

State Laws and Incentives for Wind Energy Development

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I. INTRODUCTION

The U.S. wind energy industry is poised for continued growth. In fact, even with gyrations in the credit and tax equity markets the last three years, there are more than 5,600 MW of commercial wind energy projects currently under construction in the United States.² This article provides an overview of the salient laws, incentives, and rules relating to wind energy project development in nineteen key wind states across the country.

In recent years, economic incentives, along with renewable energy requirements, known as Renewable Portfolio Standard(s) (RPS) or Renewable Energy Standard(s) (RES), have been important factors in states that have seen substantial growth in commercial-scale wind energy development. States' regulatory oversight has increased, however, as the industry garners more attention from a variety of interest groups. As the wind energy industry moves forward, the authors of this piece wonder if the pace and scope of regulations will foster or complicate wind energy project development. States wanting to support growth of utility-scale wind energy projects would do well to follow the examples of other active wind states in implementing legal frameworks with reasonable levels of regulatory oversight, as well as sufficient levels of economic incentives and RPS targets.

II. STATE WIND ENERGY LAWS AND INCENTIVES

A. California

Despite ranking third in the nation in installed wind generation capacity in 2010,³ the State of California has experienced a major slowdown in wind energy development. Of the state's 3,179 megawatts (MW) of installed wind capacity, only 802 MW have come online since 2008.⁴ California developers have encountered a myriad of issues that have caused a lag in growth, including difficult and costly siting regulations, a lack of transmission, and a failure by the state to enforce policies intended to foster industry growth.⁵ This trend may change soon with commencement of what may become the largest wind farm in the world. The Alta Wind Energy Center broke ground in the Mojave Desert north of Los Angeles in July 2010; the project is planned to include 3 Gigawatts of generation capacity when completed over the next 8 years.⁶

2. AMERICAN WIND ENERGY ASS'N, AWEA U.S. WIND INDUSTRY FIRST QUARTER MARKET REPORT (APRIL 2011), [hereinafter AWEA 2011] available at <http://www.awea.org/learnabout/publications/reports/AWEA-US-Wind-Industry-Market-Reports.cfm>.

3. AMERICAN WIND ENERGY ASS'N, Resources: U.S. Wind Energy Projects, <http://archive.awea.org/projects/> [hereinafter AWEA] (then select CA from drop-down menu) (last visited February 8, 2011).

4. *Id.*; and see AWEA 2011, *supra* note 2, at 6. (California installed 89 MW in 2008, 276.5 MW in 2009 and 437 MW in 2010).

5. Kate Galbraith, *California's Wind Slowdown*, N.Y. TIMES, Jan. 29, 2009, available at <http://greeninc.blogs.nytimes.com/2009/01/29/californias-wind-slowdown/>.

6. Tiffany Tsu, *Wind farm 'mega project' underway in Mojave Desert*, LOS ANGELES TIMES, Jan. 27, 2010,

Unlike Texas and Iowa (which both exceed California in the number of wind installations), California imposes a number of complex regulatory measures requiring approvals from several agencies.⁷ Among them are laws imposed by the California Environmental Quality Act (CEQA) that require counties and cities to document and consider the environmental impacts of their actions, such as granting approval of a wind energy project. For the approval of wind projects subject to the CEQA, “Lead Agencies”⁸ are required to consult with the California Department of Fish and Game before determining whether a negative declaration or environmental impact report is required for the project.⁹ In turn, Lead Agencies must consult with a trustee,¹⁰ responsible agencies, and other public agencies that may have jurisdiction by law with respect to the project.¹¹

Another reason for the state’s sluggish growth could be California’s loosely worded RPS, which allows a utility that demonstrates a good faith effort to comply with the RPS to forego paying the penalty for non-compliance.¹² According to critics, some utility companies are entering into purchase contracts for “speculative” solar generation at “unrealistically low” prices rather than purchasing readily available wind contracts.¹³

1. Renewable Portfolio Standard

Generally speaking, an RPS is designed to increase the amount of renewable energy provided by utilities to their retail electric customers in order to reach a minimum percentage of renewable energy production.¹⁴ Like many other RPS programs, California’s RPS includes a state-regulated Renewable Energy Certificate (REC) program.¹⁵ A REC is typically a tradable instrument representing the non-power attributes of one megawatt-hour (MWh) of production from renewable energy: “The REC product is what conveys the attributes and benefits of the renewable electricity, not the electricity itself.”¹⁶ California currently has the nation’s most aggressive RPS

available at [http:// articles.latimes.com/2010/jul/27/business/la-fi-windfarm-20100727](http://articles.latimes.com/2010/jul/27/business/la-fi-windfarm-20100727).

7. *Id.*

8. “Counties, cities, federal agencies such as the Bureau of Land Management and the U.S. Forest Service (if federal lands are involved) and sometimes public utilities are the ‘Lead Agencies’ that approve wind energy projects within their jurisdictions.” Cal. Dep’t of Fish and Game, Frequently Asked Questions about California Guidelines for Reducing Bird and Bat Impacts from Wind Development, <http://www.dfg.ca.gov/habcon/energy/wind> (follow “Frequently Asked Questions about Wind Development” hyperlink at the bottom of the page) (last visited Jan. 26, 2011).

9. CAL. PUB. RES. CODE § 21080.3(a) (West 2010).

10. For example, the California Department of Fish and Game (CDFG) is considered a “trustee agency” with “jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species” and has authority to regulate activities that might affect those resources. CAL. FISH & GAME CODE § 1802 (West 1998). The CDFG makes recommendations to lead agencies regarding the protection of those resources. See *id.*

11. CAL. PUB. RES. CODE § 21153(a) (West 2010).

12. CAL. PUB. UTIL. CODE § 399.14(a)(2)(C)(ii)(I)-(IV) (West Supp. 2010).

13. Jesse Broehl, California Utilities Hide Behind Solar Smokescreen: Legal Loophole Allows Penalties to Be Avoided for Failing to Bring Wind Power Online, WIND POWER MONTHLY, April 2009, at 29-30.

14. NAT’L RENEWABLE ENERGY LAB., RENEWABLES PORTFOLIO STANDARD OVERVIEW (2005), available at http://www.windpoweringamerica.gov/pdfs/wpa/37627_rps.pdf.

15. See CAL. PUB. UTIL. CODE § 399.12-399.16 (West Supp. 2010).

16. EPA Green Power Partnership, <http://www.epa.gov/grnpower/gpmarket/rec.htm> (last visited Oct. 6, 2009).

law.¹⁷ The State's original goal was to obtain 20% of its energy from renewable sources by 2010.¹⁸ Former Governor Schwarzenegger, however, subsequently added to the standard through a November 2008 executive order that set a renewable energy goal of 33% by 2020.¹⁹ Utility companies failing to comply with the RPS are penalized on a case-by-case basis.²⁰ Utilities are excused from RPS compliance if their inability to comply is due to a lack of transmission capacity—so long as they make a reasonable effort to obtain renewable power.²¹ But California has recently changed its RPS standard from a goal to a requirement.

On April 12, 2011, Governor Jerry Brown signed Senate Bill 2X, which now requires investor owned utilities, publicly owned utilities and energy service providers to procure 33% of California's electricity from renewable resources such as wind, solar and geothermal by 2020.²² The state will need to aggressively build renewable energy generation sources to meet this deadline, as only 15-17% of the state's power comes from renewable sources currently.²³ Senate Bill 2X provides a clear statutory directive for private and public utilities to reach a 33% renewable energy use goal, and signals the need for renewable energy projects in the state.

In January 2011, the California Public Utilities Commission issued an important decision allowing Tradable Renewable Energy Credits (TRECs) to be used by California Investor Owned Utilities (IOU) to meet their RPS requirements. The ruling is applicable to the 2010 RPS year and temporarily limits the portion of RPS requirements that can be met by TRECs to 25% until December 2012; it also limits the price of each TREC to

17. Tom Cheyney, Gov. Schwarzenegger Signs Executive Order Raising California RPS to 33%—Highest in U.S., PV-TECH.ORG, Sept. 16, 2009, http://www.pv-tech.org/news/_a/gov._schwarzenegger_signs_executive_order_raising_california_rps_to_33--hig/?utm_source=Feeds&utm_campaign=News+Feed&utm_medium=rss.

18. CAL. PUB. UTIL. CODE § 399.11(a) (West Supp. 2010).

19. Cal. Exec. Order No. S-14-08 (Nov. 17, 2008). The California Governor added to the 2008 Executive Order with another recent executive order. Cal. Exec. Order No. S-21-09 (Sept. 15, 2009). Governor Schwarzenegger expressed concern about recent legislation diluting the 2008 Renewable Portfolio Standard (RPS) Executive Order, explaining:

Unfortunately, the bills the legislature recently passed are unnecessarily complex, would substantially increase costs on Californians and California's businesses and, if passed, the state standard could be held up in legal battles because the bills violate the U.S. Constitution's commerce clause by restricting the sale of energy across state lines. For these reasons, the Governor is taking action administratively today to increase California's RPS to the highest in the nation - 33 percent by 2020.

Press Release, Arnold Schwarzenegger, Cal. Governor, Gov. Schwarzenegger Signs Executive Order to Advance State's Renewable Energy Portfolio Standard to 33 Percent by 2020 (Sept. 15, 2009), *available at* <http://gov.ca.gov/index.php?/print-version/press-release/13273>. The statements in the press release and the language in the new executive order indicate the California Governor's intent to allow in-state utilities to help meet their RPS requirements by purchasing Renewable Energy Certificates (RECs) from out-of-state renewable energy project operators. See Cal. Exec. Order No. S- 21-09, *supra*.

20. See CAL. PUB. UTIL. CODE § 399.14(e).

21. *Id.* § 399.14(a)(2)(C)(ii)(I)-(IV).

22. Senate Bill 2X, First Extraordinary Session (2011).

23. Wall Street Journal: California Raises Renewable Energy Requirements (March 29, 2011). See <http://online.wsj.com/article/SB10001424052748704471904576231611388263814.html>.

\$50. The cap on TREC prices and on the RPS obligation portions that can be met with TRECs ends in 2014.²⁴

2. Net Metering

In addition to RPS, California has instituted a net metering (also known as co-metering) program that requires utility companies to purchase up to one megawatt of wind energy produced by retail customers at a rate and term approved by California's Public Utility Commission.²⁵ California utility companies are required to purchase customer produced renewable energy totaling no more than 5.0% (increased from 2.5% by 2010 legislation) of the utility's total peak demand.²⁶

3. Tax Credit

Wind facilities located exclusively in an "enterprise zone" or "targeted tax area"²⁷ are eligible to receive a tax credit for sales and use taxes paid towards the purchase of no more than \$20 million in "[m]achinery and machinery parts used for the production of renewable energy resources."²⁸ The tax credit cannot exceed a wind generator's tax liability in any given year; however, the credit can be carried forward from year to year until it is exhausted.²⁹ In 2010, California passed new incentives to attract renewable energy manufacturing.³⁰ The new statute allows the California Alternative Energy and Advanced Transportation Financing Authority to grant exemptions from sales and use taxes for alternative energy manufacturing equipment valued at up to \$100,000,000.³¹

4. Siting

Wind project siting involves a wide range of issues including the location of roads and transmission lines. Siting must also take into consideration the wind project site's terrain, placement of turbines to optimize energy output, spacing between turbines, and accommodation of federal laws such as those imposed by the Federal Aviation Administration. In light of the many wind project siting logistics, adherence to state and local turbine setback requirements can be challenging.³² A 2006 survey conducted by the California Wind Energy Collaborative found that setback requirements in five California counties ranged between 500 feet to 1,000 feet from property lines and

24. Order Instituting Rulemaking to Develop Additional Methods to Implement the California Renewables Portfolio Standard Program, Decision 11-01-025, Rulemaking 06-02-012, Before the California Public Utilities Commission (January 13, 2011).

25. See CAL. PUB. UTIL. CODE § 2827 (West Supp. 2010).

26. *Id.* § 2827(c)(1) (Cal. 2010).

27. For an explanation of enterprise zones, see CAL. GOV'T CODE § 7073 (West 2008). For an explanation of a targeted tax area, see CAL. GOV'T CODE § 7097 (West 2010).

28. CAL. REV. & TAX. CODE § 23612.2(b)(2)(A)(ii) (West 2004); CAL. REV. & TAX. CODE § 23633(b)(1)(A)(ii) (West 2004).

29. *Id.* § 23612.2(d).

30. CAL. PUBLIC RESOURCES CODE § 26003 (West 2010)

31. *Id.*

32. The term "setback" as used in the wind industry refers to the minimum distance a turbine must be from a property line, dwelling, or road. *See, e.g.*, KERN COUNTY, CAL., CODE § 19.64.0140F.1 (2009).

dwellings.³³ Wind energy developers in California are therefore advised to carefully review local rules and ordinances to ensure compliance with local setback mandates and other possible siting requirements.

The California Energy Commission has also published a report establishing guidelines for minimizing the effects of a wind farm on wildlife.³⁴ The report recommends that wind facilities not be placed near endangered species' habitats, gives engineering guidelines on how to minimize roosting and otherwise attracting birds and raptors, and instructs operators on how to monitor the facilities' continuing effect on wildlife.³⁵

B. Colorado

Colorado currently has 1,299 MW of installed wind generation capacity, ranking it twelfth nationally.³⁶ In 2007 alone, Xcel Energy added 776 MW of wind power to its portfolio.³⁷ Yet, Xcel has not added significant additional amounts in light of potential reliability concerns.³⁸ Since 2007, Xcel has proposed a conservative plan to add 100 MW per year throughout 2010-2012.³⁹ In 2009, 178.1 MW of wind power was added, while only 1.8 MW came online during 2010.⁴⁰ Like California, however, this conservative trend may be changing as Xcel Energy recently announced plans to purchase 250 MW of wind power from a new project.⁴¹

1. Renewable Energy Standards

Colorado's RES require each qualifying retail utility to acquire 12% of its energy from eligible renewable sources by 2011 and 30% by 2020.⁴² Qualifying utilities include Colorado retail electric providers, "other than municipally owned utilities that serve forty thousand customers or fewer."⁴³ Cooperative and municipal utilities with 40,000 customers or fewer have a smaller requirement of 3% by 2011 and 10% by

33. CAL. WIND ENERGY COLLABORATIVE, PERMITTING SETBACK REQUIREMENTS FOR WIND TURBINES IN CALIFORNIA 12 (2006).

34. See CAL. ENERGY COMM'N, CALIFORNIA GUIDELINES FOR REDUCING IMPACTS TO BIRDS AND BATS FROM WIND ENERGY DEVELOPMENT (2007).

35. *Id.* at 59-81.

36. AWEA 2011, *supra* note 2, at 4-5.

37. *Id.*

38. Rebuttal Testimony and Exhibits of Thomas A. Imbler, Vice President of Commercial Operations of Xcel Energy Services Inc. at 13-14, in *re* Application of Pub. Serv. Co. of Colo. for Approval of its 2007 Resource Plan, No. 07A-447E, Colo. Pub. Util. Comm'n (2008) ("While we have been successful at maintaining high levels of reliability with the existing wind portfolio, we simply do not have the requisite operating history to demonstrate that we could handle a similar increase in a single year. At some point further additions of wind may exceed the limits of flexibility inherent in the current Public Service thermal generation fleet. . .").

39. *In re* Application of Pub. Serv. Co. of Colo. for Approval of its 2007 Res. Plan, No. 07A- 447E at 6 (Pub. Util. Comm'n Nov. 15, 2007). The PUC would prefer Xcel to adopt a goal to add 800 MW by 2015. *Id.* at 3.

40. AWEA, *supra* note 3, (then select "CO" from the drop-down menu).

41. Greg Avery, *Xcel to buy power from RES Americas' planned NE Colorado wind farm*, DENVER BUSINESS JOURNAL, Mar. 31, 2010, available at <http://www.bizjournals.com/denver/stories/2010/03/29/daily35.html>.

42. 4 COLO. CODE REGS. § 723-3654(a) (2010); see also, HB 10-1001 (2010).

43. COLO. REV. STAT. § 40-2-124(1) (Supp. 2010).

2020.⁴⁴ If a utility does not comply with the RES in a given year, Colorado law requires the Public Utilities Commission to determine “what, if any, administrative penalties should be assessed against the [utility] for its failure to meet the renewable energy standard.”⁴⁵ The State may charge the utility up to what it would have spent if it had complied with the RES.⁴⁶ Alternatively, it can choose to reduce or even waive the penalty if it finds that noncompliance was due to circumstances beyond the utility’s control, such as third-party construction delays.⁴⁷ Further, a penalty will not be assessed against the utility if “the shortfall is attributable to the retail rate impact limit.”⁴⁸ Any penalties assessed for noncompliance cannot be recovered through rate increases; however, costs associated with compliance may be recovered in a ratemaking proceeding.⁴⁹

2. Siting

Colorado landowners cannot create covenants or other servitudes that unfairly prohibit or restrict the use or installation of a renewable energy device, including wind turbines.⁵⁰ Nonetheless, landowners may create easements to reduce noise, promote safety, and advance aesthetic purposes, so long as the restrictions are reasonable.⁵¹

In order to qualify as renewable energy facilities under Colorado’s RES, wind developers must consult with the Colorado Division of Wildlife (CDW) and other applicable regulatory agencies.⁵² Any development larger than two MW is required to perform and publish avian studies and minimize wildlife impacts in accordance with the studies’ findings.⁵³

The CDW has published a Resource Guide referencing federal agencies with which a developer may need to comply in order to obtain a permit.⁵⁴ The Resource Guide also lists third-party organizations that provide selected recommendations on how to reduce environmental impacts.⁵⁵ In 2005, the CDW published a study examining the effect of wind turbines on the Gunnison sage grouse.⁵⁶ Among other things, the publication recommends that turbines should not be placed within 0.6 miles of a sage-grouse breeding area.⁵⁷

44. 4 COLO. CODE REGS. § 723-3652(k).

45. 4 COLO. CODE REGS. § 723-3663(c)(I) (2010).

46. *Id.* § 723-3663(c)(I)(A).

47. *Id.* § 723-3663(c)(I)(C).

48. *Id.* § 723-3663(c)(I)(B).

49. *Id.* § 723-3663(c)(II).

50. COLO. REV. STAT. § 38-30-168(1)(a)-(b) (Supp. 2010).

51. *Id.* § 38-30-168(2)(a)-(c).

52. 4 COLO. CODE REGS. § 723-3656(a)-(b) (2010).

53. *Id.* § 723-3656(c).

54. See JENNIFER GERSON & DAVID KLUTE, COLO. DIV. OF WILDLIFE, WIND POWER AND WILDLIFE IN COLORADO: AN INFORMATIONAL RESOURCE GUIDE (2006).

55. *Id.*

56. See COLO. DIV. OF WILDLIFE, GUNNISON SAGE-GROUSE RANGEWIDE CONSERVATION PLAN (2005), available at <http://wildlife.state.co.us/WildlifeSpecies/SpeciesOfConcern/Birds/GunnisonConsPlan.htm>.

57. *Id.* (then follow “Appendix I” hyperlink).

3. Net Metering

Colorado's net metering requirement allows retail customers to offset their energy costs by up to 2 MW of the energy they produce from renewable sources.⁵⁸ Unlike in California, however, utilities are not required to pay their customers for any excess energy they produce, but the excess can be carried over to offset their energy costs for up to sixty days.⁵⁹ Many of the other states mentioned in this article have net metering laws similar to Colorado; such net metering laws will not be mentioned in the remainder of this paper unless the law is particularly unique.

4. Pending Litigation

On April 4, 2011 the American Tradition Institute (ATI) filed suit in the District Court in Denver, Colorado, claiming Colorado's Renewable Energy Standard (RES) violates Article I, Section 8 of the United States Constitution.⁶⁰ The suit alleges that the Colorado RES discriminates against legal, safer, less costly, less polluting and more reliable in-state and out-of-state generators of electricity sold in interstate commerce, and is thus forbidden under the Commerce Clause.⁶¹ ATI argues that wind energy, in particular, costs more than traditional fuels and creates more pollution claiming that coal or natural gas is needed to generate electricity when the wind does not blow.⁶² In response to the suit, the Colorado Attorney General's office issued a statement saying "It's our position that the (RES) law is defensible. We will work with our client to defend the law."⁶³

The American Wind Energy Association (AWEA) issued a statement regarding ATI's lawsuit⁶⁴ asserting that wind energy in Colorado lowers prices, creates manufacturing, construction, and offers a cleaner way of making electricity.⁶⁵ According to AWEA, in the short time since Colorado passed its RES, Coloradoans began to see the benefits of the law: clean, affordable energy and the clustering of wind industry facilities in the state.⁶⁶ AWEA further claimed that the law is completely defensible, stating "it [the RES] is constitutional because the state has a legitimate interest in promoting renewable energy generation as an important policy choice with multiple benefits for its residents."⁶⁷

58. 4 COLO. CODE REGS. § 723-3664(a)(I) (2010).

59. Compare *id.* § 723-3664(b), with CAL. PUB. UTIL. CODE § 2827(c)(1) (West Supp. 2010).

60. *American Tradition Institute et al v. State of Colorado*, 1:11-CV-00859-LTB (April 4, 2011).

61. *American Tradition Institute et al v. State of Colorado*, 1:11-CV-00859-LTB (April 4, 2011).

62. Cathy Proctor, *Denver Business Journal*: Federal suit challenges Colorado renewable energy standard (April 4, 2011). See <http://www.bizjournals.com/denver/news/2011/04/04/federal-suit-challenges-colorado.html>.

63. *Id.*

64. Statement from the American Wind Energy Association on Lawsuit Challenging the Colorado Renewable Energy Standard. See <http://www.awea.org/newsroom/pressreleases/Colorado-suit.cfm>.

65. *Id.*

66. *Id.*

67. *Id.*

C. Illinois

As of December 2010, Illinois had installed wind capacity of 2,046 MW.⁶⁸ The state has almost doubled its wind energy installations in little more than a year.⁶⁹ The state's increase in installations is not surprising given that Illinois possesses two key elements necessary for wind project development. The first is access to large load centers such as Chicago and St. Louis.⁷⁰ The second is an existing transmission infrastructure that can be utilized by wind projects to deliver wind-generated electricity to load.⁷¹ Further stimulus for the Illinois wind energy market may come from tightening siting standards for wind projects being implemented in Wisconsin.⁷²

1. Renewable Portfolio Standards

In 2007, Illinois passed an RPS, which requires that at least 25% of the state's total electricity come from a renewable energy source by 2025.⁷³ The Illinois RPS further requires that, "to the extent available," 75% of the renewable energy come from wind energy.⁷⁴ The state's RPS prevents consumer electric bills from increasing more than .5% over existing rates due to renewable sources.⁷⁵ During 2010 there was industry-wide concern that the Illinois Power Agency (IPA) would award few or no long-term contracts for new Illinois wind farms and would fulfill the state's RPS requirements by buying credits from wind farms in Texas and other states.⁷⁶ Those fears were allayed in December of 2010 when the Illinois Commerce Commission gave approval to Ameren Illinois Utilities and Commonwealth Edison Company to enter into long term power purchase agreements totaling 37,234,500 megawatt-hours of wind and solar energy.⁷⁷ Power purchase agreements went to two new Illinois projects and existing merchant facilities in Illinois and surrounding states selling power without a PPA.⁷⁸

2. Sales Tax Exemption

During its 2009 Regular Session, the Illinois Legislature passed Senate Bill 1923, which provides an important sales tax exemption for wind-power projects. Under the

68. AWEA 2011, *supra* note 2, at 5.

69. *Id.*

70. See Caleb Hale, *Wind Has Come a Long Way in Illinois*, THE SOUTHERN, May 23, 2009, http://www.southernillinoisan.com/articles/2009/05/23/front_page/29001389.txt.

71. See The Illinois Wind Energy Association, *About Wind Power in Illinois*, <http://www.windforillinois.org/> (last visited Oct. 6, 2009).

72. See Brian Clark, *Anthony: Proposed Rule Changes would Stifle Wind Industry*, WISBUSINESS.COM, January 31, 2011, available at <http://www.wisbusiness.com/index.html?Article=225115>. (Setback rules adopted by the Public Service Commission last year and scheduled to go into effect in March require turbines be 1,250 feet (roughly four football fields) from the nearest residence. Proposed legislation would increase the setback to 1,800 feet from the nearest property line.)

73. Illinois Power Agency Act, Public Act 095-0481, § 1-75(c)(1) (2007).

74. *Id.*

75. *Id.* at § 1-75(c)(2).

76. See Lydersen, Kari, *Cost-Saving State Law Endangers Growth of Wind Industry*, CHICAGO NEW COOPERATIVE, February 9, 2011. <http://www.chicagonewcoop.org/cost-saving-state-law-endangers-growth-of-wind-industry/>

77. Press Release from Illinois Commerce Commission dated December 15, 2010, available at <http://www2.illinois.gov/ipa/Documents/renewable-energy-RFP-12-15-2010.pdf>.

78. *Id.*

previous tax regime, a wind-power project had to be located within an “Enterprise Zone” in order to be eligible for the tax exemption.⁷⁹ Under the new law, wind projects not in Enterprise Zones can be designated High Impact Businesses (HIB); the HIB designation then allows the projects to claim a full exemption from the state’s 6.25% sales tax even though they are not located in an Enterprise Zone.⁸⁰ In order to qualify, the wind-power project must be new or an expansion of an existing project and must have been placed in service on or after July 1, 2009.⁸¹ Transmission lines, substations, and associated equipment are included in the definition of a wind power project.⁸² The wind turbines used must have a nameplate capacity of 0.5 MW or greater.⁸³ The Illinois Property Tax Code provides that the valuation of wind energy devices shall be calculated as follows:

Beginning in assessment year 2007, the fair cash value of wind energy devices shall be determined by subtracting the allowance for physical depreciation from the trended real property cost basis. Functional obsolescence and external obsolescence may further reduce the fair cash value of the wind energy device, to the extent they are proved by the taxpayer by clear and convincing evidence.⁸⁴

In 2010, the Illinois legislature passed HB 4797 amending the Property Tax Code to allow the special valuation procedures set forth in the Tax Code to apply through assessment year 2016, rather than allowing this special procedure to expire in 2011.⁸⁵

3. Siting

Illinois allows wind-project regulation on a local rather than state level.⁸⁶ The Illinois County Code grants statutory authority to counties and municipalities to regulate the siting aspects of wind farms.⁸⁷ Both codes require at least one public hearing that must be publicized by notice in a newspaper of general circulation in the county or municipality.⁸⁸ Both codes, however, allow for a meteorological tower to be installed prior to holding a public hearing.⁸⁹ Counties possess siting jurisdiction in unincorporated areas not within 1.5 miles of a municipality’s zoning jurisdiction.⁹⁰ Municipalities’ siting jurisdiction extends to municipal corporate limits and 1.5 miles beyond those limits.⁹¹ In August 2009, the Illinois Legislature passed House Bill 883 to

79. See 20 ILL. COMP. STAT. 655/5.5(a) (2010).

80. See *id.* § 655/5.5(a)(3)(E).

81. *Id.*

82. *Id.*

83. *Id.*

84. 55 ILL. COMP. STAT. 200-10-605 (Supp. 2010).

85. 55 ILL. COMP. STAT. 200-10-610 (Supp. 2010).

86. 55 ILL. COMP. STAT. 5/5-12020 (Supp. 2009); 65 ILL. COMP. STAT. 5/11-13-26 (Supp. 2009).

87. 55 ILL. COMP. STAT. 5/5-12020; 65 ILL. COMP. STAT. 5/11-13-26.

88. 55 ILL. COMP. STAT. 5/5-12020; 65 ILL. COMP. STAT. 5/11-13-26.

89. 65 ILL. COMP. STAT. 5/11-13-26.

90. 55 ILL. COMP. STAT. 5/5-12020.

91. 65 ILL. COMP. STAT. 5/11-13-26.

remove the requirement that meteorological towers be dismantled within three years of installation.⁹²

Many counties in Illinois have adopted ordinances that regulate the siting of wind turbines and their ancillary facilities.⁹³ The ordinances often contain a siting approval application process that requires wind developers file a site plan for the county's approval.⁹⁴ Typically, the site plan must show the locations of the wind energy facilities, specify which public roads will be used, and confirm compliance with setback distances imposed by the applicable ordinance. Many of the ordinances also require the developer to post a decommissioning bond for removal of the wind energy facilities after termination of the lease.⁹⁵ Wind projects are also required to comply with Illinois's Pollution Control Board noise standards.⁹⁶

4. Transmission

In July 2010 the Midwest Independent Transmission System Operator (MISO) filed its proposed cost allocation methodology for new interstate electric transmission projects with the Federal Energy Regulatory Commission (FERC).⁹⁷ The allocation methodology was approved in December 2010 and creates a new category of transmission projects known as Multi Value Projects (MVPs) which are transmission projects that spread the costs of lines that enable the delivery of energy in support of energy policy mandates, such as renewable portfolio standards; or address regional reliability and/or economic issue.⁹⁸ The major elements of the proposal include allocating 100% of regional transmission costs to load and exports, maintaining the current cost allocation for generator interconnection projects, maintaining a local allocation of new costs for projects that are generally small and local in nature (including those developed for reliability purposes) and avoiding re-allocation of existing transmission costs.⁹⁹

5. Pending Legislation

Offshore wind energy projects in Lake Michigan have been talked about for years, and a bill introduced by legislators representing the City of Evanston will allow the state to study the issue.¹⁰⁰ If passed, House Bill 1558 will establish the Lake Michigan Offshore Wind Energy Council ("Council"), which would exist as a separate entity

92. See H.R. 883, 96th Gen. Assem., Reg. Sess. (Ill. 2009).

93. See, e.g., LOGAN COUNTY, ILL., ZONING ORDINANCE Appendix E, § IV(C) (2009), available at http://www.co.logan.il.us/zoning/ordinance/appendix_e.pdf.

94. See generally *id.*

95. *Id.*

96. ILL. ADMIN. CODE tit. 35, § 900.102 (2009).

97. Renew Grid, *Midwest ISO Submits Proposed Cost Allocation Methodology To FERC*, July 19, 2010 available at: http://www.renewgridmag.com/e107_plugins/content/content.php?content.5519

98. Press Release from FERC dated December 16, 2010. <http://www.ferc.gov/media/news-releases/2010/2010-4/12-16-10-E-1.asp>

99. *Id.*

100. The Illinois Wind Daily: *Q&A with Rep. Robyn Gabel on Offshore Wind Legislation*. See <http://www.windforillinois.org/news/qa-with-rep-robyn-gabel-on-offshore-wind-legislation.html>.

within the state's Department of Natural Resources.¹⁰¹ The Council will examine criteria that can be used to review applications for offshore wind development, examine criteria for identifying areas that are favorable to offshore wind development, recommend a process for ensuring public engagement, examine options for how Illinois should be compensated for Lake Michigan bottomlands leasing, and make recommendations for needed state legislation and regulations concerning offshore wind farm development.¹⁰² If House Bill 1558 passes the Senate, it will be signed into law on May 31, 2011.¹⁰³

D. Indiana

Indiana currently ranks eleventh in the United States with 1,339 MW of installed wind energy capacity.¹⁰⁴ Since 2008, Indiana has added 1,209 MW of wind power, showing considerable growth over the last two years.¹⁰⁵ In early 2011, the Indiana Utility Regulatory Commission (IURC) had only one application for a wind farm under review. If approved, the wind farm by Duke Energy Generation Services would generate an additional 101 MW of power in late summer 2011.¹⁰⁶ In addition to the Duke Energy Generation Services project, there are thirteen other projects in the planning stages of development that have been announced publicly but were not under review with the IURC.¹⁰⁷ If those wind projects come to fruition, they could add approximately 4,065 MW of additional capacity.¹⁰⁸

1. Renewable Energy Standards

Indiana is one of only fourteen states without a renewable energy standard.¹⁰⁹ However, the Indiana Legislature has considered a renewable energy standard bill in each of the past four sessions.¹¹⁰ Both houses passed separate bills in 2009 (Senate Bill 420 and Senate Bill 300), but could not agree on a compromise bill due to the inclusion of nuclear energy in the definition of renewable energy.¹¹¹ Senate Bill 420 would have established a statewide Renewable Electricity Standard ensuring that Indiana would receive at least 15% of its energy from renewable or energy-efficient resources by 2025.¹¹² Neighboring states, such as Illinois and Ohio, have Renewable Energy Standards

101. Illinois House Bill 1558, §10. 97th General Assembly (2011).

102. *Id.* at §15 (1-6).

103. The Illinois Wind Daily: *Q&A with Rep. Robyn Gabel on Offshore Wind Legislation*. See <http://www.windforillinois.org/news/qa-with-rep-robyn-gabel-on-offshore-wind-legislation.html>.

104. AWEA 2011, *supra* note 2, at 4-5.

105. *Id.*; and *see*, AWEA, *supra* note 3, (then select "IN" from drop-down menu).

106. *See* The Indiana Law Blog: Environment- Indiana is a Leader in Wind Turbines, but the Pace is Slowing (2010), http://indianalawblog.com/archives/2010/05/environment_ind_44.html

107. *See*: OED Wind Power (2010), at <http://www.in.gov/oed/2413.htm>

108. *Id.*

109. *See* PEW Center on Global Climate Change (2010), http://www.pewclimate.org/what_s_being_done/in_the_states/rps.cfm.

110. *See* Indiana Economic Digest: Indiana Lagging on Renewable Energy Plan (2010), <http://www.indianaeconomicdigest.net>

111. *See* No Renewable Energy Standard for Indiana (2009), <http://www.bloomingtonalternative.com/node/9937>

112. *See* Indiana General Assembly, <http://www.in.gov/legislative/bills/2009/ES/ES0420.1.html>

in place that would allow for 25% of energy to come from renewable energy sources by 2025.¹¹³

2. Siting

Indiana does not regulate siting of wind facilities at the state level.¹¹⁴ Siting and permits are handled entirely at the local government level, and interaction with state agencies is triggered by state laws that govern electric generation and transmission, and environmental laws that apply to construction projects.¹¹⁵ However, if the project includes federal money, coordination with the Department of Natural Resources is required.¹¹⁶ Projects that will require a permit or certification from local government or state agencies generally will include discharge of storm water runoff; placement of fill or excavation within a wetland, lake, river or stream; and construction on, obstruction or excavation within a floodway.¹¹⁷

The Benton County Wind Energy Siting Ordinance states that a Wind Energy Conversion System cannot be closer to any property, overhead electrical line, roadway or railroad right-of-way than 350 feet or 1.1 times the height of the tower, whichever is greater.¹¹⁸ The setback distance for turbines with a rated capacity of 1.0 MW or less shall be 1,000 feet or more from any existing or occupied residence.¹¹⁹ For blade clearance, the minimum distance between the ground and any blade utilized on the Wind Energy System shall be fifteen feet, as measured at the lowest point of the arc of the blades.¹²⁰ Many other counties in Indiana have adopted similar ordinances that regulate the siting of wind turbines. Typically, the ordinances specify which permits are required, what, if any restoration requirements are required, noise regulation, fees, and inspections.

3. Incentives

Wind facilities, along with other clean energy projects, are provided financial incentives by the Indiana legislature. Specifically, if a facility is approved as an alternative energy facility, it may recover costs incurred during construction and the operation of projects; be allowed up to a 3% return on shareholder equity; and other financial incentives that the IURC deems to be appropriate.¹²¹

113. Pew Center on Global Climate Change (2010), http://www.pewclimate.org/what_s_being_done/in_the_states/rps.cfm.

114. Great Lakes Wind Collaborative, <http://www.glc.org/energy/wind/pdf/GLWC-LandBasedSiting-Jan2010.pdf>

115. *Id.*

116. *Id.*

117. Ind. Admin Code 15-1-1 (2010).

118. Ordinance for Regulating Energy Generation Using Wind Power in Benton County, Indiana, available at: http://www.in.gov/oed/files/Benton_County_Wind_Ordinance.pdf

119. *Id.*

120. *Id.*

121. IND. CODE ANN. §8-1-8.8-11 (1-5) (2010).

4. Regulations

Alternative energy production is also addressed through the Indiana Code. An alternate energy production facility includes wind facilities.¹²² A utility must purchase electricity from a qualifying alternate energy facility if the facility has a capacity less than 80 MW; the facility uses appropriate technology (including wind), and the facility is not owned by an entity primarily engaged in the business of selling nonrenewable energy.¹²³

While Indiana has flourished in wind energy growth without a renewable energy standard, and has a number of potential projects slated for the upcoming year, the state may see a large slow-down in 2011 as neighboring states continue to pass legislation and local ordinances that entice wind energy companies away from Indiana. While other states offer Net Metering Laws on a commercial level, which require power companies to buy energy generated by renewable sources and give discounts to customers who generate their own electricity, Indiana has yet to pass such laws for commercial entities. Schools and homeowners do benefit from net metering laws.¹²⁴ Currently, many wind farms are being constructed near the Illinois border because Illinois, as well as other neighboring states, offer more lucrative incentives and encourage alternative energy production. Union leaders in Indiana hope that a federal Renewable Energy Standard is reached in order to harness more wind energy benefits in Indiana, as a study by the Lawrence Berkeley National Labs indicated that three-quarters of new renewable energy generating capacity added in 2007 went to states with renewable energy standards in place.¹²⁵

E. Iowa

With 3,675 MW of wind energy in service, Iowa ranks second in the nation for installed wind generation capacity—all without an RPS.¹²⁶ Iowa developers enjoy one of the most generous state-based monetary incentive programs in the nation, including a production tax credit of \$0.015 per kilowatt hour (kWh) sold during the first ten years of production.¹²⁷ Despite Iowa's lack of an RPS, wind generators are still able to sell RECs to utilities in other states.¹²⁸

122. IND. CODE ANN. § 8-1-2.4-2(b)(1) (2010).

123. IND. CODE ANN. §8-1-2.4-5 (a)(1-3) (2010).

124. IND. CODE ANN. § 4-4.1-7 (2010).

125. *See* Indiana Unions push for strong US renewable energy standard (2009), http://chestertontribune.com/Business/52092%20indiana_unions_push_for_strong_u.htm.

126. AWEA 2011, *supra* note 2, at 5.

127. IOWA CODE § 476C.2, 476C.5 (Supp. 2009).

128. *See, e.g.*, Horizon Wind Energy, Pioneer Prairie I Wind Farm, <http://www.horizonwind.com/projects/whatwevedone/pioneer-prairie-I.aspx> (last visited Oct. 6, 2009).

1. Energy Independence Plan

In lieu of an RPS, Iowa has set a goal to be energy independent by 2025.¹²⁹ Although the plan does not consist of specific renewable energy goals like an RPS, it is clear that renewable energy will play a central part in achieving energy independence.¹³⁰

2. Incentives

In 2005, Iowa implemented two production tax-credit programs for eligible wind energy facilities. If a facility has received a tax credit pursuant to Chapter 476B, it is not eligible for a tax-credit certificate under Chapter 476C of the Iowa Code.¹³¹ Chapter 476B applies to wind energy facilities only,¹³² while both wind energy and certain other renewable energy facilities may be eligible for the Chapter 476C tax credit.¹³³

Chapter 476B provides a production tax credit of one cent per kWh of qualified electricity that the owner “sells or uses for on-site consumption during the ten-year period beginning on the date the qualified facility was originally placed in service.”¹³⁴ The credit can be applied toward the state’s personal income tax, business tax, financial institutions tax, or sales and use tax.¹³⁵ The Iowa Utilities Board must make a determination of eligibility.¹³⁶ In order to qualify, the facility owner may not own more than two eligible facilities and must submit a copy of any power purchase or interconnection agreement—unless the electricity will be used for on-site consumption.¹³⁷ Additionally, the facility must be placed in service on or after July 1, 2005, but before July 1, 2012, and must have no less than 2 MW and no more than 30 MW of generating capacity.¹³⁸ The maximum amount of generating capacity eligible for the credit is 150 MW for the entire state.¹³⁹

The Chapter 476C production tax credit requires that renewable energy facilities be originally placed in service on or after July 1, 2005, and before January 1, 2012,¹⁴⁰ to qualify for a tax credit of \$0.015 per kWh sold during each taxable year for the first ten years of the facility’s production.¹⁴¹ Facilities must have one qualifying owner for each 2.5 MW of nameplate capacity,¹⁴² and qualifying owners cannot own more than two qualifying facilities.¹⁴³ The maximum amount of nameplate generating

129. IOWA CODE § 469.4.2 (Supp. 2009).

130. THE OFFICE OF ENERGY INDEPENDENCE, ENERGY INDEPENDENCE PLAN 9 (2009) (reiterating the Iowa Governor’s goal to be a leader in renewable energy).

131. IOWA CODE § 476C.4.6.

132. IOWA CODE § 476B.1.4, 476B.2 (Supp. 2009).

133. IOWA CODE § 476C.1.6, 476C.1.11 (Supp. 2009); IOWA CODE § 476C.2.1 (Supp. 2009).

IOWA CODE § 476B.2.

134. IOWA CODE § 476B.2.

135. *See id.*

136. *Id.* §§ 476B.1.1, 476B.5.

137. *Id.* § 476B.5.5, 476B.5.1(e).

138. *Id.* § 476B.1.4.c.d.

139. *Id.*

140. IOWA CODE § 476C.1.6.d (Supp. 2009).

141. IOWA CODE §§ 476C.2, 476C.5 (Supp. 2009).

142. *Id.* § 476C.1.6.c.

143. *Id.* § 476C.3.6.

capacity of all of the state's wind energy conversion facilities eligible for the tax credit cannot exceed 330 MW.¹⁴⁴

3. Siting

In addition to recommended general wildlife protection guidelines similar to those used by other states—to keep turbines away from endangered species' habitats and to avoid creating perches for birds and raptors—Iowa has other specific siting guidelines for developers to follow.¹⁴⁵ Among other things, those guidelines recommend that developers avoid bird migration paths or position turbines so that the blades turn in a direction that is parallel with bird migration paths whenever possible in order to reduce risk of collision.¹⁴⁶ The State also recommends that operators take measures to dispose of carrion and to control rodent populations that might attract raptors.¹⁴⁷

Although Iowa demonstrates that a state can have a successful wind industry without an RPS, the state may not have seen as much growth had it not provided the above-described state tax credits.¹⁴⁸ In contrast, Texas has a stringent RPS law which imposes stiff penalties for utilities that do not comply, but the state has fewer additional incentives.¹⁴⁹ RPS laws come at a higher administrative cost because the market for Renewable Energy Credits (REC) must be regulated, but this market allows the value of renewable energy to change with demand. Tax incentives, on the other hand, have fewer administrative costs, but their value cannot adjust with changes in market conditions. Both RPS programs and monetary incentive packages come with different risks and benefits to state governments. Yet, both methods of encouraging wind energy development seem to be effective.

F. Kansas

Kansas ranks third in the United States for wind potential and fourteenth in installed capacity.¹⁵⁰ The growth of wind development in Kansas hinges in part on the State's ability to balance preservation concerns with the desire to tap the state's substantial wind resources. In 2003, then Kansas Governor Kathleen Sebelius asked the State Energy Resources Coordination Council (SERCC) to form a special task force to study and make recommendations regarding the siting of wind power projects in the Flint Hills and Tallgrass Prairie Regions.¹⁵¹ In response, the SERCC formed the Wind and

144. *Id.* § 476C.3.4; S. File 456, 83d Gen. Assem., 1st Sess. (Iowa 2009).

145. *See* ASS'N OF FISH & WILDLIFE AGENCIES, WIND POWER SITING, INCENTIVES, AND WILDLIFE GUIDELINES IN THE UNITED STATES (2007) (summarizing environmental and wildlife guidelines across the United States).

146. IOWA DEP'T OF NAT. RES., WIND ENERGY AND WILDLIFE RESOURCE MANAGEMENT IN IOWA: AVOIDING POTENTIAL CONFLICTS 3 (2007).

147. *Id.*

148. *See* discussion *supra* Part II.E.2.

149. *See infra* Part II.S.2-3.

150. AWEA, *supra* note 3 (then select "KS" from the drop-down menu).

151. Letter from Kathleen Sebelius, Governor of Kan., to Lee Allison, Chairman, State Energy Resources Coordinating Council (Dec. 2, 2003), *available at* http://kec.kansas.gov/wptf/sercc_wptf_sebelius.html.

Prairie Task Force (Task Force), which delivered its final report in 2004.¹⁵² Recognizing the sensitivity of the region, the Task Force recommended that the grasslands of Kansas be preserved, and the Governor publicly discouraged wind development in that region of the state.¹⁵³ In response to the prospect of wind development in the Flint Hills region, in 2006 local landowners donated more than 10,000 acres to the Kansas Chapter of The Nature Conservancy (Conservancy) which placed a conservation easement on the acreage.¹⁵⁴ This particular conservation easement precludes development on the land if such development is incompatible with the tallgrass prairie.¹⁵⁵ The number of acres covered by the conservation easement has expanded since that time, and as of October 2008, the Conservancy oversaw 22,357 acres protected by conservation easements in the Flint Hills region.¹⁵⁶ Further ensuring no wind development will occur in the Flint Hills region, on October 30, 2009, the Kansas Supreme Court issued an opinion upholding a 2004 Wabaunsee County ordinance that banned the construction of commercial wind farms in the county.¹⁵⁷ Wabaunsee County is located in the Flint Hills of Kansas,¹⁵⁸ and the ordinance states, in part, wind farms “would be incompatible with the rural, agricultural, and scenic character of the county.”¹⁵⁹ The State Supreme Court decision was unanimous and held a county-wide ban on all commercial wind farms is not unreasonable.¹⁶⁰ A few issues were left pending before the court including the question of whether the ban on wind farms constituted a taking. Party briefs along with six Amicus Curiae briefs were filed with the Supreme Court in Kansas in December. As of late January, the Court had not rendered a decision on the takings-related issues.

Although there has been opposition to wind development in certain parts of Kansas, other activity indicates an effort by the State and others to strike a balance between preservation and development. For example, the State formed the Kansas Wind Working Group to “[o]ptimize wind energy utilization in Kansas.”¹⁶¹ The Kansas Energy Council has issued the Wind Energy Siting Handbook (Siting Handbook), which provides advisory guidelines for project development to stakeholders and directs the reader to applicable mandatory county guidelines.¹⁶² The Southwest

152. See WIND AND PRAIRIE TASK FORCE, WIND AND PRAIRIE TASK FORCE FINAL REPORT (2004), available at <http://kec.kansas.gov/wptf/WPTFFinalReport.pdf>.

153. Press Release, Kathleen Sebelius, Governor of Kan., Statement from Governor Kathleen Sebelius upon Receiving the Wind and Prairie Task Force Report (July 7, 2004), available at <http://kec.kansas.gov/wptf/GovernorsRelease060704.pdf>; RenewableEnergyWorld.Com, Kansas Governor Halts Wind Power in Tallgrass Prairies, (Dec. 2, 2004), available at <http://www.renewableenergyworld.com/rea/news/article/2004/12/kansas-governor-halts-wind-power-in-tallgrass-prairies-19425>.

154. Steve Fry, *Couple Donates 10,000 Acres to Nature Conservancy*, TOPEKA CAPITAL-J., Sept. 2, 2006, available at http://cjonline.com/stories/090206/kan_flinthills.shtml.

155. *Id.*

156. The Nature Conservancy, Conservation Easement Increases Amount of Protected Land in the Flint Hills, available at <http://www.nature.org/wherewework/northamerica/states/kansas/press/press3714.html> (last visited Oct. 6, 2009).

157. *Zimmerman v. Bd. of County Comm’r*, 2009 WL 3491015 (Kan. 2009).

158. *Id.* at 3.

159. *Id.* at 5.

160. *Id.* at 18.

161. Kan. Exec. Order No. 08-01 (Jan. 7, 2008), available at http://www.governor.ks.gov/executive/Orders/exec_order0801.htm.

162. KAN. ENERGY COUNCIL, WIND ENERGY SITING HANDBOOK: GUIDELINE OPTIONS FOR KANSAS CITIES AND COUNTIES (2005), available at http://www.kansasenergy.org/Kansas_Siting_Guidelines.PDF.

Kansas Royalty Owners Association has created Guidelines for Landowners in Negotiating Wind Energy Leases.¹⁶³ Perhaps the two initiatives that are most likely to encourage wind development in Kansas are the recently mandated RPS and the creation of the Kansas Electric Transmission Authority, each are discussed in greater detail below.

1. Wind Lease Regulation

In addition to the guidelines contained in the above-described reports, Kansas has passed legislation formally regulating wind development. Among those statutes is section 58-2272, which requires “every instrument that conveys any interest created by any lease or easement involving wind resources and technologies to produce and generate electricity [to] include a description of the real property subject to the easement and a description of the real property benefiting from the wind lease or easement.”¹⁶⁴ Compliance with this section at the outset of project development would presumably be difficult because it is typically undecided at that stage which properties benefit from an easement or lease. In addition, given that a wind project is an integrated system, arguably all tracts included in a project would benefit each other and would need to be recorded with each lease or easement. Given the nature of a wind project development, the authors suggest that a developer agree to attach a graphic depiction of the entire project area to the lease or easement agreement once construction of the project is complete.

Section 58-2272(b) likewise imposes a requirement that cannot be fulfilled at the lease-signing stage of project development. It requires that a wind lease or easement include “a description of the vertical and horizontal angles, expressed in degrees, and distances from the site of the wind power system in which an obstruction to the wind is prohibited or limited.”¹⁶⁵ In the authors’ experience, wind developers often include wind lease restrictions on the placement of structures or trees on the property that will interfere with wind speeds. This typically takes the form of a non-obstruct easement or non-interference clause (Non-Obstruct Clause). Typically, however, the Non-Obstruct Clause is stated in broader terms, such as, “no structures shall be placed within five hundred feet of a wind turbine.” Although the language of section 58-2272(b) requires more precision in describing the Non-Obstruct Clause, it does not provide more clarity. For most landowners and developers it is easier to determine a distance of five hundred feet when out in the field than it is to determine the distance as described under the statute without the aid of a ground survey. In addition, it is unclear from the language of the statute if a “wind power system” refers to an individual turbine or the entire wind project.¹⁶⁶ The safer approach would be to include a description of all areas subject to a Non-Obstruct Clause and attach it to the lease upon completion of the entire project.

163. Bernard E. Nordling, SWKROA Assistant Executive Secretary, 55th Annual Meeting of the Southwest Kansas Royalty Owners Association in Hugoton, Kansas (Apr. 26, 2003), *available at* <http://www.swkroa.com/formspublications.html>.

164. KAN. STAT. ANN. § 58-2272(a) (2005).

165. *Id.* § 58-2272(b).

166. *Id.*

2. Incentives

In 2009, Kansas established the Renewable Energy Standards Act which contained a RPS mandating utilities acquire 20% of their electricity from renewable energy by 2020.¹⁶⁷ Section 3(c) of House Bill 2369, which establishes the State's RPS goals, slightly diminishes its own requirement by allowing each MW installed after January 1, 2000, to count as 1.10 MW.¹⁶⁸ As the summer of 2010 the Kansas Corporation Commission (KCC) had issued a proposed rule and accepted comments from various stakeholders.¹⁶⁹ The Kansas Legislature gave the KCC broad discretion to set penalties at a level that promotes compliance with the RPS¹⁷⁰ and proposed rule K.A.R. 82-16-3 contains an administrative penalty equal to twice the average market rate for RECs adjusted by the KCC for relevant factors. Under the proposed rule, capacity is calculated differently depending on whether the power is obtained under a ten year or less than ten year power purchase agreement ("PPA"). For power purchased under a PPA of ten years or more, capacity is calculated as nameplate capacity minus auxiliary power.¹⁷¹ Power purchased under a PPA of less than ten years, capacity is calculated as average power purchased divided by capacity factor, which is related to the average power purchased from a renewable generator and the average total capacity of that generator.¹⁷² In comments filed with the KCC, at least one stakeholder requested that the rule not provide an advantage to long term PPAs by using nameplate capacity.¹⁷³

Kansas also provides a state tax incentive in the form of a tax exemption "from all property or ad valorem taxes levied by the law of the state of Kansas" to renewable energy resources or technologies used.¹⁷⁴ The tax exemption applies to all property "actually and regularly used predominantly to produce and generate electricity."¹⁷⁵

3. Local Regulations

Many Kansas counties require a county-issued permit in order to operate a wind project. The above-referenced Siting Handbook illustrates general project guidelines using examples from four Kansas counties that have considered zoning regulations.¹⁷⁶ The Siting Handbook also contains templates for use by local governments in drafting county regulations.¹⁷⁷ A search for local permitting guidelines should be done at the outset of project development because county guidelines could affect project design.

167. H.B. 2369, Kan. Reg. Sess. (2009).

168. *Id.* § 3(c).

169. K.A.R. 82-16-1.

170. H.B. 2369, Kan. Reg. Sess. § 6(a) (2009).

171. K.A.R. 82-16-1(e).

172. K.A.R. 82-16-1(e)-(f).

173. Comments made by The Wind Coalition filed with the KCC on June 14, 2010.

174. KAN. STAT. ANN. § 79-201 (Supp. 2008). "[R]enewable energy resources or technologies shall include wind, solar, photovoltaic, biomass, hydropower, geothermal and landfill gas resources or technologies." *Id.* § 79-201 *Eleventh*.

175. *Id.*

176. *See* KAN. ENERGY COUNCIL, *supra* note 162. The counties are Butler, Geary, Riley, and Wabaunsee. *Id.*

177. *See id.* at "III. APPLICATION TEMPLATES."

4. Transmission

In 2005 the Kansas Electric Transmission Authority (“KETA”) was created by HB 2263. KETA’s stated purpose is to “further ensure reliable operation of the integrated electrical transmission system, diversify and expand the Kansas economy and facilitate the consumption of Kansas energy through improvements in the state’s electric transmission infrastructure.”¹⁷⁸ KETA is authorized to achieve its goals by contracting for the building of transmission facilities and by facilitating the development and improvement of third-party development of transmission lines.¹⁷⁹ The transmission line construction costs incurred by KETA are recovered through tariffs imposed by the Southwest Power Pool or KCC assessments on Kansas utilities.¹⁸⁰ In its 2007 annual report, KETA acknowledged the need for additional transmission infrastructure to encourage the building of wind projects in the southwest portion of the state.¹⁸¹ Starting in 2008 the KETA Board began exploring the need for “collector transmission lines” that would move wind generated electricity from wind projects onto any new high-voltage lines designed for long distance transmission.¹⁸² In a 2009 report written by KETA the Board acknowledged the need to engage in transmission planning for wind on a region-wide basis.¹⁸³ Notably in 2009, Phase I of a KETA project that would connect Spearville, Kansas to Axtell, Nebraska received approval from the KCC.¹⁸⁴ Phase I is comprised of approximately 89 miles of transmission line between Spearville and Hays, Kansas.¹⁸⁵ In 2010 the KCC granted ITC Great Plains siting approval for Phase II of the project which involves the construction of a 345 kV line spanning 85 miles from north-central Kansas to the Kansas-Nebraska border.¹⁸⁶ The Nebraska Public Power District will complete the KETA project with a final 51 mile segment from the Kansas-Nebraska border into Axtell, Nebraska.¹⁸⁷

5. Recently Enacted Legislation

On April 13, 2011, Governor Brownback enacted Senate Bill 227, which includes two provisions related to wind energy.¹⁸⁸ First, any anemometer, an instrument for measuring and recording the speed of wind, that is fifty (50) feet tall or higher, located outside the corporate boundaries of any city, must be marked, painted, flagged or constructed to be recognizable in clear air during daylight hours.¹⁸⁹ Any anemometer tower built before July 1, 2011 must be so marked within two years of the effective date

178. KAN. STAT. ANN. §74-99d01, *et seq*

179. "Winds of Change: Special Edition" of the *Kansas Government Journal* published by the League of Kansas Municipalities.

180. *Id.*

181. 2007 KETA Annual Report to the Governor.

182. 2008 KETA Annual Report to the Governor.

183. "Winds of Change: Special Edition" of the *Kansas Government Journal* published by the League of Kansas Municipalities; p. 175.

184. KCC News Release dated July 13, 2009 (available online at <http://www.kcc.state.ks.us/pi/press/09-23.htm>).

185. *Id.*

186. *North American Wind Power*, Volume 7, Number 7, p. 24 (August 2010).

187. *Id.*

188. Kan. Senate Bill 227 (2011).

189. *Id.* at §1(a)(1).

of Senate Bill 227; a tower erected after this date must be marked at the time it is built.¹⁹⁰ The towers must be painted in equal, alternating bands of aviation orange and white; two marker balls must be attached to and evenly spaced on each of the outside of guy wires; and one or more seven-foot safety sleeves must be placed at each anchor point.¹⁹¹

Another provision in Senate Bill 227 establishes guidelines for wind energy agreements.¹⁹² Each lease or easement involving wind or solar resources must include a description of the property subject to the easement and a description of the property benefiting from lease.¹⁹³ Further, a description of the vertical and horizontal angles and distances from the site of the wind or solar power system in which an obstruction to the system is prohibited is required; and any termination and compensation requirements are also required in the agreement.¹⁹⁴

6. Pending Legislation

Draft legislation, House Bill 2141, was introduced to the House on January 27, 2011 that would prohibit severance of wind energy production rights from the surface rights for the tract of land on which the wind energy project is located.¹⁹⁵ The proposed legislation states that no interest in any resource located on a tract of land and solely associated with the production or potential production of wind on the land may be severed from the surface estate.¹⁹⁶ Leasing arrangements may be made only with the authorized owner of the surface.¹⁹⁷ The proposed legislation passed the House on February 23, 2011, but as of early-May 2011, had not passed out of the Senate, and remains in the Committee on Utilities.¹⁹⁸

G. Michigan

Michigan has only 143.39 MW of wind power currently being generated.¹⁹⁹ While several wind projects came online during 2008 and 2009, none came online during 2010.²⁰⁰ Development of offshore wind projects in Michigan's Great Lakes could influence the amount of wind energy produced in Michigan. With over 38,000 square miles of state-owned Great Lakes bottomlands, the potential for Great Lakes wind projects is good if proposed legislation does not get in the way of offshore development.²⁰¹

190. *Id.*

191. *Id.* at §1(b)(1-3).

192. *Id.* at §2.

193. *Id.* at §2(a)(1).

194. *Id.* at §2(a)(2-3).

195. Legislation Introduced in the House by the Committee on Energy and Utilities January 27, 2011.

196. *Id.*

197. *Id.*

198. Kansas Legislature: HB2141. See http://www.kslegislature.org/li/b2011_12/year1/measures/hb2141/

199. AWEA 2011, *supra* note 2, at 4-5; and see, AWEA, *supra* note 3 (then select MI from the drop-down menu).

200. *Id.*

201. Katherine Brady-Medley & Nick Schroek, *Offshore Wind Energy Development in Michigan's Great Lakes: Current Law and Proposed Legislation*, 29 Mich. Env. L.J. 82 (2011) [hereinafter, BRADY-MEDLEY].

1. Renewable Portfolio Standard

Michigan's 2008 Clean, Renewable, and Efficient Energy Act established an RPS.²⁰² Public Act 295 requires all electric providers in the state provide at least 10% of their electricity using renewable energy sources, including wind, by the year 2015.²⁰³ The RPS compliance period begins in 2012, and each utility has an annual obligation based on its energy portfolio.²⁰⁴

2. Siting and Permitting

Michigan has not adopted any statewide legislation detailing wind specific siting regulations or a permitting process. There are a number of siting issues that the state is reviewing, including tower height, tower setbacks, noise levels, shadow flicker, and decommissioning.²⁰⁵ The state did issue recommended guidelines to encourage uniformity with local governments in developing siting requirements.²⁰⁶ The guidelines do not bind local governments, but recommend a more standard system of codification for local ordinances.²⁰⁷

3. Offshore Wind Energy

Michigan has over 38,000 square miles of state owned Great Lakes bottomlands,²⁰⁸ but it does not yet have a process for permitting offshore wind energy facilities on Great Lakes bottomlands.²⁰⁹ The bottomlands are regulated by the Michigan Department of Natural Resources and Environment (MDNRE) through the Natural Resources and Environmental Protection Act (NREPA) (authorizing the MNDRE to enter into agreements for the bottomlands).²¹⁰

The Great Lakes Wind Council is an advisory body within the Michigan Department of Energy, Labor & Economic Growth²¹¹ charged with providing input on proposed and new Great Lakes Wind development laws and rules.²¹² The Council issued its report in October 2010²¹³ noting that 35% of the state-owned Great Lakes bottomlands are good potential sites for offshore wind energy project development and recommending a project permitting process be established.²¹⁴

202 Watt's New? Michigan Energy News, September, 2008. See <http://www.varnumlaw.com/energynews>.

203. Michigan Renewable Energy Standard Summary. See: www.ucsusa.org/assets/documents/clean_energy/michigan-1.pdf

204. 2008 PA 295

205. The State Bar of Michigan, Environmental Law Section: Wind Energy Siting and Planning Update (2009). See http://www.michbar.org/environmental/pdfs/WindEnergySiting_Planning.pdf

206. State of Michigan Department of Labor and Economic Growth: Michigan Siting Guidelines for Wind Energy Systems. See http://www.michigan.gov/documents/Wind_and_Solar_Siting_Guidelines_Draft_5_96872_7.pdf

207. *Id.*

208. BRADY-MEDLEY, *supra* note 201.

209. *Id.*

210. *Id.*

211. Report of the Michigan Great Lakes Council, October 1, 2010. See http://www.michigan glow council.org/GLOWreportOct2010_with%20appendices.pdf

212. *Id.*

213. Michigan Great Lakes Wind Council. See <http://www.michigan glow council.org>

214. *Id.*

Because any lease or use of Great Lakes bottomlands in Michigan must be approved by the legislature,²¹⁵ additional laws and administrative rules are needed to implement a practical process for offshore wind energy development.²¹⁶ 2010 proposed laws would have required the Public Service Commission and Great Lakes Wind Council to create a Great Lakes wind facility permitting and siting plan,²¹⁷ but the pending legislation was not enacted.²¹⁸

H. Minnesota

Minnesota currently has an installed wind generation capacity of 2,192 MW and it is ranked fourth nationally; it has the potential to develop 75,000 MW.²¹⁹ The majority of Minnesota's development has taken place in the southwest corner of the state in Lincoln, Pipestone, and Murray counties.²²⁰ Minnesota's success has come without the use of financial incentives utilized by other states.²²¹ Minnesota's success is attributable to its aggressive RPS.²²²

Looking forward, Minnesota is approaching a development crossroads. As the State continues to attract large wind developers, utilities are planning for expensive additions to its transmission infrastructure.²²³ In April 2009, Minnesota utility companies obtained a Certificate of Need for the CapX 2020 project,²²⁴ which would add over 600 miles of transmission lines at an estimated cost of up to \$1.7 billion.²²⁵ Recent discussions, however, have challenged the need for the substantial transmission investment.²²⁶ People opposing the CapX 2020 project claim that sufficient infrastructure already exists to add an estimated 3,500 MW of renewable energy through strategically placed "dispersed wind generation."²²⁷ This plan proposes the pursuit of small developments known as community-based energy developments that can plug into the grid using existing low-voltage utility lines at a fraction of the cost of CapX 2020,

215. BRADY-MEDLEY, *supra* note 201.

216. *Id.*

217. *Id.*

218. *Id.*

219. AWEA 2011, *supra* note 2, at 4-5; and *see*, AWEA, *supra* note 3 (then select "MN" from the drop-down menu).

220. DEP'T OF ADMIN. LAND MGMT. INFO. CTR., WIND TURBINES IN MINNESOTA (2009), *available at* http://www.state.mn.us/mn/externalDocs/Commerce/Map_Wind_Turbine_Locations_022409111000_WindTurbineMap.pdf.

221. *See supra* Part II.E.2.

222. Cameron Macht, *Something in the Wind*, MINN. ECON. TRENDS, Mar. 2009, at 2.

223. Business Wire, *Upper Midwest Utilities Identify Electric Transmission Upgrades to Meet Renewable Energy Standard Milestones*, REUTERS, Apr. 2, 2009, *available at* <http://www.reuters.com/article/pressRelease/idUS144532+03-Apr-2009+BW20090403>.

224. Press Release, Great River Energy, CapX2020 Granted Certificate of Need for 345-kilovolt Projects in Minnesota (Apr. 16, 2009), *available at* <http://www.reuters.com/article/pressRelease/idUS206762+16-Apr-2009+BW20090416>; *See also*, <http://www.capx2020.com/>.

225. JOHN BAILEY ET AL., MEETING MINNESOTA'S RENEWABLE ENERGY STANDARD USING THE EXISTING TRANSMISSION SYSTEM 5 (2008).

226. *Id.* at 6-7.

227. *Id.* at 9-10.

which would add only 1,050 MW after the first phase.²²⁸ Minnesota is the nation's leading producer of locally owned wind power and has long been a proponent of community development.²²⁹ Yet, large-scale transmission development may have a greater overall benefit to Minnesota's economy by enabling wind-generated power to be sold across state lines.²³⁰

1. Renewable Portfolio Standard

Minnesota has two different RPS requirements: It has a higher standard for utilities that owned a nuclear generating facility as of January 1, 2007,²³¹ and a somewhat lower standard for other utilities in the state.²³² The lower RPS requires a gradually increasing percentage of renewable energy by the year 2025, with 12% by 2012, 17% by 2016, 20% by 2020, and 25% by 2025.²³³ The higher RPS percentages for nuclear facilities are 15% by 2010, 18% by 2012, 25% by 2016, and 30% by 2020.²³⁴ The higher nuclear RPS also contains a unique provision mandating that at least 25% of the 30% year 2020 requirement come from wind energy plants.²³⁵

2. Incentives

In lieu of a personal property tax, Minnesota wind generators are required to pay a production tax of 0.012 cents to 0.12 cents per kWh— depending on the size of the project—unless the facility is located within a job opportunity building zone (JOBZ).²³⁶ Launched in 2004, the JOBZ initiative is a stimulus program created to encourage “economic development in rural Minnesota by providing local and state tax exemptions to companies that start up or expand in targeted areas.”²³⁷ “The exemptions begin on the date they sign a business subsidy agreement and lasts until the program expires on December 31, 2015.”²³⁸ A new 2010 law revises the JOBZ program, clarifying that the wind energy production tax exemption is limited to wind project owners who have a business subsidy agreement with the applicable local governmental authority covering the land area where the wind project is located.²³⁹

228. *See id.* at 10.

229. Macht, *supra* note 222, at 2.

230. BAILEY, *supra* note 225, at 14 (arguing that the CapX 2020 project is designed to meet regional power needs).

231. U.S. Energy Information Administration, Prairie Island Nuclear Plant, Minnesota http://www.eia.doe.gov/cneaf/nuclear/page/at_a_glance/reactors/prairieisland.html (last visited Oct. 6, 2009); U.S. Energy Information Administration, Monticello Nuclear Power Plant, Minnesota *available at* http://www.eia.doe.gov/cneaf/nuclear/page/at_a_glance/reactors/monticello.html (last visited Oct. 6, 2009).

232. MINN. STAT. § 216B.1691.2a (Supp. 2009).

233. *Id.* § 216B.1691.2a(a).

234. *Id.* § 216B.1691.2a(b).

235. *Id.*

236. MINN. STAT. § 272.029.3(a)(1), (b) (Supp. 2009). Facilities producing more than 0.25 MW, but no more than 2 MW, pay 0.012 cents per kWh; facilities producing more than 2 MW, but no more than 12 MW, pay 0.036 per kWh; and facilities producing more than 12 MW pay 0.12 cents per kWh. *Id.* § 272.029.3(a)(1)-(3).

237. *See* Minn. Dep't of Employment and Econ. Dev., What is JOBZ?, *available at* <http://www.positivelyminnesota.com/bizdev/jobzwhat.htm> (last visited Oct. 6, 2009).

238. *Id.*

239. HF 3729 Omnibus Tax Bill (2010).

For taxing purposes, Minnesota values wind facilities as it would undeveloped land, and additions of personal property to the land for the purpose of wind energy production are not considered improvements when it comes to property taxation.²⁴⁰ However, like Iowa, Minnesota exempts materials used in the construction of the facility from sales and use taxes.²⁴¹

3. Siting and Permitting

Minnesota is unique in that a permit from the Minnesota Public Utility Commission (PUC) preempts and replaces all local regulations and zoning ordinances for wind developments generating 5 MW or more.²⁴² Therefore, large-scale wind developers must only worry about obtaining a permit from the PUC.²⁴³ The law, however, allows counties to assume the task of permitting under the supervision of the PUC for projects less than 25 MW in size.²⁴⁴ In early 2008, the PUC adopted a standard set of siting rules for projects in the 5-25 MW size.²⁴⁵ The siting standards include rules regarding setbacks from the property lines of non-participating landowners, internal turbine spacing rules, noise standards, and minimum setbacks from residences.²⁴⁶ While these standards technically only apply to projects that are between 5 and 25 MW in size, a review of a permit for a larger facility demonstrates that the PUC tends to follow the same standards in reviewing and approving projects greater than 25 MW.²⁴⁷ More recently, the PUC sought comment on whether to impose additional wind project siting and permitting standards in response to certain health issues examined in a White Paper published by the Minnesota Department of Health.²⁴⁸ Initial comments were due by September 16, 2009, and reply comments were due on October 14, 2009.²⁴⁹

I. Missouri

In 2010, Wind Capital Group finished installation of a 148.5 MW wind facility, bringing Missouri's total installed capacity to 457 MW.²⁵⁰ Two of the state's largest facilities are located in the northwest corner of the state,²⁵¹ where Missouri's wind resources are richest.²⁵²

240. See MINN. STAT. § 272.027.9(a) (Supp. 2009).

241. MINN. STAT. § 297A.68.12 (Supp. 2009).

242. MINN. STAT. §§ 216F.01.2, 216F.07 (Supp. 2009).

243. *Id.* §§ 216F.01.2, 216F.07.

244. MINN. STAT. § 216F.08(a) (Supp. 2009).

245. See Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Minn. Pub. Util. Comm'n, Jan. 11, 2008), available at <http://www.windaction.org/documents/14797>.

246. *Id.*

247. See Minn. Pub. Utils. Comm'n, Large Wind Energy Conversion System Site Permit for Ecoharmony West Wind Project in Fillmore County PUC Docket No. IP-6688/WS-08-973, at 6 (2009), available at <http://energyfacilities.puc.state.mn.us/documents/19910/Commission%20Order%20Accepting%20Site%20Permit%20Application-Draft%20Site%20Permit.pdf>.

248. Minn. Pub. Utils. Comm'n, Notice of Comment Period PUC Docket No. E-999/CI-09- 845, (2009).

249. *Id.*

250. AWEA, *supra* note 3 (then select "MO" from the drop-down menu).

251. (indicating that the Iberdola development is in Atchinson County); Wind Capital Group: News Archive, available at http://www.windcapitalgroup.com/News/SingleNews/09-04-17/vice_president_

Missouri's total potential wind generation capacity is 5,960 MW²⁵³ meaning Missouri wind energy could accommodate 25% of the state's current 23,000 MW-load.²⁵⁴ However, proponents of Missouri wind development must compete with neighboring Iowa, and its generous incentive program.²⁵⁵ The Missouri RPS law permits wind purchased from out-of-state to count toward a utility's required renewable energy portfolio.²⁵⁶ In fact, it seems uncertain whether the out-of-state power must be consumed in Missouri in order to qualify as RPS power.²⁵⁷ If permitted to sell RECs to Missouri utilities without selling the energy to Missouri customers, an Iowa wind facility could sell energy to Iowa customers, availing itself of Iowa's tax credit, and meanwhile, sell RECs to a Missouri utility.²⁵⁸ As a counteractive incentive, renewable power purchased from Missouri facilities currently gives utilities 25% more credit than out-of-state power, providing wind energy companies that develop in-state projects with a competitive advantage.²⁵⁹

1. Renewable Portfolio Standards

Missouri has a goal for utility corporations to reach a 2% renewables portfolio by 2011 and 15% by the beginning of 2021.²⁶⁰ As mentioned above, to encourage in-state development, renewable energy units purchased from within Missouri are worth 1.25 RECs—25% more than out-of-state energy units.²⁶¹ For non-complying utilities, the State

biden_tojoin_wind_capital_group_associated_electric_cooperative_abb_ge_energy_uaw_and_rmt_to_announce_wind_farm_to_be_developed_as_a_result_of_federal_stimulus.aspx (indicating that the Lost Creek development is located in DeKalb County).

252. U.S. Dep't of Energy, Nat'l Renewable Energy Lab., Mo. 50 m Wind Power (2005), *available at* http://www.windpoweringamerica.gov/images/windmaps/mo_50m_800.jpg (last visited Oct. 6, 2009).

253. Missouri Partnership – Missouri's Wind Resources (*available at* <http://www.missouripartnership.com/Industries/Energy>).

254. *See* JEFF DAVIS, COMM'R, MO. PUB. SERV. COMM'N, THE DEMAND CHALLENGE: MEETING MISSOURI'S DEMAND FOR ENERGY GROWTH IN AN ENVIRONMENTALLY RESPONSIBLE MANNER 5 (2009), *available at* <http://www.semowired.org/files/energy-conf-presentation-by-jeff-davis-3-09.pdf>. Missouri's wind generation capacity is 5,960 MW, and the total load is 23,000 MW. Dividing the total load by the wind generation capacity indicates a total of 25.9%.

255. *See supra*, Part II.E.

256. MO. REV. STAT. § 393.1030.1 (Supp. 2009).

257. The Missouri Public Service Commission (PSC) is currently working through a rule promulgation process to implement the RPS law. A debate exists as to whether REC must represent energy that is consumed by a utility's customers in Missouri. The most recent draft states that “[c]ompliance may be achieved through the prudent purchase and retirement of RECs . . . that are not associated with electrical energy delivered to the utility's Missouri retail customers.” MO. CODE REGS. ANN. tit. 4 § 240-20.XXX(2) (proposed rev. 11, Jun. 22, 2009), *available at* <https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=935400568>. Wind Capital Group has opposed portions of the current rule revisions and asked for a requirement that REC “to be counted towards the RES requirements only if the generation facility for the renewable energy resource is either located in Missouri or, if located outside of Missouri, the renewable energy resource is delivered to Missouri electric energy retail customers.” WIND CAPITAL GROUP, COMMENTS REGARDING GEOGRAPHIC SOURCING – GENERATED IN OR DELIVERED INTO MO 3-4 (Jun. 30, 2009), *available at* <https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=935401876>.

258. *See* MO. REV. STAT. § 393.1030.1 (permitting a qualifying renewable energy generator to sell credits to a Missouri utility company); *see also* Horizon Wind Energy, *supra* note 128 (noting that Iowa wind facilities sell REC to utilities in other states).

259. MO. REV. STAT. § 393.1030.1.

260. *Id.*

261. *Id.*

imposes a penalty “of at least twice the average market value of renewable energy credits for the compliance period.”²⁶² As an added incentive, a utility generating renewable energy equal to 15% or more of its fossil fuel generation is not required to pay customers rebates or subsidies for customer-generated solar energy.²⁶³ These utilities are also exempt from the solar requirement imposed by the RPS law.²⁶⁴

2. Siting and Permitting

Missouri has very few laws governing the installation of wind power facilities. The Missouri Public Service Commission does not currently require wind energy developers to obtain a certificate before beginning construction of a wind project. Likewise, the Missouri Department of Natural Resources does not require developers to obtain a siting permit, nor has the department published guidelines for the developer to follow. Furthermore, most local governments do not have the authority to regulate wind developments. Under Missouri law, counties are classified by their assessed value,²⁶⁵ and only “first-class” counties are authorized to establish zoning ordinances or restrict land use.²⁶⁶ Because the wind-rich counties of Atchison, Holt, Nodaway, and DeKalb are not first-class counties, current Missouri wind projects are largely unregulated.

J. Nebraska

Nebraska has 213 MW of installed wind energy generating capacity.²⁶⁷ It has approximately 204 MW of power capacity currently under construction.²⁶⁸ The largest of the additional projects will be Broken Bow, with approximately 81 MW of power generated.²⁶⁹ The Nebraska legislature and other stakeholders have been very active the past few years with new initiatives to spur growth in the Nebraska wind energy market.

1. Renewable Portfolio Standards

While Nebraska has yet to mandate an RPS by law, the State is taking steps to ensure that a portion of their energy sales come from renewable resources.²⁷⁰ Both Nebraska Public Power and Omaha Public Power districts have implemented a goal of obtaining 10% of their energy from renewable sources by 2020.²⁷¹

262. § 393.1030.2. The statutory language is not completely clear as to which renewable energy credits the penalty applies. The authors presume, however, that the legislature intended the penalty to apply to only the remaining segment of the minimum level of REC that the applicable utility did not achieve in the given time period.

263. MO. REV. STAT. § 393.1050 (Supp. 2009).

264. *Id.*

265. MO. REV. STAT. § 48.020 (Supp. 2009).

266. MO. REV. STAT. § 64.010 (2007).

267. AWEA 2011, *supra* note 2, at 5.

268. *Id.*

269. *Id.*

270. Renewable Power & Energy Efficiency Market: Renewable Portfolio Standards, available at <http://www.ferc.gov/market-oversight/othr-mkts/renew/othr-rnw-rps.pdf>.

271. Clean and Secure Energy Actions Report • 2010 Update, Renewable/Alternative Energy Portfolio Standards and Goals, <http://www.nga.org/Files/pdf/1008CLEANENERGYELECTRICITYRENEWABLE.PDF> (last visited Feb.

2. Private Wind Development

Legislative Bill 1048 (LB 1048) provides a statutory structure for private wind energy development and energy export. The statute first defines a new category of renewable energy facility known as a certified renewable export facility -- a facility that will generate electricity using solar, wind, biomass, or landfill gas, constructed and owned by an entity other than a municipality, public power district or electric cooperative; such facilities must have a power purchase or similar agreement with an initial term of ten years or more for the sale of at least 90% of the output of the facility with a customer located outside of Nebraska.²⁷² A private renewable energy facility can be constructed upon conditional approval which requires that the facility provide identifiable public benefits, including economic development, to the residents of Nebraska; such facilities must be privately owned and the conditional approvals require that the facility show evidence of negotiations for power purchase agreements.²⁷³

Before receiving final approvals, renewable export facilities must demonstrate that they (a) will not have a materially detrimental effect on Nebraska utility ratepayers, except to the extent required for transmission improvements, (b) have obtained the necessary generation interconnection and transmission service approvals, (c) have applied for and are pursuing the required approvals from any other federal, state or local entities with jurisdiction or permitting authority over the facility, (d) have no substantial risk of unprofitability, (e) agree to reimburse any costs not covered by a regional transmission organization tariff, and (e) must submit a decommissioning plan.²⁷⁴

3. Nameplate Capacity Tax

A 2010 law imposes a Nameplate Capacity tax under section §77-6203 to replace property taxes currently imposed on wind infrastructure; the prior property caused budgeting challenges with too many increased upfront costs for wind energy developers.²⁷⁵ Rather than pay a property tax, the owner of a wind energy facility will now pay a nameplate capacity tax equal to the total nameplate capacity of the commissioned wind turbine of the wind energy generation facility multiplied by a tax rate of three thousand five hundred eighteen dollars per megawatt (\$3,518.00/MW).²⁷⁶ It is also now clear that the presence of wind energy generation facilities and supporting infrastructure will not affect the value of the property beneath them for other Nebraska property tax purposes.²⁷⁷

4. Siting

Nebraska Revised Statute 66.913 allows all counties or municipalities having zoning jurisdiction to include considerations for the encouragement of solar and wind energy use

13, 2011)

272. *Id.* at §6(1).

273. *Id.* at §6 (2)(a)

274. *Id.* at §6 (2)(c) (i-viii)

275. NEB. REV. STATUTES CH. 77 §6201(1) (2010).

276. NEB. REV. STATUTES CH. 77 §6203 (1) (2010).

277. *Id.* at §6203(4).

and the protection of access to wind energy in all application regulations.²⁷⁸ Considerations may include regulation of height, location, setback, and use of structures.²⁷⁹

5. Lease Priority; Existing Land Tenants

If a wind lease is entered into on land already being leased for agricultural or other purposes, the rights of the prior lessee will have priority over the wind lease.²⁸⁰ If damages to personal property or crops (including grass) occur from the wind lease, the prior lessee must be compensated.²⁸¹ Further, if a wind lease is entered into on land with an existing lease, the first lessee will have priority as to the use of water on the land.²⁸²

6. Wind Agreement Requirements; Severance

If a landowner wishes to enter into an instrument creating a right in land or an option to secure a land right in real property (or the vertical space above the real property) for wind energy conversion system, Nebraska Revised Statute 66-911.01 imposes several requirements.²⁸³ The agreement must be created in writing, filed and duly recorded and indexed in the office of the register of deeds in the county in which the real property is located.²⁸⁴ The instrument must also include the names of the parties, a legal description of the real property, the nature of the interest created, consideration paid, and a description of the improvements the developer plans to make on the property, including a description of the decommissioning security, as defined in section 76-3001 of the Nebraska Revised Statutes.²⁸⁵ A wind agreement runs with the land benefitted and burdened and terminates upon the conditions stated in the wind agreement; further, wind agreement terms cannot exceed forty years.²⁸⁶ No interest in any resource located on a tract of land associated with the production of wind-generating energy on the tract of land may be severed from the surface estate.²⁸⁷

7. Production Tax Credit

Any electricity generated by a new zero-emission facility can earn a renewable energy production tax credit (PTC).²⁸⁸ Eligible renewable resources include wind energy.²⁸⁹ For electricity generated on or after January 1, 2010, but before January 1, 2013, the PTC is be .075 cents per kilowatt-hour of electricity; for electricity generated on or after January 1, 2013 and before January 1, 2018, the credit is .05 cents per

278. NEB. REV. STATUTES CH. 66 §913 (2010).

279. *Id.*

280. NEB. REV. STATUTES CH. 72 §273 (1) (2010).

281. *Id.* at §273 (2).

282. *Id.* at §273 (3).

283. NEB. REV. STATUTES CH. 66 §911.01 (2010).

284. *Id.*

285. *Id.* at §911.01 (1)-(6). These rules are similar to recent legislation passed in Oklahoma, which mirrors the Nebraska statutes; See *infra* Part II. N., Oklahoma.

286. Legislative Bill 568 §2 (2010).

287. NEB. REV. STATUTE CH. 76 §3004 (2010).

288. NEB. REV. STATUTES CH. 77 §27, 235 (2010).

289. *Id.*

kilowatt-hour.²⁹⁰ The total amount of tax credits that can be given is \$750,000 without legislative approval.²⁹¹ Legislation introduced in the 2011 Session seeks to change the language of the bill from a “new zero-emission facility” to “renewable electric generation facility”.²⁹² The Nebraska PTC cannot be claimed by a producer who received a sales tax exemption under statutory section 77-2704.57 for the facility.²⁹³

8. Registration of Wind Measurement Equipment

As of July 15, 2010, all wind measurement equipment associated with wind-powered electric generation in Nebraska must be registered with the Department of Aeronautics if the equipment is at least fifty feet above the ground and is located outside the boundaries of an incorporated city or village.²⁹⁴ All equipment installed after July 15, 2010 must be lighted or painted.²⁹⁵

K. New Mexico

The State of New Mexico has an online wind generation capacity of 700 MW.²⁹⁶ Although the state’s development has not been as rapid as other states, New Mexico recently implemented some new policies and programs that are likely to attract new development. New Mexico wind generators are eligible for a production-based tax credit against state income tax up to \$4 million annually for ten years.²⁹⁷ New Mexico has also established the Renewable Energy Transmission Authority (RETA) to “focus [] entirely on developing new transmission projects . . . to promote development of renewable energy.”²⁹⁸ RETA has been delegated broad power from the state, including the power to buy, sell, and lease land, enter into partnerships, issue bonds, and even exercise eminent domain power.²⁹⁹ RETA is currently helping to finance the 460-mile SunZia transmission project, which would carry power into Arizona and add another 3,000 MW of capacity, but the project is facing opposition from environmental groups.³⁰⁰ The SunZia project also highlights another hurdle for developers in New Mexico: With so much of the land in the western United States owned by the federal government, permits from the Bureau of Land Management are often required either for the facility itself or for transmission access.³⁰¹

290. *Id.* at §27, 235(1).

291. *Id.* at §27,235 (6).

292. Nebraska Legislative Bill 359, Introduced January 13, 2011.

293. NEB. REV. STATUTES CH. 77 §27, 235 (7) (2010).

294. Legislative Bill 1048 §8 (2010).

295. *Id.* at (1)(b)

296. AWEA 2011, *supra* note 2, at 5.

297. *See* N.M. STAT. § 7-2-18.18(C) (Supp. 2008).

298. Joanna Prukop, Cabinet Sec’y, N.M. Energy, Minerals and Natural Res. Dep’t, Presentation at Western States State Energy Program Conference: Approaches for Responsible Energy Development, (Apr. 15, 2009); *see also* N.M. STAT. § 62-16A-4 (Supp. 2008).

299. *See* N.M. STAT. § 62-16A-4.

300. *See* Juliet Eilperin & Steven Mufson, *Renewable Energy’s Environmental Paradox: Wind and Solar Projects May Carry Costs for Wildlife*, WASHINGTON POST, Apr. 16, 2009, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/04/15/AR2009041503622.html>.

301. *Id.* (“The agency has already authorized 206 wind projects . . . and at least 200 more awaiting approval.”).

1. Renewable Portfolio Standards

Public utilities are required to generate 20% of their total retail sales from renewable energy resources by 2020, with interim standards of 10% by 2011 and 15% by 2015.³⁰² Rural electric cooperatives are required to achieve 5% renewable production by 2015, with a 1% increase each year thereafter until 2020 an aggregate total of 10%.³⁰³

2. Incentives

Owners of wind facilities installed prior to 2018 can receive a production tax credit of \$0.01 per kWh of energy produced for the first 400,000 MWh of generation per year for ten years.³⁰⁴ The amount of the credit is based on a varying amount per unit of electricity generated, multiplied by the number of units generated in the applicable period.³⁰⁵ Any amount of the credit exceeding the taxpayer's liability may be carried forward for up to five years.³⁰⁶

3. Siting and Permitting

The New Mexico Public Regulations Commission requires that state-level certificates be obtained for any facility that has a generation capacity of 300 MW or more.³⁰⁷ There is no similar state-level permitting requirement for facilities with capacities less than 300 MW. Yet, such facilities may still be subject to local governmental regulations. The New Mexico Game and Fish Department has issued wildlife impact guidelines for developments similar to those discussed in other states.³⁰⁸ The guidelines recommend that developers: (1) avoid placing turbines at or around ridge passes and prairie dog colonies where raptors might be found; (2) orient turbines in rows parallel to bird migration paths to avoid avian collisions; (3) "implement appropriate storm water management practices that do not create attractions for birds"; (4) avoid fragmenting habitats and building near endangered and sensitive species, including prairie chickens; and (5) monitor mortality rates after development.³⁰⁹

L. New York

With 1,275 MW of installed wind capacity, New York ranks thirteenth in installed capacity.³¹⁰ New York's wind energy portfolio seems poised for continued growth as the State takes steps to be a leader in reducing carbon emissions. On August 6, 2009, Governor David Paterson signed Executive Order No. 24, creating a Climate Change

302. S.B. 418, 48th Leg., 1st Sess. (N.M. 2007).

303. N.M. STAT. § 62-15-34(A)(1)-(2) (Supp. 2008).

304. N.M. STAT. § 7-2-18.18(C) (Supp. 2008).

305. *See id.*

306. *Id.* § 7-2-18.18(L)(1).

307. N.M. CODE R. § 17.9.592.7, 17.9.592.9 (Weil 2009).

308. N.M. GAME AND FISH DEP'T, IMPACTS OF WIND ENERGY DEVELOPMENT ON WILDLIFE 6 (2004). *See discussion infra* regarding environmental impact guidelines for California and Colorado.

309. *Id.*

310. AWEA 2011, *supra* note 2, at 4-5.

Action Council responsible for developing a plan to reduce carbon emissions 80% by 2050.³¹¹ The order provides specific instructions for the Council to assess how to reduce emissions in the energy production sector.³¹² With these aggressive policies and room to grow, it seems likely that New York will expand its wind portfolio.³¹³

1. Renewable Portfolio Standards

In 2005, New York imposed an RPS goal to increase its then current renewable energy percentage from 19% to 24% by 2013 with the use of state incentive programs.³¹⁴ On April 2, 2010, New York encouraged utilities to provide 30% of their energy from a renewable source by 2015.³¹⁵ The entire program is incentive-based, and the State does not impose penalties for non-compliance.³¹⁶ The New York State Energy Research and Development Authority (NYSERDA) administers the program. NYSERDA collects a surcharge from utility companies and uses the proceeds to help fund renewable energy facilities.³¹⁷

2. Incentives

New York further incentivizes new project development by providing relief from certain real property taxes during the early years of a new project. Increases in real property value from the addition of wind energy systems constructed before December 31, 2014, are exempt from property taxation for fifteen years.³¹⁸ A county, city, township, village, or school district may choose, however, not to provide this exemption.³¹⁹ A list of local bodies that have opted not to provide this exemption can be found at the State of New York's Office of Real Property Services.³²⁰ In the alternative, a local body may allow the developer to enter into a contract to make payments in lieu of taxes in an amount not to exceed the amount payable without the exemption.³²¹

3. Siting and Permitting

Any electric generation facility exceeding 80 MW in capacity is required to obtain a certificate from the New York Public Service Commission prior to construction.³²² Among other things, applications for a certificate must include an environmental-impact

311. N.Y. Exec. Order No. 24 (Aug. 6, 2009), available at http://www.state.ny.us/governor/executive_orders/xeorders/pdf/eo_24.pdf.

312. *Id.*

313. AWEA *supra* note 3 (then select "NY" from the drop-down menu) (stating that New York has 7,080 MW in potential capacity).

314. N.Y. STATE PUB. SERV. COMM'N, CASE NO. 03-E-0188, PROCEEDING ON THE MOTION OF THE COMMISSION REGARDING A RETAIL RENEWABLE PORTFOLIO STANDARD 4 (2010).

315. *Id.*

316. *Id.*

317. N.Y. STATE ENERGY RESEARCH & DEV. AUTH., REQUEST FOR PROPOSALS NO. 916 2 (2004), available at http://www.nysesda.org/wms/docs_funding/916RFP.pdf.

318. N.Y. REAL PROP. TAX LAW § 487.2, .5 (McKinney 2010).

319. *Id.* § 487.8. A few school districts are not permitted to disallow this exemption. *Id.*

320. Office of Real Prop. Servs. Solar and Wind Energy Exemption (RPTL, Section 487) Opt Out, www.orps.state.ny.us/legal/localop/487opt.htm (last visited Oct. 6, 2009).

321. N.Y. REAL PROP. TAX LAW § 487.9(a).

322. N.Y. PUB. SERV. LAW § 68 (McKinney 2000).

study³²³ and a statement demonstrating the facility's construction is "reasonably consistent" with the state's energy plan.³²⁴ The NYSERDA has published a series of guidelines for mitigating environmental and wildlife impacts in design and construction.³²⁵ The New York Department of Environmental Conservation has also issued guidelines for conducting surveys to monitor a facility's impact on bats.³²⁶

4. Code of Conduct

In response to allegations of "improper relationships between Wind Companies and local officials," the New York Attorney General issued a voluntary code of conduct to "promote public integrity" in the development of wind farms.³²⁷ As of July 2009, seventeen developers comprising "virtually the entire wind industry" in New York have become signatories to the code.³²⁸ Developers who sign the code agree not to offer any kind of benefit to the officer or her associates, including gifts of more than \$10, employment or promises of employment, or honors.³²⁹ Municipal officers cannot be involved in the wind projects as lessors.³³⁰ Developers must also publicly disclose any financial interest that the municipal officer or her relative has in the project.³³¹ Additionally, within sixty days of signing the code, the developer is required to train all employees with regard to compliance with the code.³³² Participating developers who violate the code are subject to a civil penalty of up to \$50,000 for the first violation and up to \$100,000 for any subsequent violation.³³³

5. Offshore Wind

In June 2010 the New York Port Authority (NYPA) announced the start of a multi-phase review process for five proposals seeking to construct wind turbines in the Great Lakes.³³⁴ The NYPA has identified potential turbine locations off the shores of Webster, Irondequoit, Greece and Rochester Counties and in the New York State waters of Lake Erie and Lake Ontario.³³⁵ The initiative known as the Great Lakes Offshore Wind ("GLOW") project has been met with some opposition from the counties of

323. N.Y. COMP. CODES R. & REGS. tit. 16, § 1001.3(a) (2009).

324. *Id.* § 1001.5(a).

325. *See generally* N.Y. State Energy Research & Dev. Auth., Wind Development – Wind Energy Toolkit, available at <http://www.powernaturally.org/programs/wind/toolkit.asp> (last visited Oct. 6, 2009) (listing a series of guidelines under the "Environmental" subheading).

326. N.Y. STATE DEP'T OF ENVTL. CONSERVATION DIV. OF FISH, WILDLIFE AND MARINE RES., GUIDELINES FOR CONDUCTING BIRD AND BAT STUDIES AT COMMERCIAL WIND ENERGY PROJECTS 2 (2009).

327. ANDREW M. CUOMO, ATTORNEY GENERAL, STATE OF N.Y., CODE OF CONDUCT AGREEMENT 1 (2008), available at http://www.oag.state.ny.us/media_center/2008/oct/WindCODE%20FINAL.pdf.

328. Andrew M. Cuomo, Attorney General, State of N.Y., Statement Regarding Reunion Power's Decision to Adopt His Wind Industry Ethics Code (July 29, 2009), available at http://www.oag.state.ny.us/media_center/2009/july/july29b_09.html.

329. CUOMO, *supra* note 327, at 1-2.

330. *Id.* at 2.

331. *Id.* at 2-3.

332. *Id.* at 5.

333. *Id.* at 6.

334. *See* <http://www.nypa.gov/NYPAwindpower/GreatLakesWind.htm>

335. Amanda Seef, *Webster Board Says "No" to Wind Turbines*, WEBSTER POST, Aug. 19, 2010, available at <http://www.websterpost.com/yourlife/x1422851307/Webster-board-says-no-to-wind-turbines>

Webster, Greece, Wayne, Jefferson and Oswego all passing resolutions opposing GLOW.³³⁶ Nonetheless, the NYPA hopes to have a developer selected in the last quarter of 2010 or first quarter of 2011.³³⁷ Construction for the GLOW project is slated for a 2013 start, with hopes that offshore wind farms could be commercially operational by 2015 or 2016.³³⁸ In addition to the GLOW project, the New York Port Authority is also planning to have five wind towers, each more than 280 feet tall, operating in the New York Harbor.³³⁹ The city's Economic Development Corporation has also been studying the feasibility of placing turbines atop buildings, and throughout the City.³⁴⁰

M. North Dakota

North Dakota has 1,424 MW of operating wind capacity.³⁴¹ North Dakota is the most wind rich state in the nation, with the potential capacity to produce 138,400 MW of wind.³⁴² The State's wind energy developers enjoy generous incentives, including a tax credit with a twenty-year life.³⁴³ Yet, developers in North Dakota are also subject to some unique rules and regulations.

Prior to starting wind leasing in the state, a developer should become familiar with Chapter 17-04 of the North Dakota Century Code entitled "Wind Energy Property Rights" (Chapter). Among other things, the Chapter requires developers obtain a permit from the state and have a transmission interconnection request in process within five years of entering into an easement or option agreement or the easement or option will be automatically voided and terminate.³⁴⁴ Presumably, this requirement is designed to discourage prospective developers from locking landowners into long-term commitments to participate in developments that never materialize. The requirement to obtain a permit and begin the interconnection process within five years is a significant change from the previous North Dakota law that required developers to produce wind power within five years.³⁴⁵ Regulations such as the repealed statute are potentially fatal for projects that face development obstacles taking more than five years to resolve. The new requirement is more flexible in that it only requires certain permits to be obtained within the initial five-year period.³⁴⁶ Additional Chapter requirements are discussed below.

336. *Id.*

337. James Cartledge, *New York Considers Five Great Lake Offshore Wind Proposals*, *BrighterEnergy.Org*, June 7, 2010, available at <http://www.brighterenergy.org/11632/news/wind/new-york-considers-five-great-lake-offshore-wind-proposals/>

338. *Id.*

339. McGeehan, Patrick, *New York Times*, "Wind Turbines are Coming to New York, and Not Just Offshore" August 16, 2010. See http://www.nytimes.com/2010/08/16/nyregion/16turbines.html?_r=1&pagewanted=print.

340. *Id.*

341. AWEA 2011, *supra* note 2, at 5.

342. AWEA, *supra* note 3 (then select "ND" from the drop-down menu).

343. S.B. 2033, 61st Legis. Assem., Reg. Sess. (N.D. 2009) (stating that the twenty-year life only applies to wind energy devices installed after Sept. 30, 2008 and before Jan. 1, 2012). The Governor signed the bill on March 19, 2009.

344. N.D. CENT. CODE § 17-04-01 & 17-04-05 (Supp. 2009). The Governor signed the bill on April 8, 2009.

345. *Id.*

346. *Id.*

With its electricity demand being relatively small, North Dakota's success in wind development depends on its ability to transport energy to highly populated areas outside the state.³⁴⁷ North Dakota has worked collaboratively with neighboring states to resolve this issue,³⁴⁸ and a transmission initiative known as the Green Power Express that would add 12,000 MW of capacity between North Dakota, South Dakota, and Minnesota is in the development stage.³⁴⁹

1. Renewable Portfolio Standards

North Dakota has adopted a program known as the 25x25 initiative, with a goal to produce 25% of all energy used in agricultural production—"food, feed, and fiber"—from renewable sources by the year 2025.³⁵⁰ The state also has a general RPS objective of 10% by 2015.³⁵¹ The North Dakota RPS is "voluntary and there is no penalty or sanction for a retail provider of electricity that fails to meet this objective."³⁵²

2. Incentives

North Dakota also offers a tax credit "for the cost of a . . . wind energy . . . device installed before January 1, 2015 . . . on property owned or leased by the taxpayer in North Dakota."³⁵³ For devices installed before January 1, 2001, the credit must be in an amount equal to 5% of the cost of the device per year for three years, and for devices installed after December 31, 2000, the credit must be in an amount equal to 3% per year for five years.³⁵⁴ The tax credit cannot exceed the taxpayer's liability for any given year, but it may be carried forward for up to twenty years.³⁵⁵ A 2007 legislative amendment prohibits wind developers from transferring the tax credit to subsequent purchasers of the wind turbine.³⁵⁶ The State also exempts wind developers from sales and use taxes on all materials and equipment used to construct the facility.³⁵⁷ Wind

347. Jerry Lein, Pub. Util. Analyst, N.D. Pub. Serv. Comm'n, North Dakota Transmission Strategies (May 13, 2005), *available at* <http://www.ferc.gov/EventCalendar/Files/20050627131854-Lein, North Dakota PSC.pdf>. ("[North Dakota relies] on transmission export capability to out-of- state load centers located to the south and east. Present export capacity is limited to about 2,000 MW and is fully subscribed. Approximately 2/3 of the energy now produced in ND is exported – primarily into Minnesota.")

348. Letter from the Members of the Upper Midwest Transmission Development Initiative, to Jon Wellinoff, Acting Chairman, Federal Energy Regulatory Commission (Mar. 6, 2009), *available at* http://www.misostates.org/UMTDI_final-LettertoFERC_Mar609.pdf. ("Led by our Governors, the states of Minnesota, North Dakota, South Dakota, Iowa and Wisconsin have formed the Upper Midwest Transmission Development Initiative (UMTDI) to coordinate sub-regional electric transmission planning and related cost allocation issues.")

349. ITC Holdings Corp., The Green Power Express, <http://www.itctransco.com/projects/the-greenpowerexpress.html> [hereinafter Green Power Express] (last visited Oct. 6, 2009); *see also* ITC Holdings Corp., Conceptual Map, *available at* <http://www.itctransco.com/projects/thegreenpowerexpress/the-greenpowerexpress-map.html> (last visited Oct. 6, 2009).

350. N.D. CENT. CODE § 17-01-01 (Supp. 2009).

351. N.D. CENT. CODE § 49-02-28 (Supp. 2009).

352. *Id.*

353. N.D. CENT. CODE § 57-38-01.8.1 (Supp. 2009).

354. *Id.*

355. *Id.* § 57-38-01.8.6 (twenty-year carry forward only applies to wind devices).

356. *Id.* § 57-38-01.8.7.

357. N.D. CENT. CODE §§ 57-39.2-04.2, 57-40.2-04.2 (Supp. 2009).

turbines are exempt from locally assessed property taxes for the first five years of operation.³⁵⁸

3. Local Regulation

In addition to obtaining a general permit from the State Public Service Commission (PSC), developers in North Dakota must also comply with local zoning regulations.³⁵⁹ The zoning requirements vary by jurisdiction. For example, Elden Township in Dickey County imposes a setback requirement of five times the rotor diameter of the subject turbine from the property line of a non-participating landowner.³⁶⁰ Neighboring Logan County's siting requirements are identical to Dickey County's, except that its setback requirement is 2.5 times the turbine's rotor diameter.³⁶¹ In February 2011, a bill was introduced in the State Senate that would give the PSC broader siting power over almost all wind projects.³⁶² The Senate voted unanimously to extend the PSC's jurisdiction to wind projects capable of generating more than one-half megawatt of electricity.³⁶³ Currently, the PSC only has siting authority when a project can generate more than 60 MW of power. The bill is now in the House for review.

4. Wind Lease Regulation/Severance

Chapter 17-04 of the Code contains a comprehensive set of wind lease regulations. Section 17-04-06 requires that every wind lease provided to a landowner must, among other things, include the following statement on the cover page of the lease in sixteen-point font:

Special message to property owners

This is an important agreement our lawyers have drafted that will bind you and your land for up to _____ years. We will give you enough time to study and thoroughly understand it. We strongly encourage you to hire a lawyer to explain this agreement to you. You may talk with your neighbors about the wind project and find out if they also received a proposed contract. You and your neighbors may choose to hire the same attorney to review the agreement and negotiate changes on your behalf.³⁶⁴

The Chapter prohibits the execution of a wind easement until ten business days after the easement was first delivered to the landowner.³⁶⁵ The Chapter further prohibits requiring that either party maintain confidentiality but allows the parties to mutually agree to do so.³⁶⁶ The Chapter also contains various other requirements for

358. *Id.* § 57-02-08.27.

359. N.D. CENT. CODE § 49-22-16.2 (1999).

360. ELDEN TOWNSHIP, N.D., ZONING REGS. § 6.11.4.2 (2007).

361. LOGAN COUNTY, N.D., ZONING REGS. § 6.11.4.2 (2006).

362. Senate Bill 2196 (2011).

363. *Id.*

364. N.D. CENT. CODE § 17-04-06.1.a (Supp. 2009).

365. *Id.* § 17-04-06.1.b

366. *Id.* § 17-04-06.1.c.

wind leases, many of which are, in the authors' experience, standard clauses included in a wind lease; these include clauses such as, tax requirements, surface use accommodation, minimum payment clauses, insurance requirements, preservation of certain rights by the landowner, indemnity clauses, and compliance with state and local laws.³⁶⁷ If the wind lease does not comply with the requirements imposed by the statute, a court may reform the lease, void the lease, or order any relief allowed by law.³⁶⁸

Section 17-04-04 prohibits landowners from severing their wind rights from the surface property, stating "an interest in a resource located on a tract of land and associated with the production of energy for wind power on the tract of land may not be severed from the surface estate".³⁶⁹ Landowners can choose to terminate their lease agreements "if the wind energy facility has not operated for a period of at least three years unless the property owner receives normal minimum lease payments that would have occurred if the wind energy facility had been operating during that time."³⁷⁰

N. Ohio

Ohio has only 10 MW of installed capacity³⁷¹ with another 304 MW under construction by Iberdrola Renewables. Once complete the 304 MW Blue Creek Wind Farm will be the largest wind project in Ohio.³⁷² Two applications for projects have been submitted to the Ohio PUC that could add up to 475 MW to Ohio's portfolio by the end of 2011.³⁷³ Ohio's primary source of potential wind power lies in offshore locations along Lake Erie.³⁷⁴ Offshore wind energy projects have been slow to develop in the United States.³⁷⁵ Nevertheless, Ohio's recent passage of a substantial RPS requirement suggests the state expects the Lake Erie offshore wind energy potential to soon be realized through new wind energy projects.³⁷⁶

367. *Id.* § 17-04-06.1.d-i.

368. *Id.* § 17-04-06.3.

369. N.D. CENT. CODE § 17-04-04 (Supp. 2009).

370. *Id.* § 17-04-06.1.h.

371. AWEA, *supra* note 3 (then select "OH" from the drop-down menu).

372. See Russo, Kristen *FirstEnergy to Buy Renewable Energy from Wind Farm*, February 10, 2011, available at <http://www.vindy.com/news/2011/feb/10/firstenergy-to-buy-renewable-energy-from/>

373. Ohio Wind Working Group, Ohio Wind Projects, available at <http://www.ohiowind.org/Ohio-Wind-Projects.cms.aspx> (last visited Oct. 6, 2009). The Buckeye Wind Project will have a capacity of 125- 175 MW, and the Hardin Wind Energy Development will have a capacity of 300 MW. *Id.*

374. See U.S. Dep't of Energy, Nat'l Renewable Energy Lab., Ohio 50m Wind Power, available at http://www.windpoweringamerica.gov/images/windmaps/oh_50m_800.jpg.

375. Windustry & Great Plains Windustry Project, Offshore Wind Potential in the United States, available at <http://www.windustry.com/news/offshore-wind-potential-in-the-united-states> (last visited Oct. 6, 2009).

376. The RPS bill was very specific in including certain categories of energy generation as being eligible renewable energy resources for purposes of the RPS. One of the specific categories mentioned in the bill, added to the applicable statute, is a "wind turbine located in the state's territorial waters of Lake Erie." S.B. 221, 127th Gen. Assem. § 1 (Ohio 2008) (adding section 4928.01 (A) (35) to the Ohio Revised Code).

1. Renewable Portfolio Standards

Ohio's RPS requires utilities to provide 25% of their electricity from "alternative energy resources" by 2025.³⁷⁷ Half of this percentage (12.5%) must come from "renewable energy resources" while the remaining half may come from "advanced energy resources."³⁷⁸ These advanced energy resources include resources that produce thermal energy as a byproduct, technologies that increase energy production without increasing carbon emissions, chemically altered substances that reduce carbon emissions (clean coal), and advanced nuclear technology.³⁷⁹ Of the 12.5% that must come from renewable energy resources, half of that energy must be produced from within the state.³⁸⁰ Any energy produced from outside the state must be "deliverable into" Ohio.³⁸¹ Each year that a utility fails to comply with the RPS, it is penalized "not less than forty-five dollars" multiplied by the amount of RECs the utility is deficient.³⁸² However, the PUC will not impose a penalty for deficiencies caused by circumstances beyond a utility's control, including shortages in qualifying energy³⁸³ or if the cost of compliance is "reasonably expected" to increase the utility's costs by 3% or more.³⁸⁴

2. Incentives

Wind developments in Ohio may be eligible for tax exemptions as an exempt "Energy Conversion Facility" under sections 5709.20 to 5709.27 of the Ohio Tax Code.³⁸⁵ Exempt facilities approved by the tax commissioner receive an exemption certificate³⁸⁶ that exempts them from state sales and use taxes and personal property tax.³⁸⁷ Any development of the real property for the exempt facility is not considered an improvement for property tax purposes.³⁸⁸

3. Siting and Permitting

Ohio has a streamlined permitting process for wind energy projects. Wind facilities producing 5 MW or more of energy are required to obtain a certificate from the State PUC.³⁸⁹ A certificate from the PUC satisfies all siting and permitting requirements for state agencies and local governments.³⁹⁰ The certification provides comprehensive regulations for the developer to follow, including setback requirements of 1.1 times the

377. OHIO REV. CODE ANN. § 4928.64(B) (West Supp. 2009).

378. *Id.*

379. OHIO REV. CODE ANN. § 4928.01(A)(34) (West Supp. 2009).

380. *Id.* § 4928.64(B) (3).

381. *Id.*

382. *Id.* § 4928.64(C)(2)(b). Separate penalties are imposed for failing to comply with solar energy benchmarks. *Id.* § 4928.64(C)(2)(a).

383. *Id.* § 4928.64(C)(4)(c).

384. *Id.*; S.B. No. 232, 128th Gen. Assem. (Ohio, 2010)

385. OHIO REV. CODE ANN. § 5709.20 (West 2007); OHIO REV. CODE ANN. § 5709.27 (West 2007).

386. OHIO REV. CODE ANN. § 5709.21(B) (West 2007).

387. OHIO REV. CODE ANN. § 5709.25(A) (West 2007).

388. *Id.* § 5709.25(B).

389. OHIO ADMIN. CODE § 4906-17-01 (A) (2009).

390. OHIO REV. CODE ANN. § 4906.13(B) (West 2009).

height of the turbine from non-participating property lines and 750 feet from residences.³⁹¹

The developer must also document and report the facility's impacts on wildlife,³⁹² for which, the Ohio Department of Natural Resources (ODNR) has published a set of guidelines for the developer to follow.³⁹³ These guidelines advise the developer to conduct pre-construction surveys, including bird migration path surveys, raptor nest searching and monitoring, and bat monitoring.³⁹⁴ If the wind farm is located in a more wildlife-sensitive area (wetland and forest areas or within three miles of Lake Erie), more extensive surveys should be performed.³⁹⁵ The guidelines establish typical impact mitigation practices including minimizing lighting and perches.³⁹⁶ The ODNR also advises developers to conduct post-construction surveys to monitor the facility's continuing impact on wildlife.³⁹⁷

O. Oklahoma

Oklahoma has several laws directly targeted at wind energy projects, as well as a number of economic incentives, goals, and programs aimed at growing the wind energy business in the state. In just the last year Oklahoma has jumped into the top 10 states for installed wind power generating capacity, ranking eighth installed capacity³⁹⁸ and eighth for wind power generating potential.³⁹⁹ With more than 82,000 MW of estimated wind energy generating potential and just over 1,482 MW of installed projects, Oklahoma will likely see substantial growth in new wind energy projects.⁴⁰⁰

Announcements in late 2009 and early 2010 by Oklahoma's largest utility also seem to indicate that wind energy will see extended growth during the next ten years. OGE Energy Corp. released a statement in February 2009 saying it planned to delay "construction of an additional natural gas or coal power plant until at least 2020."⁴⁰¹ In April 2010, OGE also revealed they would seek Oklahoma Corporate Commission approval to build and operate a new 198-megawatt wind farm in northwest Oklahoma.⁴⁰² The plan was approved June 28, 2010⁴⁰³ and OGE is now well

391. OHIO ADMIN. CODE § 4906-17-08(C)(1)(c) (2009).

392. OHIO REV. CODE ANN. § 4906.06(A)(2) (West 2009).

393. OHIO DEP'T OF NAT. RES., ON-SHORE BIRD AND BAT PRE- AND POST-CONSTRUCTION MONITORING PROTOCOL FOR COMMERCIAL WIND ENERGY FACILITIES IN OHIO: AN ADDENDUM TO THE OHIO DEPARTMENT OF NATURAL RESOURCE'S VOLUNTARY COOPERATIVE AGREEMENT I (2009).

394. *Id.* at 2-4.

395. *Id.* at 1-2, 4-9.

396. *Id.* at 9-10.

397. *Id.* at 10-15.

398. AWEA 2011, *supra* note 2, at 4-5.

399. AWEA, *supra* note 3 (then select "OK" from drop-down menu).

400. AWEA 2011, *supra* note 2, at 5.

401. Press release, OG&E Energy Corp., OG&E Selects Norman as First Positive Energy(R) Community (Feb. 27, 2009), *available at* <http://www.oge.com/Pages/News.aspx> (follow "OG&E Selects Norman as First Positive Energy(R) Community" hyperlink).

402. Press release, OG&E Corp., OG&E Proposal would Achieve Goal to Quadruple Wind Power by 2012 (April 12, 2010), *available at* <http://www.oge.com/Pages/News.aspx> (follow "OG&E Proposal Would Achieve Goal to Quadruple Wind Power by 2012" hyperlink).

positioned to achieve its goal of quadrupling the amount of wind power on its system by 2012.⁴⁰⁴ The new wind farm is expected to come online in the second half of 2011.⁴⁰⁵ Accordingly, wind energy would seem to be a prime candidate to supply additional electricity generating capacity needed by the state over the next ten years.

1. Renewable Portfolio Standards

During the second session of the 52nd Regular Legislation Session in 2010, Oklahoma enacted the Oklahoma Energy Security Act. The Act aims to reduce the dependence of Oklahoma on foreign oil and to improve domestic security by the reduced dependence.⁴⁰⁶ The State set goals to increase its state generation of renewable to energy to 15% by the year 2015.⁴⁰⁷ Qualifying renewable energy resources include wind, solar, hydropower, hydrogen and biomass.⁴⁰⁸ The annual renewable energy percentage is determined by dividing all installed capacity of renewable electricity generation in Oklahoma by the total installed capacity of all generation in Oklahoma.⁴⁰⁹ To further these initiatives, Oklahoma is also focusing development of a more robust transmission grid to facilitate the delivery of renewable energy and to improve the reliability of the electric transmission system.⁴¹⁰

2. Wind Real Estate Instruments; Severance

a. Severance Prohibited

New 2010 laws now prohibit the permanent severing of airspace over any real property located in Oklahoma for the purpose of developing and operating commercial wind or energy systems.⁴¹¹ Wind or solar agreements will run with the land benefitted and burdened and will terminate upon the conditions stated in the wind or solar agreement; the rights to develop wind projects on given real estate cannot be severed from the ownership interest in such real estate.⁴¹²

b. Creation and Recording of Instruments

Any instrument creating a land right or option to secure a land right in either real property or the vertical space above the property for a wind energy system, or for wind measurement equipment, must be in writing.⁴¹³ Leases for the development of wind systems may only be made with the legally authorized owner of the surface estate

403. Order No. 577371, Cause No. PUD 201000037, Oklahoma Corporation Commission (July 29, 2010).

404. *Id.*

405. *Id.*

406. HB 3028 52d Leg. Reg. Sess. §2 (2010).

407. *Id.*

408. *Id.* at §4D 1-7.

409. *Id.* at §4E

410. HB 3028 52d Leg. Reg. Sess. §7A

411. OKLA. STAT. tit. 60, §820.1 (2010).

412. *Id.* at §C

413. *Id.* at §D

(effectively prohibiting severance of wind rights from the real estate surface rights).⁴¹⁴ Wind energy agreements with landowners must include the names of all parties to the underlying agreement, a legal description of the real property involved, the nature of the interest created, the consideration paid for the “transfer,” a description of the improvements the developer intends to make on the property, a description of any decommissioning security, and the terms or conditions under which the interest may be terminated or revised.⁴¹⁵

3. Decommissioning

The Oklahoma Wind Energy Development Act, as enacted through House Bill 2973 in 2010, is designed to ensure that wind turbines and wind energy facilities are decommissioned when the energy plant activities end.⁴¹⁶

a. Required Scope

The owner of a wind energy facility is responsible for the proper decommissioning of the facility upon abandonment, or the end of the useful life of the commercial wind energy equipment.⁴¹⁷ Proper decommissioning of a wind energy facility includes the removal of wind turbines, towers, buildings, cabling, electrical components, foundations and any other associated facilities, to a depth of thirty (30) inches below grade; and disturbed earth must be graded and reseeded or restored to substantially the same physical condition as prior to construction.⁴¹⁸ This restoration does not include roads, unless the landowner has specifically requested, in writing, that the roads or other land surface area be restored.⁴¹⁹

b. Timeline

The decommissioning of the wind energy facility, or individual pieces of commercial wind equipment, must be completed by the owner of the wind energy facility within twelve (12) months after abandonment or the end of the useful life of the commercial wind energy equipment or facility. If the owner of the facility fails to complete the decommissioning in the time required, the Oklahoma Corporation Commission is charged with taking measures necessary to complete the decommissioning.⁴²⁰ If a lease or other agreement between a landowner and an owner of a wind energy facility contains provisions for decommissioning that are more restrictive than required by statute, the more restrictive language governs.⁴²¹

414. *Id.*

415. OKLA. STAT. tit. 60, §820.1 (2011); HB 1564 53d. Leg., Reg. Sess. (Okla, 2011).

416. OKLA. STAT. tit. 17, §160.11 (2010); HB 2973, 52d Leg. Reg. Sess.

417. *Id.* at §160.14.A

418. *Id.* at §160.14.B

419. *Id.* at §160.14.B

420. *Id.* at §160.14.C

421. *Id.* at §160.14.D

c. Financial Security

After the fifteenth year of operation, the owner of a wind energy facility is required to file evidence of a financial security for decommissioning with the Oklahoma Corporation Commission. This security must cover the anticipated costs of decommissioning a wind energy facility, and may be in the form of a surety bond, collateral bond, parent guaranty or a letter of credit.⁴²² The financial security amount is based on an estimate of the total cost of decommissioning, minus the salvage value of the equipment; such estimate must be prepared by a professional engineer licensed in the State of Oklahoma.⁴²³ If the owner fails to file this information with the Commission as required, the owner is subject to an administrative penalty of up to One Thousand Five Hundred Dollars (\$1,500.00) per day.⁴²⁴

d. Insurance Requirements

Prior to the start of construction of a wind facility, the owner or operator of the facility or wind turbine must obtain and keep in effect either a commercial general liability insurance policy with limits consistent with prevailing industry standards; or a combination of self insurance and an excess liability insurance policy.⁴²⁵ Further, the owner or operator must cause the owner of the land where the turbine or facility is located to be named as the additional insured in the policy, and the owner or operator must deliver to the landowner a certificate of insurance evidencing the policy.⁴²⁶

4. Incentives

a. State Production Tax Credit

Oklahoma has a state-level income tax credit that applies to the first ten years of a wind energy project's operation.⁴²⁷ The unused portion of the tax credit is transferable at any time during the ten-year period following the year of qualification.⁴²⁸ In the 2010 legislative session, the Oklahoma legislature suspended the wind energy tax credit for one year; any tax credit which accrues during a period from July 1, 2010 to June 30, 2011 cannot be claimed for any period prior to the 2012 tax year.⁴²⁹ But such credits continue to accrue and may be claimed in starting January 1, 2012.⁴³⁰ For Facilities placed in operation on or after January 1, 2007 and before January 1, 2016, the credit is equal to \$0.0050 per kWh of electricity generated.⁴³¹

422. *Id.* at §160.15.A

423. *Id.* at §160.15.A

424. *Id.* at §160.15.C

425. *Id.* at §160.19.A

426. *Id.* at §160.19.A and C

427. OKLA. STAT. tit. 68, § 2357.32A (2008).

428. HB 3024 52d Reg. Leg. Sess. §4F (2010).

429. *Id.* at § 4H

430. *Id.*

431. *Id.*

5. Wind Energy Projects near Airports

Another new law regulates the height of structures near public-use airports. Known as the “Aircraft Pilot and Passenger Protection Act,” the 2010 rule regulates obstructions to air navigation for safety related purposes.⁴³² The structures impacted by this legislation include buildings, towers, wind turbines, smokestacks, electronic transmission or receiving towers, and antennae and overhead transmission lines.⁴³³ If the construction of these structures occurs within a restricted area (for example, within a three (3) mile radius of a public-use airport), then any structure with a height in excess of 150 feet above the established airport elevation requires a permit from the Oklahoma Aeronautics Commission.⁴³⁴

P. Oregon

Oregon has 2,104 MW of installed wind energy generating capacity, placing it sixth overall⁴³⁵ nationally, already reaching 43% of its measured potential capacity of 4,870 MW.⁴³⁶ Although Oregon does not possess the vast wind resources of Texas and South Dakota, it does have favorable wind policies and an established transmission infrastructure. In addition, Oregon’s proximity to California may allow the state to provide some renewable capacity to the regulation constrained California renewable market. The State has an aggressive RPS that imposes financial penalties upon utilities that do not comply.⁴³⁷ Oregon also gives facility owners a tax credit of up to \$10 million amortized over a period of up to eight years.⁴³⁸

Prior to the 2009 legislative session, the tax credit was more generous in that it did not have a \$10 million cap and developers could claim a credit of up to 50% of the facility’s cost.⁴³⁹ Included in the 2009 legislative changes, wind energy project developers must have “applied for all licenses and permits required by state or local law for the facility” before they are approved for the tax credit.⁴⁴⁰ With a long and expensive permitting process, many developers prefer to know that a proposed project qualifies for the applicable tax incentives before expending the funds involved in the remainder of the development process. Transmission does not appear to be a major impediment to growth of wind energy development in Oregon; the state has been able to provide immediate transmission access for most projects to date,⁴⁴¹ and Oregon has plans to expand transmission by 2012.⁴⁴²

432. OKLA. STAT. tit. 3, §120.1 (2010).

433. *Id.* at §120.2,16.

434. *Id.* at §120.3, A 1-3.

435. AWEA 2011, *supra* note 2, at 4-5.

436. AWEA, *supra* note 3 (then select “OR” from drop down menu).

437. OR. REV. STAT. § 469A.200 (2007).

438. H.B. 2472, 75th Legis. Assem., Reg. Sess. § 7(6) (Or. 2009); OR. REV. STAT. § 469.200(1)(C) (Supp. 2009).

439. OR. REV. STAT. § 315.354 (2007).

440. *See* H.B. 2472 § 2(5).

441. *See* Eric Florip, *Just Barely Tapped*, E. OREGONIAN, July 11, 2009 (reporting that Oregon’s success in wind development is attributable to a combination of good policy and transmission access).

442. The Bonneville Power Administration is currently developing a seventy-five mile transmission line along the Oregon-Washington border, scheduled for completion in late 2012. Bonneville Power Admin., Transmission Projects,

1. Renewable Portfolio Standards

Large Oregon utilities are required to achieve a 5% renewable portfolio by 2011 and 25% by 2025.⁴⁴³ Small utilities are required to have a renewable portfolio of 5% or 10% by 2025, depending on their market share.⁴⁴⁴ The law instructs the Oregon PUC to establish alternative compliance rates that utilities may pay instead of complying with the RPS.⁴⁴⁵ The alternative compliance rate should be set high enough “to provide an adequate incentive” for the utility to participate.⁴⁴⁶ In addition to requiring utilities to pay these rates, the Oregon PUC reserves the right to impose an additional penalty upon non-complying utilities.⁴⁴⁷

2. Incentives

Oregon provides a tax credit for wind facilities of up to 50% of the eligible project cost of the facility, but the maximum credit is capped at \$3.5 million for projects qualified in 2010, \$2.5 million for 2011 projects, and \$1.5 million for projects qualified on January 1, 2012 or later.⁴⁴⁸ The credit is amortizable over five years, with the taxpayer redeeming 10% of the cost of facility in the first two years and 5% each year for the next three years.⁴⁴⁹ The amount of the credit cannot exceed the taxpayer’s annual tax liability.⁴⁵⁰ If any amount of the credit is unused in any year, it may be carried forward for up to eight years.⁴⁵¹ If ownership of the facility changes, the tax credit is not directly transferable; the new owner, however, can reapply for the remaining credit.⁴⁵² 2010 legislation caps the tax credits for the renewable energy production sector at \$300 million for biennium ending June 30, 2011 and \$150 million for the period between July 1, 2011 and June 30, 2012.⁴⁵³

Qualified renewable energy facilities⁴⁵⁴ installed in areas approved as “Rural Renewable Energy Development Zones” (RREDZ)⁴⁵⁵ are exempt from ad valorem property taxation for a period of up to five years.⁴⁵⁶ The exemption amount allows for up to \$250 million of installed facilities for each approved RREDZ.⁴⁵⁷

available at [http://www.transmission.bpa.gov/PlanProj/Transmission_ Projects/default.cfm?page=MJD](http://www.transmission.bpa.gov/PlanProj/Transmission_Projects/default.cfm?page=MJD) (last visited Oct. 6, 2009).

443. OR. REV. STAT. § 469A.052 (2007).

444. OR. REV. STAT. § 469A.055 (2007) (stating small utilities that provide electricity for less than 0.5% of Oregon consumers are subject to the 5% RPS, while the 10% RPS requirement applies to small utilities producing between 0.5% and 1%).

445. OR. REV. STAT. § 469A.180 (2007).

446. *Id.*

447. OR. REV. STAT. § 469A.200 (2007).

448. H.B. 2472, 75th Legis. Assem., Reg. Sess. § 7(4)(d) (Or. 2009) and H.B. 3680, 76th Legis. Assem., Reg. Sess. (Or. 2010).

449. *Id.*

450. *Id.*

451. *Id.*

452. *Id.* § 5(2).

453. *Id.*

454. OR. REV. STAT. § 285C.359 (2007).

455. OR. REV. STAT. § 285C.353 (2007).

456. OR. REV. STAT. § 285C.362 (2007). for a statutory description of a rural renewable energy development zone, see section 285C.353.

457. *Id.* § 285C.353.

3. Siting and Permitting

The Oregon PUC has formulated statewide siting requirements for wind energy facilities, including the following: use existing roads whenever possible; combine and consolidate underground transmission lines and substations with existing facilities; design the facility to reduce the risk of injury to raptors and bats; and minimize adverse visual features, including use of minimal lighting.⁴⁵⁸ The Oregon Department of Fish and Wildlife has also established some environmental guidelines for wind developments in a five-county region in northern Oregon.⁴⁵⁹ Some of the report's unique guidelines include engaging stakeholders with wildlife expertise; placing developments on agricultural land where wildlife and environmental impact will be smallest; performing environmental training for employees during both construction and maintenance phases; controlling weeds during construction; and developing fire prevention plans.⁴⁶⁰ The State leaves the rest of wind regulation to local governments, but encourages them to "prescribe [zoning] limitations designed to encourage and protect the installation and use of solar and wind energy systems."⁴⁶¹

4. Easements

Oregon wind easements must be recorded in order to be valid.⁴⁶² Wind leases, however, do not have to be recorded.⁴⁶³

5. Offshore Wind

In March 2010 the Oregon legislature passed new laws to incent offshore wind energy projects.⁴⁶⁴ The new rules provide incentives to medium scale wind projects -- 8% of the year-2025 RPS requirements must now come from projects of 20 MW or less; and half of that amount must be produced using offshore sources, including offshore wind.⁴⁶⁵

Q. Pennsylvania

Pennsylvania has been a leading eastern state in encouraging renewable energy development, second only to New York in total installed electricity generating capacity.⁴⁶⁶ It currently has 748.23 MW of installed generating capacity.⁴⁶⁷

458. See OR. ADMIN. R. 345-024-0015 (2009).

459. See OR. DEP'T OF FISH AND WILDLIFE, OREGON COLUMBIA PLATEAU ECOREGION WIND ENERGY SITING AND PERMITTING GUIDELINES (2008).

460. *Id.* at 10-17.

461. OR. REV. STAT. § 215.110 (2007).

462. OR. REV. STAT. § 105.910 (2007).

463. OR. REV. STAT. § 105.915 (2007).

464. HB 3633, 76th Legis. Assem., Reg. Sess. (Or. 2010).

465. *Id.*

466. AWEA, *supra* note 3 (then select "PA" from the drop-down menu).

467. *Id.*

1. Renewable Portfolio Standards

Pennsylvania's Alternative Energy Portfolio Standards Act requires that utilities meet 18% of the state's electric needs from renewable energy sources by the year 2020.⁴⁶⁸ The State's RPS also includes specific requirements regarding a portion of the renewable energy mandated to come from solar energy sources.⁴⁶⁹

2. Incentives

Pennsylvania wind facilities may qualify for a production tax credit equal to 15% of development, equipment, and construction costs up to \$1 million per qualifying taxpayer.⁴⁷⁰ The credit is assignable and can be carried over until exhausted.⁴⁷¹ The tax credit expires at the end of 2016.⁴⁷² Property taxes for Pennsylvania wind farms are calculated using an income capitalization approach to value.⁴⁷³ The valuation is determined using a nonproprietary lease and lease income information provided by the wind lessor or lessee.⁴⁷⁴

3. Local Ordinances

Developers should research local requirements for wind project development. A working group organized by the Governor's Office has developed and published a model ordinance for wind energy facilities in Pennsylvania.⁴⁷⁵ The ordinance was published in 2006 and is referenced and linked on the State Office of Energy and Technology Deployment's website.⁴⁷⁶ Several local governments in Pennsylvania have adopted, or are in the process of developing, various versions of the model wind ordinance.⁴⁷⁷ The model ordinance and other resources are also referenced and published in Pennsylvania's wind trade organization: The Pennsylvania Wind Working Group.⁴⁷⁸ Notably, a municipality's zoning ordinance takes precedence over a county's zoning ordinance.⁴⁷⁹

468. See 73 PA. CONS. STAT. §§ 1648.1 to 1648.8 (2008).

469. *Id.* § 1648.3(b)(2).

470. 73 PA. CONS. STAT. § 1649.704 (2008).

471. 73 PA. CONS. STAT. § 1649.705 (2008).

472. 73 PA. CONS. STAT. § 1649.709 (2008).

473. 72 PA. CONS. STAT. § 5453.602(d) (Supp. 2009).

474. *Id.*

475. Press Release, State of Pa., Governor Rendell Unveils Model Ordinance to Help Local Governments, Wind Energy Developers (April 24, 2006), available at <http://www.state.pa.us/pa power/cwp/view.asp?A=11&Q=452084>.

476. Pa. Dep't of Env'tl. Prot., Wind Energy: A Cost-Effective, Fuel-Free Resource, available at <http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1370&Q=485761> (last visited Oct. 6, 2009).

477. See, e.g., Crystal Ola, *North Strabane Develops Draft to Regulate Wind Turbines*, PITTSBURGH POST-GAZETTE, Aug. 19, 2009, available at <http://www.post-gazette.com/pg/09231/9918 21-100.stm?cmpid=latest.xml>.

478. See Pa. Wind Working Group, *Breaking News!*, <http://www.pawindenergynow.org/> (last visited Aug. 10, 2010). The model ordinance is available at: http://www.pawindenergynow.org/pa/Model_Wind_Ordinance_Final_3_21_06.pdf.

479. Pa. Municipalities Planning Code Act of 1968, 53 PA. CONS. STAT. § 10602 (2008).

R. South Dakota

Notwithstanding having over 100,000 MW of potential wind capacity, South Dakota only has 709 MW of installed wind capacity.⁴⁸⁰ According to the South Dakota PUC, the State's lack of wind energy development is simply due to a lack of statewide demand.⁴⁸¹ South Dakota's small population is "very reliably and economically served" by a combination of coal and hydropower.⁴⁸² With a total peak demand of fewer than 3,000 MW, wind power cannot substantially contribute to the South Dakota power grid.⁴⁸³ Compare South Dakota's energy needs with Texas's peak demand of 65,776 MW,⁴⁸⁴ and it becomes evident why Texas has developed so many wind energy projects.⁴⁸⁵ As similar to North Dakota, transmitting South Dakota wind power to out-of-state population centers seems to be the key to any future increase in wind energy development. With most of South Dakota located on the western edge of the Eastern Interconnection System,⁴⁸⁶ running transmission lines to wind facilities in the rural portions of the state will be very expensive, and it is unclear when or if South Dakota will establish the substantial transmission capacity needed to send electricity to higher load regions.⁴⁸⁷

1. Renewable Portfolio Standards

South Dakota's RPS promulgates a goal to produce 10% of retail energy from renewable sources by 2015.⁴⁸⁸ This is a voluntary objective, and retailers are not penalized or sanctioned for failing to meet the RPS goal.⁴⁸⁹

2. Incentives

Instead of paying a property tax on all personal property used in operating a wind facility, the facility must pay an annual tax "equal to three dollars multiplied by the nameplate capacity of the wind farm."⁴⁹⁰ Wind facility owners must also pay an annual

480. AWEA 2011, *supra* note 2, at 5.

481. E-mail from Tim Binder, Staff Analyst, S.D. PUC, to Brent Stahl (July 9, 2009, 9:42 CST) [hereinafter, BINDER] (on file with author) ("The simple answer to why South Dakota, with its great resources, has less than 300 MW installed is load: South Dakota has less than a million people.").

482. *Id.*

483. *Id.* "The current peak load in South Dakota is less than 3,000 MW . . ." *Id.*

484. Press Release, The Elec. Reliability Council of Tex., ERCOT Breaks Electricity Demand for the Fourth Time (August 23, 2010), *available at* http://www.ercot.com/news/press_releases/2010/nr-08-23-10. *Id.*

485. THE ELEC. RELIABILITY COUNCIL OF TEX., ERCOT QUICK FACTS (2009), *available at* <http://www.ercot.com/about/profile> (then follow "ERCOT Quick Facts May 2009"). The installed wind generation in Texas is 8,000 MW. *Id.*

486. BINDER, *supra* note 481; *see also* N. Am. Elec. Reliability Corp., NERC Interconnections, http://www.nerc.com/fileUploads/File/AboutNERC/maps/NERC_Interconnections_color.jpg (last visited Oct. 6, 2009).

487. *See, e.g.*, Green Power Express, *supra* note 349 (estimating the cost of the Green Power Express transmission project to be between \$10 and \$12 billion).

488. S.D. CODIFIED LAWS § 49-34A-101 (Supp. 2009).

489. *Id.*

490. S.D. CODIFIED LAWS § 10-35-18 (Supp. 2009).

tax of 2% of their annual gross receipts.⁴⁹¹ These two taxes are in lieu of all other state and local taxes.⁴⁹²

“Any company requiring transmission lines or wind farm collector systems or both in South Dakota for a wind farm” may receive a tax rebate equal to 50% of the cost of the transmission lines or collector system.⁴⁹³ The rebate applies to the tax on gross receipts described above and can cover up to 90% of the generator’s annual tax liability for the first five years and 50% for the next five years.⁴⁹⁴

2010 legislation provides some refunds on certain sales, use and contractors' excise taxes paid in connection with wind energy project construction.⁴⁹⁵ The tax refunds include 45% of eligible taxes paid for projects costing from \$10-40 million, and 55% of eligible taxes paid for projects costing more over \$40 million.⁴⁹⁶

3. Siting

South Dakota has taken a unique regulatory approach for wind facility siting. Like Minnesota, South Dakota retains the responsibility of imposing setback requirements on a statewide level rather than leaving the issue to local governments.⁴⁹⁷ South Dakota, however, has gone a step further by codifying its setback requirements rather than evaluating them on a case-by-case basis.⁴⁹⁸ Wind turbines taller than seventy-five feet must be stationed at a distance from any surrounding property line of 1.1 times their height or 500 feet, whichever is greater.⁴⁹⁹ Turbines seventy-five feet and shorter have the same 1.1 ratio setback requirement, but without the minimum distance requirement of 500 feet.⁵⁰⁰ These statewide regulations could avoid overly restrictive rules and ordinances from being imposed by local governments.⁵⁰¹ This statewide approach also provides continuity for a project being developed in multiple counties.

4. Easements

South Dakota law authorizes developers to create easements to ensure adequate exposure to wind, but they must be recorded.⁵⁰² The term of the easement cannot exceed fifty years, and it becomes “void if no development of the potential to produce energy from wind power” has occurred within five years after the

491. S.D. CODIFIED LAWS § 10-35-19 (Supp. 2009).

492. S.D. CODIFIED LAWS § 10-35-17 (Supp. 2009).

493. S.D. CODIFIED LAWS § 10-35-22 (Supp. 2009).

494. *Id.*

495. H.B. 1060, 85th Legis. Assem., Reg. Sess. (S.D. 2010); S.D. CODIFIED LAWS § 10-45B (Supp. 2010).

496. *Id.*

497. S.B. 141, 84th Legis. Assem., Reg. Sess. (S.D. 2009).

498. *Id.*

499. *Id.*

500. *Id.*

501. BINDER, *supra* note 481 (explaining that the South Dakota setback law was passed in order to discourage “onerous” or “detrimental” setback requirements on the local level).

502. S.D. CODIFIED LAWS § 43-13-17 (Supp. 2009).

easement's effective date.⁵⁰³ Other restrictions include the following: the developer/owner must compensate the landowner on an annual basis;⁵⁰⁴ wind rights may not be severed from the surface estate;⁵⁰⁵ and the easement must include a statement that the easement holder may encumber the easement, but such encumbrances shall not attach to the land itself.⁵⁰⁶

5. Accommodation

South Dakota has a very specific statute requiring holders “of wind easements, wind leases, or easements for essential services to accommodate the reasonable development of another holder of any wind easement, wind lease, or easement for essential services *except for competing developers of wind energy projects.*”⁵⁰⁷ The original proposed Senate Bill 184 did not contain the above-emphasized exception clause.⁵⁰⁸ Because of the exception for competing wind projects, adjacent wind energy projects will face great difficulty in trying to use the new accommodation statute to obtain crossing rights over land held exclusively by other wind energy companies.

6. Decommissioning

As part of the permit application, developers must provide a plan for the decommissioning of the facility after its useful life.⁵⁰⁹ Depending upon the applicant's financial condition, and the project's size and location, the PUC may require the developer to post a bond for the cost of decommissioning the wind facilities.⁵¹⁰

S. Texas

The State of Texas has installed 10,085 MW of wind energy generating capacity, making it the nation's leader in wind production by a large margin.⁵¹¹ Wind energy accounted for almost 8% of Texas electricity in 2010, up from 3% in 2007.⁵¹² The coupling of Texas' substantial wind resources with its friendly regulatory environment has resulted in Texas surpassing its RPS goal of 10,000 MW of installed renewable energy capacity by 2025, well ahead of schedule.⁵¹³ Texas's explosive growth has provided a case study of the need for better transmission planning in order to integrate

503. *Id.*

504. *Id.*

505. S.D. CODIFIED LAWS § 43-13-19 (Supp. 2009).

506. H.B. 1112, 84th Legis. Assem., Reg. Sess. (S.D. 2009).

507. S.D. CODIFIED LAWS § 43-13-20 (Supp. 2009) (emphasis added). “For purposes of this section, the term, essential services, includes any electric transmission and distribution lines and associated facilities, telecommunications facilities, and rural water systems.” *Id.*

508. S.B. 184, 84th Legis. Assem., Reg. Sess. (S.D. 2009).

509. S.D. ADMIN. R. § 20:10:22:33.01 (2009).

510. *Id.*

511. AWEA 2011, *supra* note 2, at 5. According to AWEA, as of December 2010, Texas had 10,065 installed MW followed by Iowa with 3,675 installed MW. *Id.*

512. Head, Christopher: *The Curious Case of the Texas Wind Industry* (February 9, 2011) available at <http://leadenergy.org/2011/02/the-curious-case-of-the-texas-wind-industry/>

513. *See* TEX. UTIL. CODE ANN. § 39.904(a) (Vernon Supp. 2008).

an energy source that is typically not located in proximity to a state's load center. The rate of new wind installations in West Texas most notably in the McCamey and Sweetwater regions quickly surpassed the level of transmission capacity available to bring that electricity to consumers in Houston, Dallas, and San Antonio. In 2009 and 2010 the state has seen steady growth along the Gulf Coast.⁵¹⁴

1. Competitive Renewable Energy Zones

In response to the lack of adequate transmission for wind projects, the Texas legislature enacted Senate Bill 20 (S.B. 20) in 2005.⁵¹⁵ S.B. 20 created a process by which the Texas PUC (PUC) would designate areas of the state with the best renewable energy resources as "Competitive Renewable Energy Zones" (CREZs).⁵¹⁶ S.B. 20 contemplated that after the CREZs were identified, the PUC would develop a plan to construct the transmission necessary to deliver the electricity generated by the CREZs to customers.⁵¹⁷ The objective behind S.B. 20 was to coordinate the build-out of renewable energy projects and transmission and avoid the transmission constraints experienced by the McCamey region by building transmission in anticipation of renewable energy projects being installed in the CREZs.⁵¹⁸ S.B. 20 conditioned CREZ designations on a showing of financial commitments by renewable energy generators to build projects in the CREZs.

In order to identify the CREZs, the Commission directed the Electric Reliability Council of Texas (ERCOT) to prepare a study that would identify the areas of the state that were best suited for development of renewable energy projects.⁵¹⁹ ERCOT filed its study with the PUC in December 2006, whereby it identified twenty-five geographic areas containing the best wind resources in Texas.⁵²⁰ Following a contested case proceeding, of the twenty-five areas identified in the ERCOT report, the PUC designated five areas as CREZs: McCamey, Central, and Central West each located in the western part of the state—and Panhandle A and Panhandle B.⁵²¹

Once the CREZs were designated, the PUC initiated further proceedings to determine the set of transmission facilities needed to deliver energy from the CREZs

514. Galbraith, Kate, *Texas Wind Power Grows Along the Gulf Coast* (February 11, 2011) available at <http://www.texastribune.org/texas-energy/energy/texas-wind-power-grows-along-the-gulf-coast/>.

515. S.B. 20, 79th Leg., 1st Called Sess. (Tex. 2005).

516. *Id.*

517. *Id.*

518. State Energy Conservation Office, Wind Energy Transmission, available at http://www.seco.cpa.state.tx.us/re_wind-transmission.htm (last visited Oct. 6, 2009). In order to effectively increase and implement the RPS goals, SB 20 includes a transmission plan for remote regions such as McCamey in West Texas that are handicapped by lack of sufficient transmission infrastructure, the goal being to increase transmission capacity to get clean energy (especially wind) from remote areas of the state to the cities. *Id.*

519. See Steve Baron, *Texas Competitive Renewable Energy Zones: A Progress Report*, UNIV. OF TEX. SCH. OF LAW WIND ENERGY INST., Jan. 21-22, 2009, at 4; ERCOT, ANALYSIS OF TRANSMISSION ALTERNATIVES FOR COMPETITIVE RENEWABLE ENERGY ZONES IN TEXAS, ATTACHMENT A (2006), http://www.ercot.com/content/news/presentations/2006/ATTCH_A_CREZ_Analysis_Report.pdf.

520. *Id.*

521. *Id.* The CREZs were originally known by the number assigned to them in the ERCOT report. McCamey was CREZ 5; Central was CREZs 9 and 10, which included an additional adjacent area; Central West was CREZ 19, Panhandle A was CREZ 2A, and Panhandle B was CREZ 4.

“in a manner that is most beneficial and cost-effective to the customers.”⁵²² Ultimately, the PUC approved a transmission plan that will accommodate 18,456 MW of wind generation.⁵²³ Next, the PUC was tasked with selecting transmission service providers (TSP) who would build the new CREZ lines and perform upgrades and other necessary modifications to existing lines. The contested case hearing to select TSPs was held in December 2008 with a final order on Rehearing issued on May 15, 2009 (Final Order).⁵²⁴ The Final Order selected both incumbent utilities and new entrants to build CREZ transmission. Among the parties vying for the right to build transmission were three municipally owned utilities (“MOU”): the City of Garland, CPS Energy of San Antonio and Texas Municipal Power Agency. The Commission did not select any MOUs to build transmission citing, among other things, concerns with the lack of regulatory oversight the Commission has over MOUs.⁵²⁵ In July 2009 the City of Garland filed an appeal citing several errors including an allegation that the PUC had erred by failing to implement a CREZ transmission plan that is most beneficial and cost-effective to customers.⁵²⁶ Garland also sought injunctive relief from the Court asking that no Certificates of Convenience and Necessity (“CCN”) be issued until its appeal had been decided.

On January 15, 2010 the Travis County District Court agreed with the City of Garland and reversed and remanded the Final Order in part “because it is in excess of the agency’s statutory authority, not reasonably supported by substantial evidence, and arbitrary and capricious”.⁵²⁷ The Court held that the Commission had relied on legally irrelevant factors in reaching its conclusions and found that the Commission’s findings relating to MOUs were not adequately supported by the evidence in the record.⁵²⁸ The Commission accepted the remand and immediately severed from its reconsideration nine projects that had been previously designated as “Priority Projects”⁵²⁹ into a separate docket and issued a Final Order re-designating Oncor and the Lower Colorado River Authority as the selected TSPs for such projects.⁵³⁰ CCNs for the Priority Projects proceeded during Garland’s appeal and were close to completion at the time of the remand. The Commission next considered how to address the concerns outlined in the Court’s ruling. The most attractive solution was to allow the City of Garland and the South Texas Electric Cooperative (“STEC”) to jointly build two projects.⁵³¹ STEC’s

522. TEX. UTIL. CODE ANN. § 39.904(g)(2) (Vernon Supp. 2008).

523. PUB. UTIL. COMM’N OF TEX., Docket No. 33672, COMMISSION STAFF’S PETITION FOR DESIGNATION OF COMPETITIVE RENEWABLE ENERGY ZONES (2008).

524. PUB. UTIL. COMM’N OF TEX., Docket No 35665, COMMISSION STAFF’S PETITION FOR SELECTION OF ENTITIES RESPONSIBLE FOR TRANSMISSION IMPROVEMENTS NECESSARY TO DELIVERY RENEWABLE ENERGY FROM COMPETITIVE RENEWABLE ENERGY ZONES (2009).

525. See PUB. UTIL. COMM’N OF TEX., Docket No 35665, Order on Rehearing at 9-10.

526. *City of Garland v. Public Utility Commission of Texas* Cause No. D-1-GV-09-001199 (Original Petition of City of Garland).

527. *City of Garland v. Public Utility Commission of Texas* Cause No. D-1-GV-09-001199, Final Judgment, 200th Jud. Dist., Travis County, Texas (Jan. 15, 2010).

528. *Id.*

529. In PUB. UTIL. COMM’N OF TEX., Docket No 35665, the Commission identified nine transmission projects that it found the existing transmission system to be in critical need of in order to alleviate constraints for existing generation. Seven of the Priority Projects were to be completed by Oncor and the other two by the LCRA.

530. PUB. UTIL. COMM’N OF TEX., Docket No. 37928, PRIORITY PROJECTS SEVERED FROM DOCKET NO. 37902, ORDER ON REMAND (Feb. 25, 2010).

531. See PUB. UTIL. COMM’N OF TEX., Docket No. 38045, SPECIFIC SUBSEQUENT PROJECTS SEVERED FROM DOCKET NO. 37902. The two projects were McCamey A to Odessa and McCamey C to McCamey A.

participation in the projects would allow the Commission to retain regulatory authority over the two selected projects which, as noted above, was a concern for the Commission in Docket 37902. On July 20, 2010 STEC and the City of Garland filed a joint motion to approve a participation agreement between the parties. The Commission approved the joint participation agreement and assigned responsibility to build the McCamey A to Odessa and McCamey C to McCamey A to STEC and City of Garland.⁵³²

The PUC rule adopted at the outset of the CREZ proceedings contemplated: 1) that renewable energy generators would provide financial commitment to build projects in the CREZs, and 2) the possibility of establishing a priority transmission access mechanism for those companies who provided financial commitment.⁵³³ In October 2009, however, the rule was amended to clarify the level of financial commitment required and how parties would demonstrate financial commitment.⁵³⁴ The amended rule provided that adequate financial commitment in the form of installed generation exists for McCamey, Central and Central West regions but required generators located in Panhandle A and Panhandle B demonstrate their financial commitment to those regions by posting collateral in accordance with the rule.⁵³⁵ The rule was also amended to clarify that the PUC would not consider a priority access mechanism unless it first determined that the traditional tool of security constrained economic dispatch was insufficient to resolve congestion caused by excess development.⁵³⁶ A contested case proceeding was initiated in October 2009 to determine whether the requisite amount of financial commitment exists for Panhandle A and Panhandle B.⁵³⁷ On July 30, 2010 the Commission entered a Final Order finding that the collateral posted by generators for Panhandle A and Panhandle B fulfilled the financial commitment requirements contained in the rule. The entry of the Final Order allowed the CCNs for the Panhandle projects to proceed.⁵³⁸

2. Renewable Portfolio Standards

The Texas RPS requires that electric retail suppliers gradually increase the portion of electricity they provide from renewable resources. Texas's first RPS was passed in 1999, and it required electricity providers to generate 2,000 MW of new renewable energy by 2009.⁵³⁹ Texas amended its RPS in 2005 to increase the total renewable energy requirement to 5,880 MW by 2015 and included a goal of 10,000 MW by 2025.⁵⁴⁰ Part of Texas's RPS success is attributable to its Renewable Energy Credits (REC) system. The REC program gives Texas utilities the flexibility to meet RPS requirements by either generating their own renewable energy or by buying qualifying

532. *Id.*, ORDER ON REMAND (Sept. 27, 2010).

533. P.U.C. SUBST. R. 25.174

534. PUB. UTIL. COMM'N OF TEX., Project No 34577, Proceeding to Establish Policy Relating to Excess Development in COMPETITIVE RENEWABLE ENERGY ZONES (2009).

535. *Id.*

536. *Id.*

537. PUB. UTIL. COMM'N OF TEX., Docket No 37567, COMMISSION STAFF'S PETITION FOR DETERMINATION OF FINANCIAL COMMITMENT FOR THE PANHANDLE A AND PANHANDLE B COMPETITIVE RENEWABLE ENERGY ZONES.

538. *Id.* See Final Order entered on July 30, 2010

539. S.B. 7, 76th Leg., 1st Called Sess. (Tex. 1999).

540. S.B. 20, 79th Leg., 1st Called Sess. (Tex. 2005).

RECs.⁵⁴¹ Under the Texas REC system, one REC is equal to one megawatt hour of qualified renewable energy that is generated in Texas.⁵⁴² With just over 10,000 MW of currently installed renewable energy capacity,⁵⁴³ Texas met its 2025 RPS target ahead of schedule. The success of the Texas wind energy industry has attracted other renewable energy sectors to the state, and the legislature has encouraged a small amount of diversification away from wind. For example, in the 2005 amendment to Texas's RPS, the legislature added a provision requiring 500 MW of the 2025 10,000 MW target from renewable energy sources other than wind.⁵⁴⁴ The PUC is currently reviewing a draft rule implementing the 500 MW requirement.⁵⁴⁵

3. Incentives

In its most recent session, the Texas Legislature passed a bill to amend the Texas Tax Code regarding tax abatements for equipment used in renewable energy projects.⁵⁴⁶ Uncertainty regarding the prior version of the statute arose under a Texas Attorney General's Opinion in early 2008.⁵⁴⁷ Additional uncertainty arose around the tax abatement provision in April 2008 when a lawsuit was filed regarding language in the prior statute.⁵⁴⁸ Passage of House Bill 3676 in 2009 resolves the uncertainty created by the Texas Attorney General opinion and the Taylor County lawsuit. Wind energy developers have long utilized the available tax abatement incentives for new projects.⁵⁴⁹ With the 2009 legislative amendments to the tax abatement statutes, wind energy developers can once again plan their projects with applicable property tax abatements as a reliable portion of the state's available incentives.

For a business that invests in a solar or wind energy device, the company's liability under the Texas franchise tax may be reduced by "10 percent of the amortized cost of a solar energy device."⁵⁵⁰ Although the statute only describes "solar" energy devices specifically as a qualifying technology, the administrative rules on this matter clarify that qualifying technology also includes wind energy devices.⁵⁵¹

541. 16 TEX. ADMIN. CODE § 25.173(g) (2000).

542. *Id.* § 25.173(c)(12).

543. AWEA 2011, *supra* note 2 at 5.

544. Tex. S.B. 20.

545. PUC PROJECT NO. 35792, RULEMAKING RELATING TO THE GOAL FOR RENEWABLE ENERGY.

546. H.B. 3676, 81st Leg., 1st Called Sess. (Tex. 2009).

547. *See* Op. Att'y Gen. GA-0600 (Tex. 2008), *available at* <http://www.oag.state.tx.us/opinions/opinions/50abbott/op/2008/pdf/ga0600.pdf>.

548. *See* Rankin v. Comm'rs Court of Taylor County, Texas, 350th Judicial District, District Court, Taylor County, Texas, Cause No. 8387-D; *see also* Daralyn Schoenewald, *Tuscola Man Drops Wind Farm Lawsuit, Says He Plans to Refile*, ABILENE REP. NEWS, July 31, 2008, *available at* <http://www.reporternews.com/news/2008/jul/31/tuscola-man-drops-wind-farm-lawsuit-says-he-to>.

549. *See* TEX. TAX CODE ANN. §§ 312.001 to 312.403 (Vernon 2008).

550. TEX. TAX CODE ANN. § 171.107 (Vernon 2008) (emphasis added).

551. State Energy Conservation Office, Texas Tax Code Incentives for Renewable Energy, *available at* http://www.seco.cpa.state.tx.us/re_incentives-taxcode-statutes.htm#171107 (last visited Oct. 6, 2009). "[W]ind energy continues to qualify under the term 'solar energy' for the exemption and deduction" under section 171.107. *Id.*

T. Wisconsin

Wisconsin ranks eighteenth in the country for existing and potential wind capacity.⁵⁵² Wind energy development in Wisconsin may face significant roadblocks because of recent state legislative events.

1. Renewable Portfolio Standard

Wisconsin Act 204 initially required regulated utilities in the state to install 50 MW of renewable energy generating capacity no later than December 31, 2011.⁵⁵³ In 2005, the Wisconsin legislatures imposed an overall RPS goal of 10% to be met by 2015.⁵⁵⁴

2. Siting and Permitting; Pending Legislation

2009 legislation required the Wisconsin Public Service Commission (PSC) to develop wind energy project siting rules.⁵⁵⁵ Under Act 40, the PSC created the Wind Siting Council to analyze and issue reports/recommendations on wind siting standards – these standards were to be the most restrictive rules cities, towns or counties could adopt for projects in their local area.⁵⁵⁶ Wisconsin Statute §196.378 provides for the PSC to address setback requirements, noise, and decommissioning issues in rules to be promulgated.⁵⁵⁷

On May 14, 2010, the Public Service Commission published a draft wind siting rule, PSC Rule 128.⁵⁵⁸ PSC Rule 128 specified requirements pertaining to setbacks for wind energy facilities, noise criteria, and decommissioning.⁵⁵⁹ PSC Rule 128 would have become effective March 1, 2011.⁵⁶⁰ But a joint committee of the Wisconsin state legislature voted not to implement the rule.⁵⁶¹ PSC Rule 128 was suspended, and will now remain as a proposed rule, or repealed and not issued unless the legislature takes action to authorize the adoption of the rules.⁵⁶²

In a 2011 special session, the Wisconsin legislature introduced Assembly Bill 9.⁵⁶³ Bill 9 includes setbacks from nonparticipating properties of at least 1,800 feet; allowing any “affected owner” who has entered into a wind energy lease, easement or other

552. AWEA, *supra* note 3 (then select “WI” from the drop-down menu).

553. 1997 Wisconsin Act 204, §27.

554. Wis. Stat. §196.387(2)(a)1 (2009-2010); 2005 Wisconsin Act 141.

555. Wis. Stat. §196.378 (2009-2010)2009 Wisconsin Act 40.

556. 2009 Wisconsin Act 40; Wis. Stat. §66.0401 (1m) (a) – (c) (2009).

557. *Id.*

558. Public Service Commission Rule 128 (2010).

559. *Id.* At 128.14-128.19.

560. Katherine Roek, *Wisconsin’s Fight Over Wind Siting Rules May have Implications*. See http://www.nawindpower.com/e107_plugins/content/content.php?content.7484

561. American Wind Energy Association: *Suspension of Wisconsin Siting Rules threatens to shut door on wind power industry in the state*. See: http://www.awea.org/newsroom/pressreleases/release_030111_03.cfm

562. Katherine Roek, *Wisconsin’s Fight Over Wind Siting Rules May have Implications*. See http://www.nawindpower.com/e107_plugins/content/content.php?content.7484.

563. *Id.*

agreement to terminate the agreement with ten days prior written notice.⁵⁶⁴ No action has been taken on this bill, and several organizations have issued statements criticizing the bill.⁵⁶⁵ The practical problem with Assembly Bill 9 is that no pending Wisconsin projects can comply with the new setback requirement and so the bill would effectively prohibit commercial scale wind energy projects in the State.⁵⁶⁶

Many companies involved in windpower supported PSC Rule 128 as a workable compromise in order to obtain more uniform regulation by local governments.⁵⁶⁷ But some developers have responded to proposed Assembly Bill 9 by choosing not to continue with the development in Wisconsin (e.g., Invenergy's Ledge Wind Energy Center project, a 100 turbine project proposed for Brown County).⁵⁶⁸ Invenergy said, "With the recent suspension of PSC 128 and the unpredictability of the course of the ensuing legislative and administrative process, Invenergy cannot justify continuing to make significant investments regarding the Ledge Wind Energy Center while uncertainty persists regarding relevant project regulations."⁵⁶⁹ Until the uncertainty surrounding PSC Rule 128 and pending Assembly Bill 9 are resolved, wind energy development in Wisconsin will likely see a dramatic slowdown if not complete halt.

3. Environmental

The Wisconsin Department of Natural Resources issued draft guidelines for wind energy projects.⁵⁷⁰ The Department recommends wind developers meet with staff in the early stages of the development process to discuss possible issues.⁵⁷¹

U. Wyoming

Wyoming ranks seventh in the country for potential wind capacity.⁵⁷² As of the end of the fourth quarter of 2010, Wyoming had 1,412 MW—ranked 10th nationally—of installed wind generation capacity.⁵⁷³ Of the state's installed capacity, 1,123 MW have come online since 2008.⁵⁷⁴ Despite more than doubling its wind power generation over the past two years, Wyoming continues to take a passive regulatory and incentives

564. *Id.*

565. *Id.*

566. Memorandum to All Legislators from Wisconsin Energy Bus. Assoc. (January 27, 2011) (<http://www.renewwisconsin.org/library/0128weba.pdf>).

567. RENEW Wisconsin: Wind Siting Rules suspended in Wisconsin (March 1, 2011). *See* <http://www.renewwisconsin.org/policy/windsiting/siting.html>

568. Wind Energy Update: Invenergy abandons Wisconsin project (April 7, 2011). *See*: http://www.lowcarboneconomy.com/profile/wind_energy_update/_news_and_press_releases/invenergy_abandons_wisconsin_project/13849

569. *Id.*

570. Wisconsin Department of Natural Resources: Wind Power. *See*: <http://dnr.wi.gov/org/es/science/energy/wind>.

571. *Id.*

572. AWEA, *supra* note 3 (then select "WY" from the drop-down menu).

573. *Id.*; and *see*, AWEA 2011 *supra* note 2, at 4-5.

574. *Id.*

approach.⁵⁷⁵ Like Oklahoma, Wyoming does not have an RPS, and the only financial incentive for developers is a sales tax exemption for equipment purchases.⁵⁷⁶ In addition, the state permitting process for wind facilities is the same for all other power generation facilities.⁵⁷⁷ In lieu of state regulation, county governments have assumed the responsibility of overseeing wind facility siting.⁵⁷⁸ As discussed below, the counties have taken a reasonable approach, generally refraining from overregulation.⁵⁷⁹

Thus far, Wyoming has attracted wind development without providing an RPS or other incentives. Change may be on the horizon, however, because the lack of transmission has begun to chill development interest in the state.⁵⁸⁰ In 2004, the State created the Wyoming Infrastructure Authority (WIA) to facilitate transmission development.⁵⁸¹ However, it remains to be seen whether the WIA will be able to provide sufficient transmission access for developers.⁵⁸² Regardless, Wyoming's recent success shows that a State can take a laissez-faire approach to wind development so long as it provides developers with transmission access.

1. Easement Regulation

Easements forms in Wyoming must be carefully drafted to ensure the instrument will be valid. Wyoming real property law declares that improperly drafted easements, "which do not specifically describe the location of the easement are null and void and of no force and effect."⁵⁸³ The description required for the easement must be "sufficient to locate the easement."⁵⁸⁴ The statute, however, does provide an exception to the aforementioned rule; the holder of an easement may amend the instrument to add a specific location description within one year of recording if the easement states that such amendment will be forthcoming.⁵⁸⁵

2. Permitting - -Siting / Decommissioning

In addition to obtaining a certificate from the Wyoming Public Service Commission,⁵⁸⁶ all industrial facilities that cost \$96.9 million or more to construct

575. During the 2009 legislative session, three of four proposed wind energy bills failed to pass. The law that did pass, HB 0215, amended the sales and use tax exemption to include only small and non-commercial wind developments. *See infra* note 517; *see also* Wyoming Legislative Service Office, 2009 General Session 60th Legislature: House Bills Index / Senate Files Index, *available at* <http://legisweb.state.wy.us/2009/billindex/BillCrossRef.aspx?type=ALL> (last visited Oct. 6, 2009) (listing 2009 legislative bills).

576. H.B. 0215, 60th Leg., Gen. Sess. (Wyo. 2009).

577. *See* WYO. STAT. ANN. § 37-2-205(a) (2009).

578. *See infra* Part II.S.4.

579. *Id.*

580. *See* Dustin Bleizeffer, *Lack of Transmission Capacity Stymies Deals with Wind Developers*, Casper Star-Trib., July 1, 2009, *available at* <http://www.trib.com/articles/2009/07/01/news/wyoming/79bf4e23cb6aa484872575e5007fc443.txt>.

581. WYO. STAT. ANN. § 37-5-303(a) (2009).

582. *See* Bleizeffer, *supra* note 580.

583. WYO. STAT. ANN. § 34-1-141 (a) (2009).

584. WYO. STAT. ANN. § 34-1-141 (d) (2009).

585. WYO. STAT. ANN. § 34-1-141 (c) (2009).

586. WYO. STAT. ANN. § 37-2-205 (a) (2009).

require a siting permit from the Wyoming Department of Environmental Quality.⁵⁸⁷ Wyoming had an active 2010 legislative session, with specific permitting and siting requirements now being imposed on wind energy projects; the site development permitting process is coordinated at the County level.⁵⁸⁸ Under the new siting rules, towers must generally be located no less than 1.1 times the tower height from neighboring property lines or public right of ways, at least the greater of 5.5 times tower height or 1000 feet from any residence, and at least one-half mile from any city or town.⁵⁸⁹ The 2010 legislative session also imposed a new set of rules regarding decommissioning for wind energy projects with 30 turbines or more.⁵⁹⁰ The Wyoming Business Council is tasked with preparing rules and regulations on decommissioning for wind projects with more than thirty turbines; it will also prepare rules for decommissioning financial assurance for certain facilities which are not under the jurisdiction of the Wyoming Public Services Commission.⁵⁹¹

3. Incentives

Equipment purchased for generating renewable energy is exempt from the state sales tax.⁵⁹² The tax-exemption period expires at the end of 2011.⁵⁹³

4. Accommodation

Like South Dakota, Wyoming has a law that requires wind developers to accommodate holders of other easements. Construction and operation of a wind facility cannot “unnecessarily inconvenience the public [or] . . . prevent interference with the service furnished by other utilities.”⁵⁹⁴ Unlike the South Dakota law, however, Wyoming’s accommodation statute is not reciprocal for wind developers.

5. Local Regulations

Six counties statewide currently have zoning rules in place to regulate wind energy project development.⁵⁹⁵ In a recent symposium, State officials and others discussed whether more counties or the State should implement additional rules regulating wind energy project development.⁵⁹⁶ With the new siting and decommissioning rules passed in the 2010 legislative session, Wyoming is now trending toward more state wide siting and other wind energy development laws and rules. Developers in Wyoming, however,

587. WYO. STAT. ANN. §§ 35-12-102(a)(vii), 35-12-106(a) (2009).

588. HB 72, *Regulation of Wind Energy Facilities* 2010 Budget Session; WYO. STAT. ANN. §§ 18-5-501 - 505 (2010).

589. *Id.*

590. *Senate File Number 66 Industrial Siting Amendments* 2010 Budget Session; WYO. STAT. ANN. §§ 35-12-102, 105, 107 (2010).

591. *Id.*

592. WYO. STAT. ANN. § 39-15-105(a)(viii)(N) (2009).

593. *See* H.B. 0215, 60th Leg., Gen. Sess. (Wyo. 2009).

594. 023 WYO. CODE R. § 237 (Weil 2009).

595. Matt Joyce, Wyoming Mulls Wind Rules: Task Force Calls for State Law to Create County Regulations, TRIB.COM, August 15, 2009, available at <http://www.trib.com/articles/2009/08/15/news/wyoming/2d1e222d350bfc5a872576130001c0e3.txt>.

596. *Id.*

should continue to review local rules to determine whether applicable counties or cities have additional ordinances regulating wind energy projects.⁵⁹⁷

6. Excise Tax

Like Oklahoma, Wyoming has been struggling with budget issues recently because of the soft economy. As a result, it has looked for new revenue raising avenues. In its last legislative session, Wyoming imposed an excise tax on wind-generated electricity.⁵⁹⁸ The tax is levied at the rate of \$1.00 per megawatt hour and become effective in January 2012.⁵⁹⁹ Wind energy projects are exempt from the tax during their first three years of operation.⁶⁰⁰

III. Conclusion

In researching various state laws and rules relating to wind energy project development, it is intriguing to see industry growth occurring in many states and under different conditions. While economic incentives and RPS requirements seem to be influential in growing a state's wind energy base, some states' laissez faire approach to the industry seems equally important in fostering increased development of new wind projects. As the wind energy industry grows, additional regulations are inevitable as interest groups press local and state governments to more closely regulate the development of new wind projects. The authors of this article have observed two divergent effects of increased regulation. The first is that compliance with specific siting rules could provide a level of regulatory certainty to developers. Second, when the regulatory environment becomes too complex it chills the development process. If recent trends continue, more rules and regulations will be enacted in most states, and as wind energy developers expand their operations into new states, they will need to examine carefully each state's regulatory framework in order to comply with the required local standards.⁶⁰¹

597. For example, Carbon County does not have comprehensive wind regulations, but it does have a relatively lenient setback requirement. Carbon County Res. 2004-02, Carbon County Planning & Zoning Commission, at 40 (2004).

598. HB 101, *Electricity Generated from Wind-Taxation* 2010 Budget Session.

599. *Id.*

600. *Id.*

601. See U.S. DEP'T OF ENERGY, ANNUAL REPORT ON U.S. WIND POWER INSTALLATION, COST, AND PERFORMANCE TRENDS: 2007 4-9 (2009) (reporting on the development of wind energy in the last ten years).