ The defendant had acquired a federal license, which permitted him to travel on U.S. waterways, thus presumably giving him the right to travel on New York waterways despite the monopoly granted by the state.⁴⁹ Although the Court decided in favor of the defendant on federal preemption grounds,⁵⁰ the Court did address the Dormant Commerce Clause. The Court determined that the Commerce Clause expressly placed the power to regulate interstate commerce in the hands of the federal government.⁵¹ In so doing, the Court drew a distinction between state police powers and state regulations affecting interstate commerce—the former of which would be valid, and the latter, invalid.⁵²

Today, the Court has a different, albeit somewhat complex, method for determining whether a state law violates the Dormant Commerce Clause. Where a law “overtly blocks the flow of interstate commerce at a State’s borders,” then that law would be found *per se* invalid.⁵³ Such laws speak of economic isolation and protectionism.⁵⁴ However, where a state statute does not discriminate against interstate commerce—meaning the statute “regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental”—the statute will be upheld unless the burden imposed on commerce “is clearly excessive in relation to the . . . local benefits.”⁵⁵ This approach balances the benefits and burdens of the statute at issue. As such, the Court will examine the local interests involved and the extent that the state statute burdens interstate commerce.⁵⁶ The Court will also examine

⁴⁸ *Id.* at 1–2; Craig B. Fields & Michael W. McLoughlin, *An Analysis of the Historical Development of the Dormant Commerce Clause in State Tax Cases*, 2007 ST. & LOC. TAX L. 39, 41.

⁴⁹ *Gibbons*, 22 U.S. (9 Wheat.) at 2; Fields & McLoughlin, *supra* note 48, at 41.

⁵⁰ *Gibbons*, 22 U.S. (9 Wheat.) at 239–40; Fields & McLoughlin, *supra* note 48, at 41.

⁵¹ *Gibbons*, 22 U.S. (9 Wheat.) at 197; Fields & McLoughlin, *supra* note 48, at 41.

⁵² *Gibbons*, 22 U.S. (9 Wheat.) at 209–10; Fields & McLoughlin, *supra* note 48, at 41.

⁵³ *City of Philadelphia v. New Jersey*, 437 U.S. 617, 624 (1978).

⁵⁴ *Id.* at 623–24. *See also* *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269 (1988). In *New Energy Co. of Indiana v. Limbach*, the Court struck down an Ohio statute which granted a tax credit against the Ohio vehicle fuel sales tax for each gallon of ethanol sold by fuel dealers, but only if the ethanol was produced in Ohio or in a state that granted a similar tax advantage to ethanol produced in Ohio. *Id.* at 271, 280. In a unanimous decision, Justice Scalia, writing for the court, noted that “[i]t could not be clearer that health is not a purpose of the provision, but is merely an occasional and accidental effect of achieving what is its purpose, favorable tax treatment for *Ohio*-produced ethanol.” *Id.* at 279. *See also* *Maryland v. Louisiana*, 451 U.S. 725, 756 (1981) (holding that a “Louisiana First-Use Tax unquestionably discriminates against interstate commerce in favor of local interests as the necessary result of various tax credits and exclusions”).

⁵⁵ *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

⁵⁶ *Id.*

whether the local interest can be promoted with a less restrictive law.⁵⁷ Thus, where a less discriminatory means is available to accomplish a state's legitimate purpose, the law at issue may be afforded less deference and ultimately struck down.

A. *The Dormant Commerce Clause as Applied to State Taxes*

While the balancing test enumerated in *Pike v. Bruce Church, Inc.* applies to states in general, a wholly different test has been developed to determine whether a state tax statute violates the Dormant Commerce Clause. Here too, the modern rules have come about as a result of evolution within the courts. More than a century ago, the Court held that a tax affecting interstate or foreign commerce constituted a regulation of that commerce⁵⁸ and that such regulation would necessarily violate the Dormant Commerce Clause.⁵⁹ While these holdings appear to all but bar state taxation of interstate commerce, the Court shortly thereafter declared in *State Tax on Railway Gross Receipts*⁶⁰ that, even though a gross receipts tax might affect interstate commerce, it did not constitute a regulation of interstate commerce since it was a tax on business and not on the commerce itself.⁶¹ Adding more confusion to the debate over whether a state tax violated the Dormant Commerce Clause, the Court later adopted the position that some activities may be so intrinsic to their place of origin that they are "local incidents" of such business.⁶² Thus, a state statute would not violate the Dormant Commerce Clause if it was directed at activities that preceded interstate commerce and were not yet within the stream of commerce.⁶³ This created confusion amongst the courts in distinguishing a local incident from a nonlocal incident and resulted in arbitrary classifications often "favoring form over substance" with respect to the Dormant Commerce Clause.⁶⁴ In 1938, the Court created more uncertainty and confusion by ruling in *Western Live Stock v.*

⁵⁷ *Id.*

⁵⁸ See *Woodruff v. Parham*, 75 U.S. (8 Wall.) 123, 138 (1868) (discussing the holding of *Almy v. California*, 65 U.S. (24 How.) 169 (1861)).

⁵⁹ *Reading R.R. Co. v. Pennsylvania (Case of the State Freight Tax)*, 82 U.S. (15 Wall.) 232, 281–82 (1872).

⁶⁰ *Reading R.R., Co. v. Pennsylvania (State Tax on Ry. Gross Receipts)*, 82 U.S. (15 Wall.) 284 (1872).

⁶¹ *Id.* at 295–96; Fields & McLoughlin, *supra* note 48, at 42.

⁶² See, e.g., *Memphis Natural Gas Co. v. Stone*, 335 U.S. 80, 86–87, 96 (1948); see also Michael B. Browde & Charles T. DuMars, *State Taxation of Natural Resource Extraction and the Commerce Clause: Federalism's Modern Frontier*, 60 OR. L. REV. 7, 34 (1981); S. Michael Gray, *Can State Regulation of Renewable Electricity Achieve Discriminatory Effects on Interstate Trade Without Triggering the Dormant Commerce Clause?*, 44 S. TEX. L. REV. 783, 786 (2003).

⁶³ Gray, *supra* note 62, at 786.

⁶⁴ R. Douglas Harmon, Note, *Judicial Review Under Complete Auto Transit: When is a State Tax on Energy-Producing Resources "Fairly Related"?*, 1982 DUKE L.J. 682, 685 & n.24 (1982) (citing *Postal Tel.-Cable Co. v. City of Richmond*, 249 U.S. 252 (1919)).

*Bureau of Revenue*⁶⁵ that the Commerce Clause does not “relieve those engaged in interstate commerce from their just share of state tax burden even though it increases the cost of doing business.”⁶⁶ The Court emphasized that “[e]ven interstate business must pay its way.”⁶⁷ The Court in *Western Live Stock* added an additional layer of analysis by noting that a tax may be valid if it does not create the risk of multiple taxation.⁶⁸

B. Abandoning Old Habits and Creating a Four-Part Test

The Court in *Complete Auto Transit, Inc. v. Brady*,⁶⁹ recognizing the years of confusion, rejected the form-over-substance treatment and articulated a four-part test under which a state tax statute would be valid under the Commerce Clause. Under the four-part test, a tax would be sustained against a Commerce Clause challenge if (1) it “is applied to an activity with a substantial nexus with the taxing State”; (2) it is “fairly apportioned”; (3) it “does not discriminate against interstate commerce”; and (4) it is “fairly related to the services provided by the State.”⁷⁰ *Complete Auto Transit* involved a Michigan corporation engaged in the business of transporting cars by motor carrier for General Motors to dealers across the country, including Mississippi.⁷¹ The Court upheld a Mississippi sales tax, though characterized as a “privilege tax,” for the privilege of doing business in the state and applied to persons operating a transportation business between points within the state.⁷² The Mississippi tax was upheld as there was no claim that the tax had violated any of the four parts the Court had identified.⁷³

C. State Taxation of Natural Resources and the Four-Part Test

The four-part test set forth in *Complete Auto Transit* has withstood the test of time. Numerous forms of taxes have been analyzed under the test, including sales and use taxes, dividend taxes, and formulary apportionment of income. More germane to this discussion, though, is the analysis of state severance taxes.⁷⁴ Here, no case stands out more than *Commonwealth Edison Co. v. Montana*.⁷⁵ In *Commonwealth Edison*, the Court

⁶⁵ 303 U.S. 250 (1938).

⁶⁶ *Id.* at 254.

⁶⁷ *Id.* (quoting *Postal Tel.-Cable Co.*, 249 U.S. at 259).

⁶⁸ *Id.* at 260.

⁶⁹ 430 U.S. 274 (1977).

⁷⁰ *Id.* at 279.

⁷¹ *Id.* at 276.

⁷² *Id.* at 274–75, 289.

⁷³ *See id.* at 288–89.

⁷⁴ *See* Carol L. Powers, *State Taxation of Energy Resources: Affirmation of Commonwealth Edison Company v. Montana*, 10 B.C. ENVTL. AFF. L. REV. 503, 533 (1982) (defining a severance tax as a “payment for the privilege of severing natural resources from the soil or water”).

⁷⁵ 453 U.S. 609 (1981).

had to determine whether a Montana severance tax on mineral production in the state violated the Commerce Clause.⁷⁶ Montana had imposed a severance tax on coal mines since 1921.⁷⁷ As a result of the 1973 OPEC oil embargo, the nation's huge coal reserves took center stage.⁷⁸ Recognizing the impact and the demands that would be placed on Montana as a result of this renewed interest in coal, the state revised its severance tax structure.⁷⁹ In restructuring the tax, the objectives were: (1) to "preserve or modestly increase revenues going to the [state's] general fund"; (2) to address "current social impacts attributable to coal development"; and (3) to "invest in the future" when new technology may reduce mining activities.⁸⁰ The severance tax was "levied at varying rates depending on the value, energy content, and method of extraction of the coal."⁸¹ At most, the amount of the tax could equal 30% of the "contract sales price."⁸²

The appellants argued that the Montana Supreme Court did not apply the correct analysis in determining whether a challenged tax substantially affected interstate commerce.⁸³ The Montana Supreme Court applied the mechanical approach by analyzing whether the state tax was levied on goods prior to their entry into interstate commerce.⁸⁴ The Court concluded that the Montana Supreme Court applied the wrong analysis in light of recent decisions and that a more "practical" analysis (i.e., the *Complete Auto Transit* four-part test) should be used.⁸⁵ The first two parts of the *Complete Auto Transit* test were not challenged, but the Court addressed each point briefly. On whether there was substantial nexus to Montana, the Court merely quoted the Montana Supreme Court in saying that "there can be no argument here that a substantial, in fact, the only nexus of the severance of coal is established

⁷⁶ *Id.* at 612.

⁷⁷ *Id.*

⁷⁸ Powers, *supra* note 74, at 508.

⁷⁹ *Id.* at 508–09.

⁸⁰ *Id.* at 509 (quoting REPORT OF THE MONTANA FREE JOINT CONFERENCE COMMS. ON COAL TAXATION I (1975)); see also *Commonwealth Edison Co.*, 453 U.S. at 648 n.13 (Blackmun, J., dissenting).

⁸¹ *Commonwealth Edison Co.*, 453 U.S. at 613 (citing MONT. CODE ANN. § 15-35-103 (1979)). See also Powers, *supra* note 74, at 510 (noting that "[t]he rate of the tax is progressive, increasing with the increased BTU output of each pound of coal. The rate varies based on whether an underground mining or surface mining procedure is used, ranging from 3 to 4 percent of the value of underground mined coal to 20 to 30 percent of the value of surface mined coal" (footnote omitted)).

⁸² *Commonwealth Edison Co.*, 453 U.S. at 613 (quoting MONT. CODE ANN. § 15-35-103).

⁸³ *Id.* at 613–14. The appellants were four Montana coal producers and 11 out-of-state utility companies. *Id.* at 613.

⁸⁴ *Id.* at 613–14.

⁸⁵ *Id.* at 616–17.

in Montana.”⁸⁶ With regards to whether the severance tax was fairly apportioned, the Court noted that the severance could not have occurred in another state and that “no other state” could tax the severance.⁸⁷

While the Court dispensed with the first two parts summarily since they were not challenged, the Court spent a significant amount of time analyzing the third and fourth parts of the *Complete Auto Transit* test. The appellants claimed that the severance tax discriminated against interstate commerce because a vast majority of the coal was shipped to other states and thus the tax burden was borne by citizens of other states.⁸⁸ In refuting this claim, the Court stated that there was no real discrimination in the case because the severance tax did not distinguish between in-state and out-of-state consumers.⁸⁹ Moreover, the tax was levied on all coal extracted in the state irrespective of final destination.⁹⁰ Although the appellants contended that the severance tax was discriminatory because it was primarily borne by out-of-state residents, the Court was not convinced, noting that the Commerce Clause does not give “residents of one State the right to control in this fashion the terms of resource development and depletion in a sister State.”⁹¹

Appellants claimed that the severance tax was not fairly related to the services provided by the state, thus violating the fourth part under *Complete Auto Transit*. Although the appellants conceded that Montana may impose a severance tax, the appellants argued that they were entitled to an opportunity to prove that the amount collected was not fairly related to the additional costs that Montana incurred due to coal mining.⁹² In rejecting this claim, the Court reiterated that states have considerable leeway in imposing general revenue taxes and that “[t]he exploitation by [out-of-state corporations] of intrastate opportunities under the protection and encouragement of local government offers a basis for taxation as unrestricted as that for domestic corporations.”⁹³ Foreign companies’ just share of the tax burden includes the cost of police, fire, a trained work force, and a civilized society.⁹⁴ In its analysis, the Court noted that the fourth part is closely related to the first part with one additional limitation, that the measure of the tax be reasonably

⁸⁶ *Id.* at 617 (quoting *Commonwealth Edison Co. v. State*, 615 P.2d 847, 855 (Mont. 1980)).

⁸⁷ *Id.* (quoting *Commonwealth Edison Co.*, 615 P.2d at 855).

⁸⁸ *Id.* at 617–18.

⁸⁹ *Id.* at 619.

⁹⁰ *Id.* at 618.

⁹¹ *Id.* at 619.

⁹² *Id.* at 620.

⁹³ *Id.* at 623 (quoting *Ford Motor Co. v. Beauchamp*, 308 U.S. 331, 334–35 (1939)).

⁹⁴ *Id.* at 624 (quoting *Exxon Corp. v. Dep’t. of Revenue*, 447 U.S. 207, 228 (1980); *W. Live Stock v. Bureau of Revenue*, 303 U.S. 250, 254 (1938)).

related to the extent of the contact.⁹⁵ On this point, the Court concluded that because the measure of the tax was a percentage of the value of the coal mined, the tax was in proper proportion to the activities conducted within the state.⁹⁶ The Court rejected the argument that a factual inquiry needed to be made and instead deferred to the state legislature, stating that questions about the appropriate level of taxes is best left to the political process.⁹⁷

IV. CHALLENGING WYOMING'S TAX ON WIND ENERGY PRODUCTION

It is clear from the ruling in *Commonwealth Edison* that the Court will not overrule a state severance tax on natural resources. While this may apply to any number of natural resources such as coal, natural gas, and oil, could the same be said of renewable resources such as wind and solar? The big difference in this case is that wind and solar are largely perpetual, unless and until there is a major shift in climate and weather patterns. Once substances such as coal and oil have been extracted, that amount is subtracted from the amount of available reserves. Renewable resources do not face the same issue. The issues surrounding renewable resources tend to be an eventual degradation of equipment leading to a reduction in performance over a period of years.⁹⁸ Despite this major difference, states rich in renewable resources and states rich in natural resources do share something in common: They both tend to export a majority of their resources to other states.⁹⁹

How would Wyoming's wind production tax statute be evaluated under *Commonwealth Edison*? First, is the Wyoming tax applied to an activity with a substantial nexus to Wyoming? There can be no doubt that nexus is satisfied here. The tax is levied on production from wind turbines located in Wyoming only. The wind blows over the state and spins the wind turbines which are located in the state. Therefore, it cannot be concluded that nexus would not be satisfied in this instance.

⁹⁵ *Id.* at 626.

⁹⁶ *Id.*

⁹⁷ *Id.* at 628.

⁹⁸ See R.P.L. Nijssen, *Fatigue Life Prediction and Strength Degradation of Wind Turbine Rotor Blade Composites* (Nov. 27, 2006) (unpublished Ph.D. dissertation, Delft University of Technology), available at repository.tudelft.nl/assets/uuid:e33139ca.../ae_nijssen_20061127S.pdf; C.R. OSTERWALD, NAT'L RENEWABLE ENERGY LAB., *MODULE AND ARRAY TESTING AT THE OUTDOOR TEST FACILITY* (2007), available at http://www1.eere.energy.gov/solar/review_meeting/pdfs/exp_5_osterwald_nrel.pdf.

⁹⁹ See Ashley C. Brown & Jim Rossi, *Siting Transmission Lines in a Changed Milieu: Evolving Notions of the "Public Interest" in Balancing State and Regional Considerations*, 81 U. COLO. L. REV. 705, 711 (2010); Walter Hellerstein, *Political Perspectives on State and Local Taxation of Natural Resources*, 19 GA. L. REV. 31, 49–50 (1984).

Next, we turn to whether the tax is fairly apportioned. The analysis here looks to whether there is the potential for multiple taxation.¹⁰⁰ The electricity generated from the wind turbines is generated in Wyoming. No other state could possibly tax the electricity generation. If every state passed a similar law, there would be no risk of multiple taxation since each state would be taxing production of wind-generated electricity within its own borders. Even if, in the case of a Wyoming wind producer and a California purchaser, states in between charged a fee for the use of the transmission lines, such fees would not give rise to multiple taxation if examined in connection with the Wyoming tax.¹⁰¹

Turning to the third part of the analysis, the Wyoming tax must not discriminate against interstate commerce. The Wyoming tax is assessed on how much production occurs irrespective of whether such power is used within the state or outside the state. The point could be raised that the vast majority of the power is to be transmitted out of state, thus the burden of the tax falls disproportionately on out-of-state users. However, the Court could likely conclude, as it did in *Commonwealth Edison*, that the Commerce Clause does not give out-of-state residents the right to dictate policies of resource development in another state.¹⁰²

The fourth part of the analysis looks to whether the Wyoming production tax is fairly related to the services provided by the state. It is under this part of the test that a wind producer could argue that the production tax is not fairly related to the services because, unlike a severance tax on coal or oil, the amount of resource reserves does not change. Walter Hellerstein once noted that “[d]efenders of producing states’ severance tax policies constantly remind us that their resources are a ‘one time harvest,’ which, when mined, will be lost forever.”¹⁰³ While it is true that resource depletion may no longer be an issue, the state may have to allocate its expenditures in a different manner. For example, the state may have to use funds to train a green-collar workforce to be able to provide the necessary installation and maintenance services that wind production entails. In addition, the state may have to expend a certain amount of funds to review and assist in the development of new

¹⁰⁰ See *Container Corp. of Am. v. Franchise Tax Bd.*, 463 U.S. 159, 169–70 (1983) (where the Court required that a tax be both internally and externally consistent). Because the tax in *Container Corp.* involved a state franchise tax using the unitary business principle and a three-factor formulary apportionment, external consistency, which requires that “the apportionment formula must actually reflect a reasonable sense of how income is generated,” needed to be satisfied. *Id.* See also *Fields & McLoughlin*, *supra* note 48, at 48. However, it is unlikely that the external consistency test would be required here as the Wyoming wind production tax is not an income tax or similar tax which may include income from activities in other states.

¹⁰¹ See *Shell Oil Co. v. City of Santa Monica*, 830 F.2d 1052, 1059–60 (9th Cir. 1987). However, the user fee itself may be subject to commerce clause claims.

¹⁰² *Commonwealth Edison Co. v. Montana*, 453 U.S. 609, 619 (1981).

¹⁰³ Hellerstein, *supra* note 99, at 45 (footnote omitted) (quoting Arthur A. Link, *Political Constraint and North Dakota’s Coal Severance Tax*, 31 NAT’L TAX J. 263, 264 (1978)).

transmission lines and substations to handle the electricity generated from the wind turbines, which are often located in remote territories where transmission lines and substations do not currently exist.¹⁰⁴ These expenditures may be immediate expenditures compared with a rainy day fund to re-train workers once natural resources have been depleted. Thus, the issue becomes one based on the timing of state expenditures, as the actual amount may be the same. The wind producer could also argue that the tax rate is not proportional to the services provided. Under this argument, the wind producer could argue that the tax rate of one dollar is somewhat arbitrary and does not depend on factors other than production. The wind producer will lose here too. Similar to *Commonwealth Edison*, the Court could hold that the taxpayer should pay its fair share and then defer to the state legislature to determine what the appropriate incidence of the tax should be. As noted earlier, supporters of the Wyoming tax have claimed that wind development carries its fair share of costs, such as roads, emergency services, and environmental and wildlife impact.¹⁰⁵ This claim by supporters of the tax is likely to be seen as fair given prior holdings of the Court. Moreover, the Court is unlikely to be tempted into crafting a test to determine whether a certain rate is fairly related to the services provided given its opinion in *Commonwealth Edison*.¹⁰⁶

V. ALTERNATIVE THEORIES ON THE WYOMING WIND PRODUCTION TAX

It remains to be seen whether the Wyoming wind production tax will actually be challenged under the Dormant Commerce Clause. Despite the potential for a constitutional challenge, the tax may be considered a necessary evil under two separate theories.

A. Resolving NIMBY Problems

The siting and development of wind projects often give rise to problems commonly referred to as “not in my backyard” problems, or NIMBY for short. Projects which generate NIMBY problems can be defined as “socially desirable land use that broadly distributes benefits, yet is difficult or impossible to implement because of local opposition”

¹⁰⁴ See Brown & Rossi, *supra* note 99, at 737–38 (noting that oil baron T. Boone Pickens “highlighted the need to build massive transmission infrastructure to allow development of new wind turbine fields in Texas as, without such infrastructure, generating facilities are isolated and unable to reach customers”).

¹⁰⁵ Joyce, *Talk of Wyoming*, *supra* note 35.

¹⁰⁶ *Commonwealth Edison Co.*, 453 U.S. at 628 (noting that “it is doubtful whether any legal test could adequately reflect the numerous and competing economic, geographic, demographic, social, and political considerations that must inform a decision about an acceptable rate or level of state taxation, and yet be reasonably capable of application in a wide variety of individual cases”).

and “inequalities in distribution.”¹⁰⁷ Such projects often generate an overall increase in the “social surplus,” but the benefits are enjoyed amongst a broad spectrum of the population while the costs and risks are borne by a “small group of residents in the host community.”¹⁰⁸ Wind projects sited in Wyoming are no different in this respect. Most of the wind-generated electricity would be exported to other states to be enjoyed by the greater public while Wyoming residents must bear the costs and risks associated with the project. Common NIMBY claims regarding wind projects include loss of property values, aesthetics, noise, light flicker, ice throws, and the negative impact to birds and bats.¹⁰⁹ In some instances, towns have gone so far as to declare a moratorium on wind project development until comprehensive zoning regulations can be adopted.¹¹⁰

Although project developers may see the Wyoming wind tax as an impediment, those affected by the wind turbines and not directly compensated by project developers could view the tax as a method of indirect compensation to the towns and counties which bear the costs and risks of the wind projects. In light of such compensation, residents may be less willing to block such projects. Indeed, the structure of how the monies collected from the wind production tax closely aligns with this view since the amount allocated to the counties depends on the number of wind turbines located in a county compared to the total statewide.¹¹¹ While Wyoming is the first state to implement such a tax, financial remuneration has been utilized by developers to compensate landowners who do not necessarily have a wind turbine on their property but are within a certain zone of proximity to the turbines.¹¹² The satisfaction of NIMBY claims through some method of compensation may seem reasonable, but Wyoming may be a different case entirely, where landowners are pooling their land to form wind associations to market their land¹¹³ and 78.1% of the population supports energy development from wind.¹¹⁴

¹⁰⁷ Barak D. Richman & Christopher Boerner, *A Transaction Cost Economizing Approach to Regulation: Understanding the NIMBY Problem and Improving Regulatory Responses*, 23 YALE J. ON REG. 29, 37 (2006).

¹⁰⁸ *Id.*

¹⁰⁹ Susan Lorde Martin, *Wind Farms and NIMBYS: Generating Conflict, Reducing Litigation*, 20 FORDHAM ENVTL. L. REV. 427, 443, 459 (2010).

¹¹⁰ *See, e.g.*, *Ecogen, LLC v. Town of Italy*, 438 F. Supp. 2d 149, 152 (W.D.N.Y. 2006) (Town of Italy declared a moratorium prohibiting “the construction or erection of wind turbine towers, relay stations and/or other support facilities” (internal quotation marks omitted)).

¹¹¹ WYO. STAT. ANN. § 39-22-111 (a) (i) (2010).

¹¹² *See* Martin, *supra* note 109, at 465.

¹¹³ *Id.* at 444–45.

¹¹⁴ Bob Moen, *Poll: Wyoming Residents OK with Uranium Extraction*, BILLINGS GAZETTE, Oct. 4, 2010, available at http://billingsgazette.com/news/state-and-regional/wyoming/article_6321f626-cfee-11df-a322-001cc4c03286.html. The poll also

B. Tax on Economic Rents

The concept of economic rent owes its origins to nineteenth-century economist David Ricardo in the context of grain supply.¹¹⁵ Simply put, economic rent represents the “earnings above the earnings necessary to induce producers to supply a good (their opportunity cost).”¹¹⁶ Thus, a tax on economic rent would therefore “capture[] rents that the producers would otherwise keep” and not otherwise affect the amount supplied by the producer.¹¹⁷ A tax on economic rent may reduce overall economic efficiency, though this may be “counterbalanced” through the “provision of public or collective goods.”¹¹⁸ Additionally, if a taxed good is consumed outside of the taxing jurisdiction, the incidence of the tax may be shifted to out-of-state residents.¹¹⁹ This, as discussed previously, would be an argument that could be lodged under a Commerce Clause claim. The Wyoming wind production tax could be considered a tax on economic rent. Because the tax rate is relatively nominal, it is unlikely to affect the amount of wind-generated electricity supplied by a project developer. However, the tax may reduce overall economic efficiency. If evaluated similar to the NIMBY claims above, this reduction would be mitigated by the distribution of some of the funds to the counties which are directly impacted by the wind turbines. However, if the wind tax combined with other taxes, such as sales and use taxes, makes the cost of development artificially higher than neighboring states with similar wind characteristics, the combined effect of such taxes would put Wyoming producers at a competitive disadvantage.

VI. CONCLUSION

It appears clear that the Wyoming wind production tax would survive a challenge under the Commerce Clause in light of the four-part test enumerated in *Complete Auto Transit* as applied in *Commonwealth Edison*. Despite the differences between renewable resources and non-renewable resources, a state will be permitted to tax the activity occurring within its own borders irrespective of whether those resources are actually used within the state. While the Wyoming governor’s office and numerous industry groups battle out the economic effect of the wind production tax, absent further challenges or a legislative move to amend or repeal the tax, it appears that the wind production tax is here to stay. Although

found that “Wyoming residents put job creation and tax revenue above environmental and health concerns.” *Id.*

¹¹⁵ John Bohn, *Softwood Lumber Dispute with Canada Nears Climax*, NAT. RESOURCES & ENV’T, Summer 2006, at 24, 25.

¹¹⁶ Robert William Alexander, *The Collision of Tribal Natural Resource Development and State Taxation: An Economic Analysis*, 27 N.M. L. REV. 387, 408 (1997).

¹¹⁷ *Id.* at 408–09.

¹¹⁸ *Id.* at 409.

¹¹⁹ *Id.*

the federal government under President Obama has made a push for increased use in renewable energy, absent any legislation that might preempt the Wyoming tax, the tax will also survive such challenges. When looking at the severance tax on natural resources, Walter Hellerstein points out that “the real issue . . . is not tax exportation, but ‘excessive’ tax exportation.”¹²⁰ In his view, severance taxes may be relatively insignificant compared with other costs such as transportation.¹²¹ This may not be the case with renewable energy given the high upfront costs and the lack of parity compared with conventional energy. That may be the real challenge to the Wyoming wind production tax. In any case, while the “big winds still blow across Wyoming,” the tax will still attach itself to those winds.

¹²⁰ Hellerstein, *supra* note 99, at 50.

¹²¹ *Id.*