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NIMBY To NOPE—Or YESS?

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NIMBY TO NOPE—OR YESS?

K.K. DuVivier[†] & Thomas Witt[†]

On December 12, 2015, 195 governments around the world agreed to the COP21 commitments to combat climate change. Pivotal to the success of these goals is a shift from fossil-fuel energy generation to renewable resources. Wind power is one of the largest renewable energy generation sources in the United States and has the greatest potential for future development.

While wind energy generation has enjoyed some of the most impressive gains in development of new capacity, reaching future goals will face more challenges. In addition to resource potential, wind development is also confined to locations that meet the sweet spot of being located near transmission lines and consumer load. As the number of favorable locations diminishes, the regulatory regimes for wind become increasingly important.

This Article is the result of NSF research to carefully catalogue and categorize wind siting regulation across the United States. It goes beyond previous efforts in this regard because it further examines the effectiveness of various regulatory regimes in the context of litigation that has resulted from one method in contrast to another. Based on this review, saying YESS¹ to a statewide siting regime for wind appears to be the best solution for counteracting NIMBY² reactions to wind development and avoiding a NOPE³ result that could seriously thwart the COP 21 goals.

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¹ YESS stands for “Yes, an Emphasis on Statewide Siting.”

² NIMBY stands for “Not In My Back Yard.”

³ NOPE stands for “Not On Planet Earth.”

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INTRODUCTION

Alarm about the growing impact of carbon emissions on climate led to the First World Climate Conference in Geneva in 1979⁴ and the creation of the Intergovernmental Panel on Climate Change (IPCC) in 1988.⁵ The IPCC's Fifth Assessment Report, issued in 2014, showed a ninety-five percent probability consensus by the scientists involved that human activity was the principal cause of warming since the 1950s.⁶ This scientific evidence, along with catastrophic weather conditions that could be linked to global warming, pushed the political dial enough to result in an historic agreement at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21).⁷ On December 12, 2015, representatives from 195 nations signed the COP21 accord, which commits nearly every country around the globe to reduce its greenhouse gas (GHG) emissions.⁸ Generation of electricity from renewable energy sources is a key strategy for meeting the COP21 GHG goals.⁹

A. *Growth of Wind Power*

In the United States, wind power is second only to hydropower in the renewable generation category, accounting for 4.4% out of the total 13.5% percent of U.S. electricity generated by all renewable sources in 2014.¹⁰ One reason for wind's popularity is price. The cost of generating

⁴ Spencer Weart, *The Discovery of Global Warming: Impacts of Climate Change*, AM. INST. PHYSICS, <https://www.aip.org/history/climate/impacts.htm> (last updated Jan. 2017).

⁵ *Id.*

⁶ *A Strong Scientific Consensus*, UNITED NATIONS & CLIMATE CHANGE, <http://www.un.org/climatechange/the-science> (last visited Nov. 14, 2016).

⁷ U.N. Framework Convention on Climate Change, *Adoption of the Paris Agreement*, FCCC/CP/2015/L.9/Rev.1 (Dec. 12, 2015), <http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>.

⁸ Coral Davenport, *Nations Approve Landmark Climate Accord in Paris*, N.Y. TIMES (Dec. 12, 2015), http://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0; see U.N. Framework Convention on Climate Change, *supra* note 7.

⁹ KATHERINE ROSS & THOMAS DAMASSA, WORLD RES. INST., *ASSESSING THE POST-2020 CLEAN ENERGY LANDSCAPE* (2015), http://www.wri.org/sites/default/files/WRI-OCN_Assessing-Post-2020-Clean-Energy-Landscape.pdf.

¹⁰ U.S. DEP'T OF ENERGY, OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, *2014 RENEWABLE ENERGY DATA BOOK 10* (2015) [hereinafter *2014 RENEWABLE ENERGY DATA BOOK*], <http://www.nrel.gov/docs/fy16osti/64720.pdf> (hydropower represented 6.3%, wind 4.4%, biomass 1.6%, solar .8%, and geothermal .4%).

electricity from wind power declined forty-three percent between 2009 and 2012.¹¹ As a result, wind power may be the lowest cost source for electricity generation even as compared to fossil fuels.¹²

U.S. wind power capacity has exploded over the last decade from 6.7 gigawatts in 2004¹³ to almost seventy gigawatts by the end of 2014.¹⁴ In comparison to conventional hydropower, which requires the disruption of entire ecosystems and the flooding of large swaths of land,¹⁵ wind has greater potential for future development with comparatively little environmental impact.¹⁶

Wind energy charges forward as a viable, clean, and renewable resource that has the capacity to generate power without many of the issues raised by other energy sources. Wind farms, once constructed, generate no waste and produce no emissions. Abundant wind resources are available in most regions of the United States, and much of that wind is in economically depressed rural areas.¹⁷ Additionally, Congress's renewal in late 2015 of the Production Tax Credit for wind eliminates much uncertainty of investment, ensuring wind's continued growth.

B. *NSF Research and this Article*

Despite the impressive past growth of new wind capacity, developing enough wind power in the United States to meet the COP21 and President Obama's related Clean Power Plan goals¹⁸ will require

¹¹ Michael Goggin, *Earth Day Good News: Wind Energy's Costs Decline, Contributions to Energy Mix Grow*, INTO THE WIND: AWEA BLOG (Apr. 22, 2014), <http://www.aweablog.org/earth-day-good-news-wind-energys-costs-decline-contributions-to-energy-mix-grow>.

¹² LAZARD, LAZARD'S LEVELIZED COST OF ENERGY ANALYSIS—VERSION 8.0 (2014), https://www.lazard.com/media/1777/levelized_cost_of_energy_-_version_80.pdf.

¹³ 2014 RENEWABLE ENERGY DATA BOOK, *supra* note 10, at 23.

¹⁴ *Id.*; see also LESLEY HUNTER ET AL., AM. COUNCIL ON RENEWABLE ENERGY, THE OUTLOOK FOR RENEWABLE ENERGY IN AMERICA (2014), http://acore.org/files/pdfs/ACORE_Outlook_for_RE_2014.pdf.

¹⁵ See generally Tasneem Abbasi & S.A. Abbasi, *Small Hydro and the Environmental Implications of Its Extensive Utilization*, 15 RENEWABLE & SUSTAINABLE ENERGY REVIEWS 2134 (2011); Dan Tarlock, *The Legal-Political Barriers to Ramping Up Hydro*, 86 CHI.-KENT L. REV. 259, 261 (2011).

¹⁶ Dennis Y.C. Leung & Yuan Yang, *Wind Energy Development and its Environmental Impact: A Review*, 16 RENEWABLE & SUSTAINABLE ENERGY REVIEWS 1031, 1036–37 (2012).

¹⁷ See generally K.K. DuVivier, *Rural Wind Windfalls*, 23 KAN. J.L. & PUB. POL'Y 401 (2014) [hereinafter DuVivier, *Rural Wind Windfalls*]; K.K. DuVivier, *Animal, Vegetable, Mineral—Wind? The Severed Wind Power Rights Conundrum*, 49 WASHBURN L.J. 69, 70–71 (2009).

¹⁸ For a general overview of President Obama's stated goals for the Clean Power plan, see *A Historic Commitment to Protecting the Environment and Addressing the Impacts of Climate Change*, WHITEHOUSE.GOV, <https://www.whitehouse.gov/the-record/climate> [https://web.archive.org/web/20170101011541/https://www.whitehouse.gov/the-record/climate]. For an overview of the goals of the Clean Power Plan, see *Fact Sheet: Clean Power Plan Overview*, U.S.

new strategies. First generation wind farms have been sited not only where there is sufficient resource potential, but also in locations that meet the sweet spot of being in areas with incentives and near transmission lines and consumer load.¹⁹ As the demand for wind development increases and the number of favorable locations diminishes, the regulatory regimes for wind become increasingly important.²⁰

As part of this NSF project, a research team carefully catalogued and categorized wind siting regulation across the United States. In addition, the team looked at all litigation arising from statewide regulations.²¹ While the number of cases from which to draw lessons is relatively few and primarily limited to more densely populated states,²² this analysis supports the conclusion that wind siting regimes with some form of statewide control help counteract NIMBY reactions to wind development. Collective NIMBY reactions have global consequences if all or a significant number of communities refuse to embrace wind power. Then NIMBY can turn to NOPE, which could seriously thwart the COP21 climate goals.

This Article first provides some background about the unique impacts created by large-scale wind projects,²³ and the potential legal

ENVTL. PROTECTION AGENCY, <https://www.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-overview> (last visited Feb. 14, 2017).

¹⁹ K.K. DuVivier et al., *Transmission and Transport of Energy in the Western U.S. and Canada: A Law and Policy Road Map*, 52 IDAHO L. REV. 387, 397 (2016); see also Marc Sydnor, Determinants of Wind Energy Deployment: Infrastructures, Policies, Resources or Economics? 20 (Nov. 2015) (unpublished Ph.D. dissertation, University of Denver), <http://digitalcommons.du.edu/etd/1065> (listing demand, transmission, retirements, RPSs, property taxes as key drivers).

²⁰ See generally 2014 RENEWABLE ENERGY DATA BOOK, *supra* note 10, at 18–40.

²¹ Although word searches were made to uncover all lawsuits related to wind development, it was beyond the scope of the NSF research funding to catalogue all local level regulation or to track down any conflicts that were not reflected in reported state or federal court cases.

²² See *U.S. Wind Energy State Facts*, AM. WIND ENERGY ASS'N, <http://www.awea.org/resources/statefactsheets.aspx?itemnumber=890> (last updated July 2016) (hover the cursor over each state in order to see its ranking in terms of cumulative installed capacity). The authors note that the following states are the highest for wind power production, in order of cumulative installed capacity: (1) Texas; (2) Iowa; (3) California; (4) Oklahoma; (5) Illinois; (6) Kansas; (7) Minnesota; (8) Oregon; (9) Washington; (10) Colorado; (11) North Dakota; (12) Indiana; (13) New York; (14) Michigan; (15) Wyoming; (16) Pennsylvania; (17) New Mexico; (18) South Dakota; (19) Idaho; (20) Nebraska; (21) Montana; (22) Maine; (23) Wisconsin; (24) West Virginia; (25) Missouri; (26) Ohio; (27) Utah; (28) Arizona; (29) Hawaii; (30) Maryland; (31) New Hampshire; (32) Nevada; (33) Vermont; (34) Massachusetts; (35) Alaska; (36) Tennessee; (37) Rhode Island; (38) New Jersey; (39) Connecticut; (40) Delaware. *Id.* While none of these states regulate wind siting purely at the state level, the authors have interviewed parties involved in wind development who have indicated that the certainty of statewide regulation would be a benefit, especially when NIMBY concerns arise.

²³ A wind project with less than five megawatts (MW) in capacity might be considered to serve on-site users or small communities, but anything larger will generally be selling power to

issues they raise. Part II then reviews some of the NIMBY problems that arise from the default position of allowing complete or heavy local control of wind project siting. This Part examines several Pennsylvania cases in depth to illustrate some of the specific concerns. Part III uses some specific state laws and cases to illustrate various YESS regimes and their advantages. Finally, Part IV employs the changing laws in New York to provide a case study comparing the NIMBY impacts of local controls to the alternative of a YESS regime.

I. BACKGROUND

Most wind energy generation projects in the United States are utility-scale. This is driven by economics—lower cost per unit of electricity through economies of scale—and by the need to have unobstructed wind, which makes distributed wind in more densely populated areas less economically feasible. As a result, developing a wind farm can have substantial impacts on a local community. Public acceptance or animosity varies across the country and can vary from municipality to municipality, raising threats of NIMBY responses.²⁴

A. Wind Power Benefits

Many of wind's impacts are positive. In comparison to other power sources, wind generation not only avoids air pollutants and greenhouse gases, but also is entirely emission free. Wind power achieves this without any threats of explosions or toxic residues.²⁵ Furthermore, coal, natural gas, and nuclear power plants employ a steam cycle that requires water for the boilers and for cooling. In contrast, wind power is one of

the wholesale market. See, e.g., ENVTL. LAW INST., STATE ENABLING LEGISLATION FOR COMMERCIAL-SCALE WIND POWER SITING AND THE LOCAL GOVERNMENT ROLE 1 & n.1 (2011) [hereinafter ELI 2011]. This threshold is not universal, and in some situations, twenty or twenty-five MW is used to define "utility-scale" wind. *Id.*

²⁴ NAT'L ASS'N OF REGULATORY UTIL. COMM'RS, PUT IT THERE!—WIND ENERGY & WIND-PARK SITING AND ZONING BEST PRACTICES AND GUIDANCE FOR STATES 5 (2012) [hereinafter NARUC], <http://pubs.naruc.org/pub/539BA6EE-2354-D714-5157-359DDD67CE7F>.

²⁵ See Uma Outka, *Environmental Law and Fossil Fuels: Barriers to Renewable Energy*, 65 VAND. L. REV. 1679, 1703, 1710 (2012) (describing how environmental laws written for fossil fuel generation presume that a certain amount of harm must be "permitted"); see also Alexandra B. Klass, *Property Rights on the New Frontier: Climate Change, Natural Resource Development, and Renewable Energy*, 38 ECOLOGY L.Q. 63, 70 (2011); Hannah Wiseman et al., *Formulating a Law of Sustainable Energy: The Renewables Component*, 28 PACE ENVTL. L. REV. 827 (2011); cf. Steven Ferrey, *Restructuring a Green Grid: Legal Challenges to Accommodate New Renewable Energy Infrastructure*, 39 ENVTL. L. 977, 979 (2009) ("[F]ocus[ing] on how the new power grid must be modified and the legal and policy challenges this poses.").

the only methods of generating electricity that does not require water—which is especially beneficial in areas with scarce water resources and which reduces any possibility of water pollution.

While wind power is generally developed in utility-scale farms, these tend to be significantly smaller in capacity size than traditional electricity generation plants. For example, while large coal-fired and nuclear power plants in the United States have had capacities exceeding 1,000 MW, most U.S. terrestrial, or land-based, wind farms have been below 100 MW in size.

Finally, wind development has significant financial benefits including more local jobs, lease payments to landowners, and increased tax revenues to local communities.²⁶ In addition to these direct benefits, wind development can result in indirect benefits—like increased activity for financiers, suppliers, and local industries²⁷—and induced benefits for local restaurants and support services.²⁸ Beside these economic benefits, wind has environmental advantages in comparison to almost any other source of electricity generation, including the possibility of improving crop production.²⁹

B. *Wind Power Challenges*

Despite these benefits, wind has its challenges, including some that are unique to wind development. This Section will address (1) Land Area; (2) Tower Heights and Aesthetics; (3) Wildlife and other unique wind issues; and (4) NIMBYism.

²⁶ DuVivier, *Rural Wind Windfalls*, *supra* note 17, at 403 (citing U.S. DEP'T OF ENERGY, ECONOMIC BENEFITS, CARBON DIOXIDE (CO₂) EMISSIONS REDUCTIONS, AND WATER CONSERVATION BENEFITS FROM 1,000 MEGAWATTS (MW) OF NEW WIND POWER IN KANSAS (2008) [hereinafter WIND POWER IN KANSAS], <http://www.nrel.gov/docs/fy08osti/43517.pdf>).

²⁷ *Id.* at 404–05 (citing WIND POWER IN KANSAS, *supra* note 26, at 1).

²⁸ *Id.* at 405 & n.36 (referencing the *JEDI: Jobs and Economic Development Impacts Models*, NAT'L RENEWABLE ENERGY LAB., <http://www.nrel.gov/analysis/jedi> (last visited Feb. 14, 2017)).

²⁹ *Id.* at 412–13 (citing Daniel A. Rajewski et al., *Crop Wind Energy Experiment (CWEX): Observations of Surface-Layer, Boundary Layer, and Mesoscale Interactions with a Wind Farm*, 94 BULL. AM. METEOROLOGICAL SOC'Y 655, 661 (2013); Cathy Proctor, *An Agricultural Windfall*, DENV. BUS. J., Dec. 24, 2010, at A3; Somnath Baidya Roy et al., *Impacts of Wind Farms on Surface Air Temperatures*, 107 PROC. NAT'L ACAD. SCI. U.S. AM. 17899, 17899 (2010)); Daniel T. Kaffine, *Good Neighbors? Microclimate Impacts of Wind Farms on Crop Yields* (working paper 2017) (on file with author).

1. Land Area

Although wind developments are usually smaller in capacity than fossil-fuel generation plants, they generally can impact more land area. For example, the actual land area occupied by the bases of wind turbines or other facilities is relatively small, with the average of about 0.4 hectares per megawatt of capacity. However, the fact that the turbines are dispersed over wide areas to collect the winds without impacting other turbines means that the total wind plant areas are much larger.³⁰ For example, a ten MW wind farm could impact an area of approximately four square miles.

2. Tower Heights and Aesthetics

One of the most common objections is the aesthetic impact of wind turbines on scenic views or disruption of the character of residential neighborhoods or rural areas. Wind power does not use water, but it must be sited where the resource is available, which frequently can be along imposing, highly visible ridge tops. This is in contrast to conventional power plants that are tied to water resources, but therefore can be sited in a variety of less visible locations in valleys. In addition, wind towers can be immense. The height and size of these towers, and their placement in exposed areas capable of accessing winds can result in a substantial visual footprint.

Wind tower heights have been growing in recent decades, from less than 100 feet in the 1980s and 1990s to an average of approximately 300 feet today.³¹ Furthermore, terrestrial turbines are projected to reach 500 feet in the near future.³² As they grow, the impacts will be broader.³³ Wind farms can include tens to hundreds of these turbines that tower over existing vegetation, homes, and almost any other human construction within the landscape.

³⁰ PAUL DENHOLM ET AL., NAT'L RENEWABLE ENERGY LAB., LAND-USE REQUIREMENTS OF MODERN WIND POWER PLANTS IN THE UNITED STATES 1, 9 (2009), <http://www.nrel.gov/docs/fy09osti/45834.pdf>. Concerns over the land needed for growing energy demands, or "energy sprawl," is a growing concern for some communities, particularly in more populous areas where demand is high and available land is low. See Sara C. Bronin, *Curbing Energy Sprawl with Microgrids*, 43 CONN. L. REV. 547, 553–54 (2010).

³¹ See U.S. DEP'T OF ENERGY, WIND VISION: A NEW ERA FOR WIND POWER IN THE UNITED STATES fig. ES.2-5 (2015), http://www.energy.gov/sites/prod/files/wv_executive_summary_overview_and_key_chapter_findings_final.pdf.

³² See *id.*

³³ K.K. DuVivier, *Wind Power Growing Pains*, 21 CHAP. NEXUS J.L. & POL'Y 1 (2016) [hereinafter DuVivier, *Wind Power Growing Pains*].

Furthermore, the need to place them in areas with few obstructions to incoming wind, such as in open plains or along ridge tops and mountains, makes the turbines visible over great distances, often contrasting greatly with their surroundings.³⁴ While some may find them aesthetically pleasing, opponents argue large-scale wind farms threaten the qualities that give some properties their value in areas of high residential density or with strong recreational values.³⁵

3. Wildlife and Other Unique Wind Concerns

Environmental groups also raise concerns about wind turbine impacts on wildlife, especially bat and avian species. These impacts are sufficient to align these groups against wind, despite wind's other environmental benefits. Not only do the turbines interfere with wildlife when in operation, the construction and maintenance of the turbines and related infrastructure results in increased traffic, and noise that disturbs both wildlife and humans.³⁶

Finally, opponents challenge wind projects for impacts such as interference with communication networks, noise generation, ice throws,³⁷ or shadow flickers.³⁸

³⁴ See Avi Brisman, *The Aesthetics of Wind Energy Systems*, 13 N.Y.U. ENVTL. L.J. 1 (2005).

³⁵ Maine provides strong examples of this, including an aesthetic provision in its Wind Energy Act. ME. REV. STAT. ANN. tit. 35-a, § 3402(2)(C) (2010). This provision has been the subject of several legal challenges, questioning whether large-scale wind projects in scenic or recreational areas violate the challengers' rights under the Equal Protection Act. See, e.g., *Friends of Lincoln Lakes v. Bd. of Env'tl. Prot.*, 989 A.2d 1128 (Me. 2010). In addition, some studies have shown that the visibility of wind turbines is a strong cause of public opposition. See Robert G. Sullivan et al., *Wind Turbine Visibility and Visual Impact Threshold Distances in Western Landscapes* (2012) (unpublished manuscript), <http://visualimpact.anl.gov/windvitd/docs/WindVITD.pdf>; Jacob Ladenburg & Jens-Olav Dahlgaard, *Attitudes Threshold Levels and Cumulative Effects of the Daily Wind Turbine Encounters* (USAEE-IAEE, Working Paper No. 11-069, 2011), https://www.researchgate.net/profile/Jacob_Ladenburg/publication/228264644_Attitudes_Threshold_Levels_and_Cumulative_Effects_of_the_Daily_Wind_Turbines_Encounter/links/00b49526793db7ef9b000000.pdf.

³⁶ Ronald H. Rosenberg, *Diversifying America's Energy Future: The Future of Renewable Wind Power*, 26 VA. ENVTL. L.J. 505, 530–31 (2008).

³⁷ The following cases demonstrate landowners challenging local zoning ordinances on a myriad of state and federal claims that include damage to property and health due to ice throws. See, e.g., *Trude v. Town Bd. of Cohocton*, No. 95,747, 2007 WL 2811372, at *3 (N.Y. Sup. Ct. Sept. 24, 2007); *Bomba v. Zoning Bd. of Appeals of Princeton*, 2005 WL 2106162, at *2 (Mass. Land Ct. Sept. 1, 2005).

³⁸ Peter Schworm & David Filipov, *Flickering Shadows from Wind Turbines Draw Complaints*, BOS. GLOBE (Apr. 5, 2013), <https://www.bostonglobe.com/metro/2013/04/04/turbine-flicker-effect-draws-complaints/UKgf7nOwMHm8CWAtZ47V5L/story.html>; see also *Muscarello v. Winnebago Cty. Bd.*, 702 F.3d 909, 911 (7th Cir. 2012).

4. NIMBYism

Even a single wind turbine can change the character of an area, and wind farms are large infrastructure projects that might be resisted by those who oppose any type of industrial use in their neighborhoods. The regulatory fixes that might appease opponents of other types of industrial development may not work in the context of wind. For example, shielding or fencing, to hide from view a factory or conventional energy plant, cannot be employed for wind because of the height of a wind tower and the impracticability of blocking the very wind resource needed to run the turbines.

While these unique challenges raise legitimate concerns with proposed wind farms, the problems can be exacerbated by NIMBY views, even by people who support renewable energy but want it to be somewhere else. Thus, while the impacts of wind development are frequently part of a state, local, or even federal review process, how that review process is structured can leave issues unresolved or result in processes that can thwart reasonable development.³⁹

While conventional fossil-fuel generation plants have faced similar NIMBY challenges in the past,⁴⁰ states have created regulatory regimes that significantly curtail opposition to these sources of generation. For example, California's Energy Commission was created in 1974 because of local opposition to the proposed siting of nuclear power plants throughout the state.⁴¹ Some of the advantages of these alternative siting regimes are one-stop shopping with a single state agency, alternative review processes that preempt local control, and more predictable and limited judicial review.⁴²

The idea of dividing wind development projects by size, and having different regulatory paths, has some advantages.⁴³ Divisions by size allow small wind developers, such as ranches or small end-users seeking a single tower, to avoid the possibly long and expensive statewide review in favor of a review process designed for considering the impacts of large-scale projects. However, either because wind developments are

³⁹ Uma Outka, *The Renewable Energy Footprint*, 30 STAN. ENVTL. L.J. 241 (2011) [hereinafter Outka, *Footprint*] (reviewing some of the challenges presented by siting, and siting regulations and approaches taken by the federal governments and some states to expedite siting approvals).

⁴⁰ For an overview of the local challenges to fossil-fuel power plants see, for example, Glenn Blomquist, *The Effect of Electric Utility Power Plant Location on Area Property Value*, 50 LAND ECON. 97 (1974).

⁴¹ K.K. DuVivier, *The Superagency Solution*, 46 MCGEORGE L. REV. 189, 197-98 (2014) [hereinafter DuVivier, *The Superagency Solution*].

⁴² *Id.* at 202-03.

⁴³ For more discussion of the size divisions, see *infra* Section II.B.

smaller than many conventional fossil-fuel plants, or because of other special characteristics distinguishing wind development from most fossil-fuel generating plants,⁴⁴ many states that have statewide siting for almost all other sources of electricity generation do not cover wind.⁴⁵

II. U.S. WIND ENERGY REGULATION

While financial incentives have been provided at the federal level, primarily through the Production Tax Credit,⁴⁶ legislation to regulate the construction, operation, and decommissioning of wind projects—as well as to protect the interests of developers, lessors, and neighbors—has generally been handled at the state and local level.⁴⁷

⁴⁴ NAT'L ACAD. OF SCIS. ET AL., *ELECTRICITY FROM RENEWABLE RESOURCES: STATUS, PROSPECTS, AND IMPEDIMENTS* 67–132 (2010). Wind and photovoltaic solar are the only two current utility-scale technologies that do not require water for the generation of electricity. Other “thermoelectric” forms of power generation, nuclear, coal, natural gas, and even concentrating solar thermal (CSP), first boil water to steam to turn the electric generator. See P. TORCELLINI, N. LONG & R. JUDKOFF, NAT'L RENEWABLE ENERGY LAB., *CONSUMPTIVE WATER USE FOR U.S. POWER PRODUCTION* (2003), <http://www.nrel.gov/docs/fy04osti/33905.pdf>.

⁴⁵ For example, the California Energy Commission regulates the siting of all other sources of electricity generation except wind and solar power. DuVivier, *The Superagency Solution*, *supra* note 41, at 199–200.

⁴⁶ 42 U.S.C. § 13317 (2012); see also *Production Tax Credit*, AM. WIND ENERGY ASS'N, <http://www.awea.org/production-tax-credit> (last visited Jan. 19, 2017).

⁴⁷ This Article is focused on U.S. terrestrial wind development on private lands, which, as of 2012, still accounts for 98.6% of total U.S. installed capacity. See *Public Lands and Wind Energy*, AM. WIND ENERGY ASS'N, <http://www.awea.org/Issues/Content.aspx?ItemNumber=858> (last visited Nov. 15, 2016). As of 2015, the United States had yet to complete the construction of a single offshore wind turbine, although several have been proposed and are in various stages of development. See *State Activities*, BOEM, <https://www.boem.gov/Renewable-Energy-State-Activities> (last visited Mar. 17, 2017). Because much offshore development is projected to occur in federal waters, the federal government will have a much greater role in regulating that development. See Jeremy Firestone et al., *Regulating Offshore Wind Power and Aquaculture: Messages from Land and Sea*, 14 CORNELL J.L. & PUB. POL'Y 71, 78–82 (2004). Federal regulation is also required for projects that take place on federal lands, or that trigger existing regulations through impacts to federal waters, endangered species, federal highways, or make use of federal funding. The American Wind Energy Association (AWEA) reports that only 1.4% of total wind energy capacity was installed on public lands through 2012. The U.S. Forest Service (USFS) manages 193 million acres of National Forest and Grasslands across the country. USFS has only approved one 30 MW wind project: Deerfield Wind in Vermont on federal lands. As of May 2015, the Bureau of Land Management (BLM) has recognized 20.6 million acres as having wind potential and authorized forty wind energy development projects. See *Wind Energy*, BLM, https://www.blm.gov/wo/st/en/prog/energy/wind_energy.html (last updated Apr. 21, 2016). Again, this Article focuses on state and local regulations required for wind developments, and not federal regulations that may be triggered by specific projects. State and local regulations vary substantially in what areas are specifically regulated. For an overview of different state approaches see NARUC, *supra* note 24, at 48 app. A.

A. *Why Siting Matters*

The efficiency and viability of wind energy projects is not solely determined by the siting of towers. However, siting may be one of the most critical decisions made for a project.⁴⁸ Turbine heights allowing greater blade size⁴⁹ and the location of towers factor into a wind farm's efficiency, along with the wind conditions,⁵⁰ prevailing wind direction, wake effect,⁵¹ and local topography.⁵² Developers conduct careful studies to find the most efficient arrangement of towers so as to maximize the wind potential for the project and minimize the wakes to prevent one tower from adversely affecting the efficiency of a neighboring tower in the area of the project or a competing project.

Unfortunately for wind developers, siting decisions also have the potential to raise some of the strongest regulatory and legal challenges. It is the placement of the towers themselves that often raises the ire of local residents or their representative governments. New technologies and advanced wind modeling can determine the most efficient placement of towers—one that yields the greatest and most consistent energy based on prevailing wind patterns.⁵³ However, final siting

⁴⁸ An Environmental Law Institute (ELI) study cites ELIZABETH DORIS ET AL., NAT'L RENEWABLE ENERGY LAB., STATE OF THE STATES 2009: RENEWABLE ENERGY DEVELOPMENT AND THE ROLE OF POLICY, TECH. REP. NO. NREL/TP-6A2-46667 (Oct. 2009), <http://www.nrel.gov/docs/fy10osti/46667.pdf>, and notes that it is useful, but glaringly omits discussion of siting policies. ELI 2011, *supra* note 23, at 1.

⁴⁹ See also, e.g., *Does Wind Turbine Blade Length Really Matter*, ORENDA ENERGY SOLUTIONS (Aug. 6, 2013), <http://orendaenergy.com/does-wind-turbine-blade-length-really-matter>. See generally DuVivier, *Wind Power Growing Pains*, *supra* note 33.

⁵⁰ See, e.g., BRUCE BAILEY & RICH OSSIBOFF, AWS TRUEPOWER, ADVANCED CHARACTERIZATION OF WIND RESOURCES IN SELECTED FOCUS AREAS OF CALIFORNIA 37-46 (2010), <http://www.energy.ca.gov/2013publications/CEC-500-2013-155/CEC-500-2013-155.pdf> (describing the impacts of unusual weather events in Chapter 5).

⁵¹ Wake effect is the result of the wind energy generation process. The wind flowing through the turbine loses energy and becomes turbulent, leaving a wake of turbulent and diminished wind energy on the downwind side. Turbines located within that wake will suffer from diminished capacity. For further explanation of wake effect, see Kimberly E. Diamond & Ellen J. Crivella, *Wind Turbine Wakes, Wake Effect Impacts, and Wind Leases: Using Solar Access Laws as the Model for Capitalizing on Wind Rights During the Evolution of Wind Policy Standards*, 22 DUKE ENVTL. L. & POL'Y F. 195 (2011); and Troy Rule, *A Downwind View of the Cathedral: Using Rule Four to Allocate Wind Rights*, 46 SAN DIEGO L. REV. 207 (2009).

⁵² See, e.g., Wei Tian, Ahmet Ozbay & Hui Hu, *Terrain Effects on Characteristics of Surface Wind and Wind Turbine Wakes*, 126 PROCEDIA ENGINEERING 542 (2015).

⁵³ New technologies, including the use of portable SODAR and LIDAR, and advanced Geographic Information System (GIS)-based wind modeling systems allow developers to accurately site turbines based on long-term wind viability. The use of these technologies and new models for analysis continue to allow developers a more accurate evaluation of wind resources. For examples, see Stefano Grassi et al., *Large Scale Technical and Economical Assessment of Wind Energy Potential with a GIS Tool: Case Study Iowa*, 45 ENERGY POL'Y 73 (2012) (describing new GIS modeling systems for evaluating wind efficiency for turbine siting);

decisions can be a source of conflict between proponents and challengers of proposed projects, and siting is often strongly influenced by property ownership, municipal jurisdictions or regulations, setbacks, aesthetic or noise considerations, or environmental factors. Siting has continued to be one of the most significant impediments to the growth of the industry, and complicated regulatory regimes can make complicated siting decisions all but impossible.⁵⁴

When siting individual turbines, promoting efficient siting while minimizing local concerns can be challenging. Yet, the problems increase dramatically when siting large utility-scale projects that can include tens or even hundreds of wind turbines that cross jurisdictional boundaries.⁵⁵ Wind energy regulation, therefore, should seek to find a balance that promotes wind energy development by allowing siting that maximizes the efficiency of wind energy generation, limits conflicts between neighboring developers or between wind energy generation and competing land uses, and avoids, minimizes, or mitigates adverse impacts to the public generated directly or indirectly by a project.⁵⁶

B. *Why Size Matters*

Some states have dual regulatory paths for wind projects, depending on the size of the overall undertaking. For example, many of these states allow local control for smaller-scale wind projects while granting authority for large wind projects to a state agency or utility board.⁵⁷ The size of the project is most commonly measured by total nameplate capacity, although some states have used alternate measures such as acreage impacted or total number of turbines.⁵⁸

and see also Matthew A. Lackner et al., *The Round Robin Site Assessment Method: A New Approach to Wind Energy Site Assessment*, 33 RENEWABLE ENERGY 2019 (2008).

⁵⁴ See Outka, *Footprint*, *supra* note 39, at 242.

⁵⁵ Hannah Wiseman, *Expanding Regional Renewable Governance*, 35 HARV. ENVTL. L. REV. 477, 493–94 (2011) (identifying the need for regulation to help restrict challenges to siting wind turbines).

⁵⁶ Recognizing the delays that siting approvals can cause, and the impacts on development, some states have attempted to create streamlined reviews for wind siting. California's Executive Order S-14-08 created a one-stop permitting process for renewable projects, and Maine's Expedited Permitting of Grid Scale Wind Energy Development allowed for some expedited process in unorganized parts of the state. For a more complete review of these provisions and other streamlined siting process, see Outka, *Footprint*, *supra* note 39, at 269–83.

⁵⁷ The National Association of Regulatory Utility Commissioners' (NARUC) study of wind regulations across the United States shows sixteen states that determine siting based on the size of the project. NARUC, *supra* note 24, at 6 tbl.1.

⁵⁸ In addition to the 0.5 MW limit discussed later in this section, Wyoming also allows local governments to regulate projects with fewer than thirty turbines. WYO. STAT. ANN. §§ 18-5-502, 35-12-102 (West 2007). Maine allows local siting for projects that will impact fewer than

The dividing lines between large and small-scale projects vary significantly from one state to another. This can have a dramatic impact on how sites are regulated. For example, Connecticut allows local siting only for projects with a nameplate, or potential generating capacity of less than one MW.⁵⁹ Larger wind projects require approval from the Connecticut Siting Council. Because most single utility-scale wind turbines have a nameplate capacity of over one MW,⁶⁰ this means that local entities in Connecticut only have authority over the smallest wind projects of likely no more than one turbine. All other wind developments would therefore fall under the authority of a state siting council.⁶¹

In contrast, Massachusetts allows local siting for projects smaller than 100 MW in nameplate capacity.⁶² Wind energy development in Massachusetts has generally consisted of small to medium sized projects, and as of 2009, not a single terrestrial wind project larger than 100 MW had been constructed in Massachusetts.⁶³ Although Massachusetts has a centralized authority for larger projects, the only projects large enough to fall under that authority have been offshore

twenty acres. ME. REV. STAT. ANN. tit. 35-A, § 3451(8); tit. 38, § 482.2 (2010). The other fourteen states that divide projects by size use nameplate capacity: Iowa (twenty-five MW), IOWA CODE ANN. § 476A.2 (West 2009); Kentucky (local under ten MW; both state and local over ten MW), KY. REV. STAT. ANN. § 278.216 (West 2006); Massachusetts (local under 100 MW), MASS. GEN. LAWS ANN. ch. 164, §69G–69H (West 2003); North Dakota (under 0.5 MW as of 2011), N.D. ADMIN. CODE 69-06 (2013); N.D. CENT. CODE ANN. § 49-22-03(5) (West 2011); Oregon (under thirty-five MW unless one elects to use the state siting process), OR. REV. STAT. ANN. § 469.320(8) (West 2016); Rhode Island (local under forty MW) 42 R.I. GEN. LAWS ANN. § 42-98-11, -11(d) (West 2014); South Dakota (local under 100 MW), S.D. CODIFIED LAWS §§ 49-41B-2, -4 (2004); Virginia (local under 100 MW) VA. CODE ANN. § 10.1-1197.5 (West 2011), § 56-46.1(I) (West 2009) (as amended in 2009).

⁵⁹ CONN. GEN. STAT. ANN. §§ 16-50k, -50a (West 2013) (allowing “fuel cells built within the state with a generating capacity of two hundred fifty kilowatts or less,” and “fuel cells built out of state with a generating capacity of ten kilowatts or less,” to forgo obtaining a state certificate).

⁶⁰ U.S. Dep’t of Energy, *Utility-Scale Wind*, WINDEXCHANGE, <http://apps2.eere.energy.gov/wind/windexchange/utility-scale-wind.asp> (last updated Jan. 25, 2017) (defining utility-scale wind projects as turbines larger than 1 MW).

⁶¹ CONN. GEN. STAT. ANN. § 16-50k(a).

⁶² MASS. GEN. LAWS ANN. ch. 164, § 69G–69H (West 2003); EXEC. OFFICE OF ENERGY & ENVTL. AFFAIRS, RENEWABLE ENERGY SITING STUDY (2009), <http://www.mass.gov/eea/docs/doer/renewables/wind/wind-siting-study-04-15-09.pdf>.

⁶³ See *id.* at 5–2; see also MASS. GEN. LAWS ANN. ch. 164, §§ 69G–69H. Washington and New Mexico allow even larger projects to fall within the bounds of local siting authority. See N.M. STAT. ANN. § 62-9-3(B)-(H) (West 2015) (allowing local regulation for projects smaller than 300,000 KW [300 MW]); WASH. REV. CODE ANN. § 80.50.020 (West 2001) (requiring state approval for power generation facilities exceeding 350,000 KW [350 MW]).

projects falling outside Massachusetts jurisdiction, none of which have been built.⁶⁴

The dividing line between large and small projects can impact how projects are proposed within the state. North Dakota initially divided large and small-scale projects at 60 MW.⁶⁵ However, legislators found that too many developers were breaking projects up into smaller pieces to intentionally come in under the 60 MW threshold just to avoid state regulation.⁶⁶ In an effort to stop developers from sneaking in under the limit, North Dakota dramatically reduced the threshold capacity to 0.5 MW,⁶⁷ and now only individual home turbines are sited locally. Any utility-scale facilities are now regulated by the state.⁶⁸

C. *The Default*

Without a centralized set of federal standards, wind regulation across the country consists of a patchwork of diverse state and local laws and regulations that employ different tools in an attempt to strike the balance between promoting wind and protecting local interests. The diversity in these regulations defies easy classification, although several studies have attempted to do just that.⁶⁹

⁶⁴ See MASS. GEN. LAWS ANN. ch. 164, § 69H. The proposed Cape Wind Project has a total nameplate capacity of 468 MW making it large enough to fall under the authority of the Energy Facilities Siting Board; however, the project is outside the limits of Massachusetts jurisdiction and falls under the regulatory authority of the Bureau of Ocean Energy Management (BOEM). See *Cape Wind*, BOEM, <https://www.boem.gov/Renewable-Energy-Program/Studies/Cape-Wind.aspx> (last visited Mar. 17, 2017). As a result, although viewed as a Massachusetts project over 100 MW, the Energy Facilities Siting Board has not been charged with regulating the turbine siting, although they have been involved in some of the related transmission installation. See *FAQs: Permitting Process and Cape Wind*, CAPE WIND, <https://www.capewind.org/faqs/permitting-process-and-cape-wind> (last visited Feb. 16, 2017). See generally *All. to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd.*, 932 N.E.2d 787 (Mass. 2010).

⁶⁵ NARUC, *supra* note 24, at A-72.

⁶⁶ *Id.* The Energy Conversion and Transmission Facility Siting General Provisions were amended most recently in 2011. *Id.* This amendment closed a “loophole” that allowed wind developers to avoid the state siting provisions by breaking up larger wind projects into smaller ones simply to keep under the minimum capacity threshold.” *Id.* “Prior to this amendment, North Dakota PSC had authority to review energy conversion facilities for projects over 60 MW.” *Id.*

⁶⁷ *Id.*

⁶⁸ See N.D. ADMIN. CODE 69-06 (2013) for provisions regulating siting authority over wind energy conversion facilities defined under N.D. CENT. CODE ANN. § 49-22-03 (West 2011), as a wind facility larger than 0.5 MW in capacity. See also NARUC, *supra* note 24, at A-72.

⁶⁹ NARUC and ELI have both developed classifications of wind energy statutes across the several states. NARUC, *supra* note 24, at 6–16; ELI 2011, *supra* note 23, at 5–15. In addition, several law articles have also attempted to classify the means that states have used to regulate

Research uncovered several previous efforts to catalogue wind regulations.⁷⁰ The National Association of Regulatory Utility Commissioners (NARUC) study, published in 2012, looked at characteristics of wind energy regulation across the United States and how these regulations address various aspects of project siting and project approval.⁷¹ While the NARUC study provides a good starting point for examining how different states have approached the question of regulating wind energy projects, it also illustrates the diversity among various state approaches and the difficulty in characterizing these data. The major drawback of the NARUC data is that its categorizations comparing state and federal approaches were too simplistic.⁷²

The Environmental Law Institute (ELI), in a 2011 study, similarly looked at the different wind regulation approaches taken by the states.⁷³ In contrast to NARUC, the ELI took a more qualitative view, grouping states into six different categories based on the balance of authority between state and local government.⁷⁴ Each of the classification schemes had their advantages and their flaws, but what they all illustrate, most saliently, is that the prevailing method for wind siting in the United

wind energy. However, these groups vary in how they have categorized different state statutory schemes.

⁷⁰ See, e.g., Ronald H. Rosenberg, *Making Renewable Energy a Reality—Finding Ways to Site Wind Power Facilities*, 32 WM. & MARY ENVTL. L. & POL'Y REV. 635 (2008); U.S. Dep't of Energy, *Wind Energy Ordinances*, WINDEXCHANGE, <http://apps2.eere.energy.gov/wind/windexchange/policy/ordinances.asp> (last updated Nov. 24, 2015); CONSENSUS BLDG. INST., *A SURVEY OF WIND SITING REGULATIONS* (2013), <http://www.cbuiding.org/sites/default/files/Wind%20Siting%20Regs%20by%20State.pdf>; ELI 2011, *supra* note 23; NARUC, *supra* note 24; see also Patricia E. Salkin & Ashira Pelman Ostrow, *Cooperative Federalism and Wind: A New Framework for Achieving Sustainability*, 37 HOFSTRA L. REV. 1049, 1065–70, 1076–79, 1092 (2009) (describing local, state, and federal regulation of wind development and resulting challenges to development, and arguing for a “federal wind siting policy”); Wiseman, *supra* note 55 (describing the multiple layers of regulation and property rights that apply to large renewable developments and arguing for regional energy boards).

⁷¹ NARUC, *supra* note 24, at 6 tbl.1 (NARUC study looked at fourteen different characteristics: (1) MW Installed; (2) Primary Authority (Limit); (3) Primary or Secondary State Authority; (4) State Energy Siting; (5) Primary Rule; (6) Evaluation Criteria; (7) Voluntary Guidelines; (8) Model Ordinance; (9) Setback Standard; (10) Sound Standard; (11) Local Ordinances; (12) Renewable Energy Portfolio Standard or “RPS”; (13) RPS In-State “Tilt”; and (14) Renewable Energy Zone or “REZ”).

⁷² The NARUC study compared some of the different approaches, but did not generate any broad categories of regulations outside of identifying whether a state placed the ultimate authority at the state or local level. See *id.*

⁷³ ELI 2011, *supra* note 23.

⁷⁴ *Id.* at 5. The ELI categories include (1) Local siting with local autonomy; (2) Local siting with a defined scope; (3) Dual authority with independent decisions; (4) Dual authority with state preemption; (5) State siting incorporating local requirements; and (6) State siting. *Id.* While these divisions are somewhat useful, the exceptions appear to consume the rules, so this Article did not rely solely on the ELI categories.

States is currently local control in a manner that provides little protection against NIMBYism.

As of 2015, forty states had some form of utility wind power, and sixteen of those states had over 1,000 MW of constructed wind capacity.⁷⁵ In the absence of state legislation, local control is the default because of the traditional role local governments have played in land use decisions.⁷⁶ According to ELI, thirty-four states fit into this local control category.⁷⁷

The default for purely local regulation raises at least four concerns, illustrated by a slew of cases in Pennsylvania alone.⁷⁸ Pennsylvania allows local governments the authority to review and approve wind projects with no substantial input from state agencies.⁷⁹ Unlike most states—where local regulation is authorized by default because of a total absence of wind legislation or a lack of wind development—Pennsylvania's decision was intentional.⁸⁰ Through its Alternative Energy Portfolio Standards Act, passed in 2004, Pennsylvania established Renewable Energy Portfolio Standard (RPS) goals for the state, but did not enact any provisions for how such facilities would be regulated.⁸¹ Instead, the authority for siting and approving wind projects fell to local zoning laws typically at the county or municipal level.⁸²

Recognizing the need for guidance, the State issued a Model Wind Ordinance in 2006 to support local regulation of wind projects.⁸³ Only

⁷⁵ *U.S. Wind Energy State Facts*, *supra* note 22. The American Wind Energy Association has compiled an interactive resource that ranks all fifty states according to their current installed wind capacity. *Id.* These figures do not account for projects currently seeking permits. *Id.* Ten states currently are rated as having a megawatt capacity of zero and are unranked. *Id.* The unranked states with no installed wind capacity as of July 2016 are: Florida, Louisiana, Alabama, North Carolina, South Carolina, Virginia, Kentucky, Georgia, Mississippi, and Arkansas. *Id.*

⁷⁶ See Salkin & Ostrow, *supra* note 70, at 1065.

⁷⁷ ELI 2011, *supra* note 23, at 6. These states include: Alabama, Alaska, Arizona, Arkansas, California, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, New Hampshire, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, and Utah. *Id.* In contrast, NARUC lists twenty-six states as granting primary wind siting authority to local governments, with an additional sixteen granting the authority for small projects. NARUC, *supra* note 24, at 6 tbl.1.

⁷⁸ See Mark K. Dausch, Comment, *Analyzing a Municipality's Authority to Enact the Model Ordinance for Wind Energy Facilities in Pennsylvania*, 45 DUQ. L. REV. 47 (2006).

⁷⁹ *Id.* at 47–48.

⁸⁰ *Id.*

⁸¹ See S. 1030, 2003–2004, Reg. Sess. (Pa. 2004) (codified as amended at 73 PA. STAT. AND CONS. STAT. ANN. § 1648 (West 2008)).

⁸² See Dausch, *supra* note 78, at 47–48; NARUC, *supra* note 24, at A-81.

⁸³ See Dausch, *supra* note 78, at 47.

thirteen local Pennsylvania governments, however, have adopted any wind-specific regulations, and most areas of the state currently operate under general zoning laws with no wind-specific provisions.⁸⁴

Under Pennsylvania law, local governments have broad regulatory authority through zoning. Local governments are prohibited from passing laws that would completely exclude otherwise legitimate land uses, but the burden falls to the party challenging the regulation to show that it is exclusionary.⁸⁵ This would present a high burden for development projects by potentially requiring a party to show that a regulation would prohibit all wind projects anywhere within the jurisdiction. While this limitation would prevent total bans, it places the burden of proving a negative on the developer, which might make it difficult to show that even unreasonable regulations are sufficiently “exclud[ing] . . . otherwise legitimate [land] use[s].”⁸⁶

1. Applying Non-Wind Regulations to Wind Development

When laws and regulations lag behind technological development, they can serve to deter or hinder the development of that technology even when all other factors—such as economics, public interest, and government support—promote it. With a lack of wind specific laws in place, development must rely on existing processes, which can sometimes lead to bizarre results.⁸⁷ Is a wind turbine an accessory use like a gazebo? If the local zoning regulation says that industrial facilities need to be shielded by a fence, should that requirement be applied to require a fence around wind turbines? These are a few of the questions raised by two Pennsylvania cases addressing the application of non-wind regulations to wind development.

a. *Tink-Wig Mountain Lake Forest Property Owners Association v. Lackawaxen Township Zoning Hearing Board*⁸⁸

In 2008, Lackawaxen Township had no wind specific provisions.⁸⁹ Therefore, when a property owner requested a permit to install a single

⁸⁴ See *Wind Energy Ordinances*, *supra* note 70.

⁸⁵ See Dausch, *supra* note 78, at 48–49.

⁸⁶ Dausch, *supra* note 78, at 48–49; see, e.g., *Plaxton v. Lycoming Cty. Zoning Hearing Bd.*, 986 A.2d 199, 205, 208 (Pa. Commw. Ct. 2009).

⁸⁷ Donald Zillman et al., *More than Tilting at Windmills*, 49 WASHBURN L.J. 1, 67 (2009) (looking at the legal hurdles in developing wind energy in the United States, and examining more proactive European approaches to regulating development).

⁸⁸ *Tink-Wig Mountain Lake Forest Prop. Owners Ass'n v. Lackawaxen Twp. Zoning Hearing Bd.*, 986 A.2d 935 (Pa. Commw. Ct. 2009).

⁸⁹ See *id.* at 938.

wind turbine within a residential neighborhood, the Township Zoning Officer reviewed the request under existing zoning regulations, approving it as an “accessory use” on the property.⁹⁰

The local Property Owners Association challenged the decision, arguing that rather than an “accessory use,” the turbine should be considered a “conditional use” under the zoning laws and should have been reviewed by a different local board, the Township Board of Supervisors.⁹¹ The Property Owners Association argued that the “accessory use” provision of the zoning ordinance was intended for things like gazebos and not for something as substantial as a wind turbine.⁹²

The Township Zoning Officer defended his decision, arguing that there were no express limits on what constituted an “accessory use.”⁹³ Furthermore, because the turbine was providing an “essential service” to the property owner, the Township Zoning Officer’s decision to apply the “accessory use” provision was appropriate.⁹⁴

Lacking clear guidance for how to apply wind turbines to the ordinance, the reviewing Commonwealth Court used an abuse of discretion standard to analyze the zoning regulations and the definitions of “accessory use” and “essential service,” ultimately holding that the decision of the zoning board was appropriate and upholding the permit for the wind turbine.⁹⁵

b. *Tioga Preservation Group v. Tioga County Planning Commission*⁹⁶

In 2007, AES Armenia Mountain Wind proposed a large wind farm consisting of 124 turbines and associated infrastructure in Tioga County.⁹⁷ The Tioga County Planning Commission did not have any wind-specific regulations, but it approved the project under existing zoning regulations.⁹⁸ Tioga County’s general zoning rules required that

⁹⁰ *Id.* at 937.

⁹¹ *Id.* at 937–40.

⁹² *Id.* at 937–38 (nor did the zoning ordinance have any standards governing the siting of the proposed turbine).

⁹³ *Id.* at 938–39.

⁹⁴ *Id.*

⁹⁵ *Id.* at 941–43.

⁹⁶ 970 A.2d 1200 (Pa. Commw. Ct. 2009).

⁹⁷ *Id.* at 1202.

⁹⁸ *Id.*

development projects be screened from view.⁹⁹ However the Planning Commission granted AES a waiver to this requirement.¹⁰⁰

Local residents of Tioga County appealed, first to the Court of Common Pleas and then to the Commonwealth Court. In addition to questioning AES's status as a proper applicant for the permit, the challengers raised two arguments against the Commission's actions.¹⁰¹ First, the challengers said the Commission needed to identify sections of the ordinance from which it derived the specific conditions it imposed on AES.¹⁰² The court rejected this argument because the section of the ordinance requiring specificity only applied when the governmental body denies a land development application, not when it approves one, as was the case here.¹⁰³

Second, the challengers argued that the Commission erred in granting the fence waiver. Citing to Pennsylvania statutes, cases, and the county ordinance itself, the court noted that "a governing body or planning agency may administer waivers . . . from the literal compliance of its ordinance where literal enforcement will exact undue hardship."¹⁰⁴ AES's application stated that fully screening the turbines was infeasible because of the turbine heights and because fences would obstruct the very wind flow needed to turn the turbine blades to generate electricity.¹⁰⁵ The court, therefore, concluded that AES's application met the hardship test.¹⁰⁶

In addition, the court's scope of review was limited to "error of law or abuse of discretion."¹⁰⁷ Based on this heightened standard, the court held the Commission did not err, and affirmed its waiver of the screening requirement.¹⁰⁸

In both the *Tink-Wig* and the *Tioga Preservation* cases, the wind projects were allowed to move forward despite local challenges.

⁹⁹ *Id.* ("Article VII, section 709.06 of the Tioga County Subdivision and Land Use Ordinance . . . requires that natural screening or fencing be provided where an industrial development abuts residential property or other incompatible uses.").

¹⁰⁰ *Id.* at 1202, 1205.

¹⁰¹ *Id.* at 1203.

¹⁰² *Id.* at 1204.

¹⁰³ *Id.*

¹⁰⁴ *Id.* at 1204–05 (citing MODEL PENAL CODE §§ 503(8), 512.1(a); 53 PA. STAT. AND CONS. STAT. ANN. §§ 10503(8), 10512.1(a); Article VII, section 704 and Article IX, section 902 of the county ordinance). The cases cited held that a waiver was proper if the requirement "would offer little or no additional benefit and where literal enforcement would frustrate the effect of improvements." *Id.* (citing *Monroe Meadows Hous. P'ship, L.P. v. Mun. Council*, 926 A.2d 548 (Pa. Commw. Ct. 2007); *Ruf v. Buckingham Twp.*, 765 A.2d 1166 (Pa. Commw. Ct. 2001)).

¹⁰⁵ *Id.* at 1205.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 1203 n.1.

¹⁰⁸ *Id.* at 1205.

However, the local decision making bodies were granted broad discretion to interpret the non-wind regulations in ways that could either promote or halt wind development. This discretion could swing either way depending on the composition of the deciding authority and the latest election.

2. Lack of Regulations

Yet another Pennsylvania case illustrates the potential for costly litigation when local regulations provide no guidance in an area.

*In re Broad Mountain Development Co.*¹⁰⁹: In 2008, Broad Mountain Development Company, L.L.C., proposed a twenty to twenty-eight wind turbine project within a Woodland-Conservation Zone District in Pennsylvania.¹¹⁰ Butler Township, which had the authority over the zoning permit, had no specific regulation or guidance regarding wind energy projects.¹¹¹ Despite this lack of guidance, the Butler Township Zoning Officer approved Broad Mountain's zoning permit application during a zoning meeting on February 4, 2008.¹¹²

The Zoning Officer's activities in approving the permit included several irregularities. First, he made the following note on the application: "Zoning Permit Only. A wind energy facility is an allowable activity in a Woodland Conservation (WC) Zoning District . . ." ¹¹³ The Zoning Officer later testified that he made the note to indicate he was limiting the scope of approval.¹¹⁴ In addition, "[f]or unknown reasons, the Zoning Officer failed to include the issuance of this permit on his report to the Board of Supervisors."¹¹⁵

In contrast, the developer left the February 2008 zoning hearing believing that it had acquired the necessary permit that gave it the green light to move forward on the project.¹¹⁶ Four months after the hearing, the company invested money to erect a meteorological tower to prepare

¹⁰⁹ 17 A.3d 434 (Pa. Commw. Ct. 2011).

¹¹⁰ *Id.* at 437. Counties can create Woodland Conservation Zones by incorporating natural resource identification and protection into subdivision and development proposals through site specific performance standards. Some Pennsylvania counties refer to them as "Model Conservation Districts" (Lancaster County, PA) or "Rural Conservation Districts" (Berks County, PA) For permitted uses, see Schuylkill County, Pa., Butler Township Zoning Ordinance of 1997 art. IV, §§ 401.1–401.4 (Mar. 19, 2003), http://elibrary.pacounties.org/Documents/Schuylkill_County/7;%20Butler%20Township/4210710488mzo.pdf.

¹¹¹ *Broad Mountain*, 17 A.3d at 437.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.* at 437–38.

¹¹⁶ *Id.*

a feasibility study.¹¹⁷ This tower was approximately sixty meters tall and visible around the area.¹¹⁸ Then in February of 2009, over a year after receiving its zoning permit, the developer filed a preliminary land development plan for the wind farm.¹¹⁹ The developer paid over \$20,000 for its development plan review.¹²⁰

The developer's activities in early 2009 started to get attention, and a local newspaper carried a story about Broad Mountain's project in March of 2009.¹²¹ Suddenly, local opponents awakened. The Zoning Board was flooded with appeals against Broad Mountain's permit at its May 2009 meeting.¹²² In response to ire from its constituents, the Zoning Board revoked Broad Mountain's permit.¹²³

Broad Mountain appealed the Zoning Board's decision to revoke the permit to the Court of Common Pleas.¹²⁴ When the trial court affirmed the Zoning Board decision, Broad Mountain again appealed to the Commonwealth Court of Pennsylvania.¹²⁵ The wind developer claimed its right to the permit had vested because the neighboring landowners, who objected in May of 2009, had not timely appealed to the initial grant of the permit in February of 2008.¹²⁶ Pennsylvania law provides that parties seeking reversal of a board approval must do so within thirty days.¹²⁷

Both the trial court and the Commonwealth Court disagreed.¹²⁸ The decision rode upon notice to the parties seeking reversal.¹²⁹ This required close examination of the factual circumstances of the many parties allowed to intervene.¹³⁰ The Zoning Officer's irregularities about not reporting the permit, and his notations, also complicated the factual investigation.¹³¹ Ultimately, the appellate court affirmed the revocation

¹¹⁷ *Id.* at 438.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.* at 438–39. The Butler Township Zoning Hearing Board, who initially approved the permit application, granted an appeal of the zoning permit. In addition to determining that the permit was not within the use permitted in the Woodland-Conservation Zone, the Board held that AES did not construct the wind turbines prior to the expiration of the permit.

¹²⁴ *Id.* at 439.

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.* at 441.

¹²⁸ *Id.* at 445.

¹²⁹ *Id.* at 443.

¹³⁰ *Id.* at 439.

¹³¹ *Id.* at 437–38.

of Broad Mountain's permit despite its outlay of funds in reliance on the standard process.¹³²

The local challenge that overturned the project, and the appeal by the wind developer, highlights some of the difficulties in not having specific procedures and standards for regulating wind projects. First, unclear notice requirements left some local residents uninformed about the project, thus vitiating their right to challenge the initial zoning board approval. Second, because no clear guidelines for notice were defined by the ordinance, it also opened the door to the wind developer's legal challenge. Finally, the wind developer here moved forward with costly obligations and did not learn until more than three years after it thought its permit had been approved that it could no longer go forward with the project.

3. Lack of Expertise

*PPM Atlantic Renewable v. Fayette County Hearing Board*¹³³: In 2007, PPM Atlantic sought to develop a twenty-four turbine wind farm that fell within three different townships in Fayette County, Pennsylvania.¹³⁴ One of the townships had its own specific zoning provisions and regulated the project under those provisions.¹³⁵ However, two of the townships, Georges and Springhill, did not have any wind provisions, so the zoning responsibility fell to Fayette County.¹³⁶

Fayette County did have some wind specific provisions in its zoning ordinance.¹³⁷ The county zoning provisions considered wind turbines a "special exception" use in A-1 zones.¹³⁸ The PPM project was in an A-1 zone, so it should have been subject to the thirteen specific conditions for wind turbines in Fayette County's ordinance.¹³⁹ PPM

¹³² *Id.* at 445.

¹³³ This case went through several rounds of litigation. For a general factual overview and procedural history, see No. 1431 C.D. 2010, 2014 WL 2156744 (Pa. Commw. Ct. May 20, 2014).

¹³⁴ *PPM Atl. Renewable v. Fayette Cty. Zoning Hearing Bd.*, 13 Pa. D & C.5th 458, 461–62 (Pa. Ct. C.P. June 17, 2010).

¹³⁵ *Id.* at 461.

¹³⁶ *Id.* at 462.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.* The conditions included "a minimum lot size, maximum height, setback, maximum noise, 'viewshed impact analysis,' 'biological resource survey,' 'best management practices' to minimize erosion, siltation and water contamination, aircraft warning lights, location relative to airports, compliance with the National Historical Preservation Act," and a decommissioning standard. *Id.*

sought some variances to optimize the efficiency of the wind project.¹⁴⁰ These included siting towers the “maximum distance from residences”; ensuring performance based on wind measurements; orienting towers based on prevailing winds; and maximizing the elevation of towers.¹⁴¹ Additionally, setback variances were only requested from the property boundaries of two participating property owners, and not from non-participating owners.¹⁴²

PPM’s project faced strong opposition in public comments, so the Fayette County Zoning Board denied PPM’s requests completely.¹⁴³ PPM appealed this to the Court of Common Pleas, and the judge in that first case remanded to the Zoning Board with directions to consider and grant the special exceptions, imposing any additional requirements needed to address health, safety, and welfare concerns.¹⁴⁴

The Fayette County Zoning Board first sought clarification from the judge, and then granted some of the variances, but refused to grant others, including the setbacks between participating property owners.¹⁴⁵ PPM again appealed, and the case was randomly assigned to a second judge.¹⁴⁶

The standard of review was that Zoning Board decisions could only be overturned for an abuse of discretion or an error of law.¹⁴⁷ Even with this narrow standard, the second judge granted PPM’s appeal, noting that there was no reasonable basis to deny an exception based on setbacks to property lines, especially when all the property owners consented to the project.¹⁴⁸ Because of the time delays, the court decided it “would be a deprivation of due process to remand the case” again, and therefore directly modified the Zoning Board resolution.¹⁴⁹

Significantly, the second judge noted the complexity of regulating wind development and the particular challenges presented by local siting.¹⁵⁰ As the judge noted, it is especially difficult when local governments lack the necessary resources and expertise:

Unfortunately, just like a new prescription drug, new power technologies can have unpleasant and unforeseen “side-effects.” And both the federal and state governments acknowledge candidly that

¹⁴⁰ *Id.* at 461.

¹⁴¹ *Id.* at 473.

¹⁴² *Id.* at 476.

¹⁴³ *Id.* at 461.

¹⁴⁴ *Id.* at 463.

¹⁴⁵ *Id.* at 463–64.

¹⁴⁶ *Id.* at 464–65.

¹⁴⁷ *Id.* at 467.

¹⁴⁸ *Id.* at 478.

¹⁴⁹ *Id.* at 495.

¹⁵⁰ *Id.* at 494.

there are many as yet unanswered questions as to the best practices for siting and operating wind-power “farms.” . . . Because of these questions, *local zoning governing bodies, and their appointed zoning hearing boards, lack the information that would allow them to make ideal decisions about location and operational conditions for wind power facilities.*¹⁵¹

The PPM Atlantic Project highlights that even where wind specific zoning ordinances are in place, local regulation can prove challenging for developers in several ways:

First, the third township had its own zoning laws related to wind development.¹⁵² So even if the Fayette County process had been smoother, PPM still had to absorb the added cost of going through an additional separate approval.

Second, this case shows how broad discretion on the part of a local government, even where wind specific provisions exist, can allow for unforeseeable and arbitrary decisions.

Third, this case illustrates the costly delay caused by varying local controls. PPM first started work on this wind development in 2007, and although the project was constructed in 2010, litigation over the wind farm continued through 2014.¹⁵³ Heavy litigation and additional costs are deterrents to any investors regardless of their zeal in promoting what the PPM court called “clean renewable ‘green’ electric energy.”¹⁵⁴

4. Lack of Predictability

*Plaxton v. Lycoming County Zoning Hearing Board*¹⁵⁵: Laurel Hill Wind Energy L.L.C. faced a dizzying seesaw of decisions in developing a project in Lycoming County before it was finally completed in 2012. Seven years before, in 2005, Laurel Hill applied for a special use permit from the Lycoming County Hearing Board.¹⁵⁶ Laurel Hill wanted to construct forty-seven wind turbines along a ridgeline between two townships.¹⁵⁷ Although the county lacked wind specific provisions

¹⁵¹ *Id.* at 466–67 (emphasis added).

¹⁵² *Id.* at 461–62.

¹⁵³ *Id.* at 467; *see also* PPM Atl. Renewable v. Fayette Cty. Zoning Hearing Bd., No. 1431 C.D. 2010, 2014 WL 2156744 (Pa. Commw. Ct. 2014); *South Chestnut Wind Project*, AVANGRID RENEWABLES, http://www.avangridrenewables.us/cs_southchestnut.html (last visited Mar. 17, 2017).

¹⁵⁴ *Id.* at 466.

¹⁵⁵ 986 A.2d 199, 202–03 (Pa. Commw. Ct. 2009) (referencing the earlier denial by the county board and the unsuccessful appeal by Laurel Hill Wind L.L.C.).

¹⁵⁶ *Id.* at 202.

¹⁵⁷ *Id.*

within its zoning laws, the county board held that the project was entitled to a special use permit, as it was a “public service use.”¹⁵⁸ Regardless of this seemingly positive designation, the county board rejected the Laurel Hill project, determining that it would result in adverse impacts to the environment and to community health and welfare.¹⁵⁹

Laurel Hill appealed this decision to the courts, but the board’s decision was upheld.¹⁶⁰ Following its first rejection of Laurel Hill’s project, however, the Lycoming County commissioners drafted an ordinance that now permitted wind energy facilities, by right, within certain zoning districts.¹⁶¹ As a result, the ordinance changed the local standards allowing the Laurel Hill project to move forward.¹⁶²

Local residents challenged the validity of the ordinance.¹⁶³ The challenge to the ordinance claimed that it was an arbitrary and capricious decision on the part of Lycoming County to draft specific legislation to approve a project that had previously been rejected due to adverse effects on public health and welfare.¹⁶⁴

However, as noted in previous Sections above, a reviewing court can only overturn a board decision for abuse of discretion or error. The challengers were not able to meet this high burden of proof, and ultimately the court upheld the ordinance, deferring to the judgment of the board and stating that it was not contrary to the goals of the county.¹⁶⁵

Opponents of the project filed a second lawsuit challenging the board’s approval of the project and claiming that Laurel Hill’s application did not contain information sufficient to grant the approval of the project.¹⁶⁶ The second court also rejected this claim, holding that the application was sufficient for the board to come to a decision, and that the approval was in line with the newly enacted amendments to the ordinance.¹⁶⁷

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.* at 203.

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *Id.* at 204.

¹⁶⁵ *Id.*

¹⁶⁶ *Piccolella v. Lycoming Cty. Zoning Hearing Bd.*, 984 A.2d 1046, 1049 (Pa. Commw. Ct. 2009).

¹⁶⁷ *Id.* at 1051–52.

5. Summary

Regardless of their individual outcomes, what these cases highlight is (1) the danger of trying to regulate wind projects under existing regulatory schemes that lack wind-specific provisions, and (2) reliance on local boards to interpret provisions incompatible with wind projects creates an uncertainty for both developers and local governments.

In Pennsylvania, strong local authority with little state control or guidance resulted in local regulation based on unclear, inappropriate, or purely discretionary standards and requirements. While resolving questions regarding the siting of wind projects is best left to state and local elected officials, these cases, instead, show that courts are making these decisions on a case-by-case basis. Court rulings on non-wind-specific local provisions offer little in the way of precedent-setting law to help resolve future conflicts. This aggravates what is already a patchwork of local legislation and creates greater uncertainty for later projects. The result of this inconsistency is an unpredictable process that offers no security for developers seeking to initiate projects, or local residents seeking to oppose them.

Other states that fall along the local end of the wind regulation continuum also illustrate the problems with strong local regulation and limited state oversight. In Massachusetts, large-scale projects 100 MW or larger are regulated by a single state agency, but projects smaller than 100 MW are regulated by local governments with limited state involvement.¹⁶⁸ In 2003, a building inspector in the City of Princeton, Massachusetts approved a permit for the installation of two test wind turbines on municipal land, but adjacent to a private property.¹⁶⁹ The permit was granted in spite of the fact that the towers exceeded the height restrictions in the local zoning laws.¹⁷⁰

The neighboring landowner challenged the decision in the state land court. In defense of his decision, the building inspector claimed that the towers constituted a “public building,” and that they also were exempted from height restrictions much like towers or other fixtures commonly carried above a roof.¹⁷¹ The court, applying principles of statutory construction to interpret vague and inappropriate statutory

¹⁶⁸ See HOWARD BERNSTEIN ET AL., MASS. DIV. OF ENERGY RES., RENEWABLE ENERGY & DISTRIBUTED GENERATION GUIDEBOOK 44 (2001), <http://www.mass.gov/eea/docs/doer/pub-info/guidebook.pdf> [<http://perma.cc/N6FU-6D8X>] (discussing the consolidated review process for large-scale energy facility projects of 100 MW and greater).

¹⁶⁹ *Bomba v. Zoning Bd. of Appeals*, No. 293552, 2005 WL 2106162, *2 (Mass. Land Ct. Sept. 1, 2005).

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at *5.

provisions, ruled against the building inspector and invalidated the permit.¹⁷² The case highlights the complications of regulations that allow discretionary approvals with no limitations or guidance specific to wind projects.

III. YESS—YES EMPHASIS ON STATEWIDE SITING

The cases in the previous Part illustrate many of the problems with relying on the default option of leaving wind siting regulation to local authorities. If wind development is new to an area, local officials may not have enacted any wind-specific ordinances and lack the resources and expertise to do so effectively. Wind development is distinct from conventional electricity generation facilities in that it is more likely to cross jurisdictional boundaries.¹⁷³ This creates increased pressure on devising a regulatory structure that can respond to the more regional nature of projects that have spillover effects, and benefits. Not least of these benefits is the role of wind power in meeting state, national, and world goals for addressing climate change through alternative non-carbon-producing sources of energy.

This Part again focuses on case law to illustrate the advantages and disadvantages of four models for statewide siting regimes for wind development. The criteria used to evaluate each include efficiency and predictability of wind siting regulation along with methods for incorporating local input in a balanced way that can counteract arbitrary NIMBY results.

¹⁷² *Id.* at *7–8.

¹⁷³ Conventional power plants addressed similar questions in the 1970s, when concern over public health and environmental impacts conflicted with a growing demand for new power generation. The result was a complex regulatory process involving multiple state and federal agencies. In response to these complications, several states granted a single state-wide agency the authority for siting decisions. Arkansas, California, Connecticut, Florida, Iowa, Kentucky, Maine, Vermont, Washington, and Wisconsin all have state agencies that determine siting, although many still balance state and local interests that can give local governments significant control over siting determinations. See Outka, *Footprint*, *supra* note 39, at 257–59 for a review of state approaches to siting conventional power plants. See also A. Dan Tarlock et al., *Environmental Regulation of Power Plant Siting: Existing and Proposed Institutions*, 45 S. CAL. L. REV. 502 (1972) (considering the environmental impacts of non-centralized siting); Mason Willrich, *The Energy-Environment Conflict: Siting Electric Power Facilities*, 58 VA. L. REV. 257 (1972) (looking at how increased demand, environmental considerations, and public health are hindered by complex decentralized reviews).

A. *The Wisconsin Approach—Statewide Regulation, Local Administration*

In Wisconsin, the state has opted for an approach that focuses the regulatory power with the state, relying on technical experts to create clear and consistent standards that all large-scale wind farms must meet regardless of jurisdiction. However, while the state creates the regulations and the standards, it delegates review and approvals to local governments, allowing them the final say as to whether a proponent has met those requirements.

Under the Wisconsin Renewable Energy Act, the Wisconsin State Power Commission (WSPC) has the authority to promulgate rules, and does so consulting with an advisory board called the Wind Siting Council.¹⁷⁴ Under the broad utility-siting powers of the Renewable Energy Act, the WSPC is authorized to draft rules regarding setbacks, noise levels, aesthetics, shadow flicker, decommissioning requirements, and interference with radio and television signals. The WSPC is also charged with setting standards for the types and amount of documentation required for approval.¹⁷⁵

While the WSPC retains the authority to set regulations and standards that all utility scale wind developments must meet, it delegates the administration of wind siting review and approvals to local governments.¹⁷⁶ Therefore, while local approvals and local challenges are considered and resolved by local governments, the standards and conditions under consideration for these approvals are set by the WSPC.

The Wisconsin legislature and the WSPC, therefore, allow limited local regulation of wind projects but heavily constrain *when* and *how* local governments can restrict projects. Under the WSPC regulations, local governments can set conditions for specific wind projects through the grant of conditional use permits under their zoning authority.¹⁷⁷

¹⁷⁴ See WIS. STAT. ANN. § 15.797 (West 2012) (authorizing the creation of the Wind Siting Council, an advisory board composed of: “(1) Two members representing wind energy system developers. (2) One member representing towns and one member representing counties. (3) Two members representing the energy industry. (4) Two members representing environmental groups. (5) Two members representing realtors. (6) Two members who are landowners living adjacent to or in the vicinity of a wind energy system and who have not received compensation by or on behalf of owners, operators, or developers of wind energy systems. (7) Two public members. (8) [And o]ne member who is a University of Wisconsin System faculty member with expertise regarding the health impacts of wind energy systems.”); see also *Wind Siting Council*, PUB. SERV. COMMISSION OF WIS., <http://psc.wi.gov/renewables/windSitingCouncil.htm> (last visited Dec. 28, 2016).

¹⁷⁵ WIS. STAT. ANN. § 196.378(4g)(b) (West 2014).

¹⁷⁶ See *id.* § 66.0401 (West 2014).

¹⁷⁷ *Id.* § 66.0401(1m); *Zoning*, LEAGUE OF WIS. MUNICIPALITIES, <http://www.lwm-info.org/719/Zoning> (last visited Jan. 18, 2017).

Under the regulations, local governments can only set restrictive conditions on the approval of a wind project when: (1) it “[s]erves to preserve or protect the public[’s] health or safety; (2) it “[d]oes not significantly increase the cost of the system or significantly decrease its efficiency”; or (3) it “[a]llows for an alternative system of comparable cost and efficiency.”¹⁷⁸

Additionally, these conditions cannot be more restrictive than the standards set by the WSPC and are subject to review by the Commission.¹⁷⁹ One final restriction on locally imposed conditions is that they must be set on a case-by-case basis and cannot create broad prospective provisions changing the standards for all projects within a jurisdiction.¹⁸⁰

By concentrating the regulatory authority with the WPSC, Wisconsin’s approach limits the ability of local governments, which may be unduly influenced by NIMBY interests, to set unreasonable standards intended purely to prevent development. By granting a limited role for local governments to set conditions on individual projects, Wisconsin also attempts to allow for some legitimate restriction based on local interests.

Two drawbacks of the Wisconsin approach are (1) cross-jurisdictional reviews and (2) multiple appeals.

1. Cross-Jurisdictional Reviews

A wind project in Wisconsin that crosses into two jurisdictions would still be subject to review in both jurisdictions.¹⁸¹ This can cause problems when the developer meets the burden of one jurisdiction’s restrictive conditions, but then encounters conflicting requirements from another.¹⁸²

For example, in 2005, Forward Energy sought approval of a wind energy development that spanned the Dodge and Fond du Lac counties in Wisconsin.¹⁸³ Although Forward Energy had no problems with Fond du Lac County, Dodge County, which had a wind ordinance, reviewed the project and issued a conditional use permit with restrictive setbacks

¹⁷⁸ WIS. STAT. ANN. § 66.0401(1m).

¹⁷⁹ *Id.*

¹⁸⁰ This matter was reviewed by the courts and resolved in *Ecker Brothers v. Calumet County*, 2009 WI App 112, ¶ 1, 321 Wis.2d 51, 55, 772 N.W.2d 240, 242.

¹⁸¹ *See id.*

¹⁸² *Id.*

¹⁸³ *In re Forward Energy L.L.C.*, 243 P.U.R.4th 297, 2005 WL 1712203 (Wis. P.S.C. July 14, 2005).

aimed at aesthetic concerns and harms to wildlife species.¹⁸⁴ The restrictions eliminated sixty turbines from the project whose siting was designed to maximize wind efficiency.¹⁸⁵ Because these local restrictions were more stringent than the state requirements, the Commission reviewed them subject to section 66.0401.¹⁸⁶ After considering the project's potential impacts on public interests, the Board found that the local restrictions met the public interest and upheld the setback provisions of the conditional use permit.¹⁸⁷

2. Multiple Appeals

Wisconsin's approach also creates another potential hurdle for development by creating the potential for two levels of review and multiple opportunities for a project to be challenged. Developers or challengers to a wind project can find themselves fighting not only over the substantive concerns, but also over whether local governments have the right to set conditions for certain projects. The conditions set by the local governments vary across districts, which creates uncertain and inconsistent outcomes.

For example, in *Roberts v. Manitowoc County Board of Adjustment*, local residents challenged a county zoning board decision to grant a conditional use permit for a proposed wind project.¹⁸⁸ The wind developer, Navitas Energy, Inc., proposed a forty-nine turbine wind project on private land.¹⁸⁹ Manitowoc County had a wind ordinance that established setback distances consistent with state regulations.¹⁹⁰ The County granted Navitas a conditional use permit, under the proviso that the conditions met one of the escape clause factors defined under section 66.0401.¹⁹¹ The Wisconsin Court of Appeals, citing section

¹⁸⁴ *Id.* The Dodge County Wind Energy Ordinance creates a wind energy overlay zoning district, provides definitions for different sizes of wind projects, and creates provisions for issuing a conditional use permit by the zoning board. See DODGE COUNTY, WIS., LAND USE CODE ch. 4.11 (2012).

¹⁸⁵ *Forward Energy*, 243 P.U.R.4th 297.

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *Roberts v. Manitowoc Cty. Bd. of Adjustment*, 2006 WI App 169, ¶ 1, 295 Wis. 2d 522, 525, 721 N.W.2d 499, 500.

¹⁸⁹ *Id.* ¶ 2.

¹⁹⁰ *Id.* ¶ 13.

¹⁹¹ *Id.* ¶ 17. Although not specifically cited in the Manitowoc County Wind Ordinance, it reiterated the same three conditions: 1) it “[s]erves to preserve or protect the public[’s] health [and] safety,” 2) it “[d]oes not significantly increase the cost of the system or significantly decrease its efficiency,” or 3) it “[a]llows for an alternative system of comparable cost and efficiency.” *Id.*; see also WIS. STAT. ANN. § 66.0401 (West 2014).

66.0401, recognized that the intent of the state statute was to promote wind developments and that the local law allowing conditional use permits was consistent with the state regulations.¹⁹² It also upheld the Board's decision regarding the setbacks, holding that it was permissible under the Wisconsin Renewable Energy Act because the local regulation was not more restrictive than the state law and met the requirements for local regulation.¹⁹³

Local conditions and restrictions are not always upheld, however. In 2009, the Wisconsin Court of Appeals clarified that the power of local government was restricted by state statute. This meant that local governments were only authorized to set conditional restrictions; they could not actually regulate wind projects in general.¹⁹⁴

For example, in *Ecker Brothers v. Calumet County*, local residents seeking a wind development found themselves facing a county-wide ban on wind development.¹⁹⁵ The Ecker Brothers filed for a declaratory judgment that the ban violated the regulatory limitations on overly restrictive local regulations, and that the County exceeded its authority under section 66.0401.¹⁹⁶ The court, reading both the Wisconsin Renewable Energy Act and the related statute limiting local authority, recognized that the intent of the state legislation had been to promote wind development, and not to restrict it.¹⁹⁷ The court further affirmed that it was the intent of the state legislature to delegate to local governments the *administration* of wind siting—involving the application or interpretation of the law through permit review and approvals—but not its *regulation*, including the creation of new restrictions.¹⁹⁸ In short, local governments were only granted the authority to approve projects based on the standards set by the state through the WSPC and the Wisconsin Siting Council.¹⁹⁹ Calumet County challenged this, arguing (a) that its ban met the requirements for placing restrictions on wind development under section 66.0401, and (b) that its ban was necessary to protect the public health and safety

¹⁹² *Roberts*, 2006 WI App 169, ¶ 17; see also WIS. STAT. ANN. § 66.0401.

¹⁹³ *Roberts*, 2006 WI App 169, ¶ 18. Manitowoc County's setback requirements were no greater than those set by Public Service Commission regulation 128.13. See WIS. ADMIN. CODE PSC § 128.13 (2016).

¹⁹⁴ *Ecker Bros. v. Calumet County*, 2009 WI App 112, ¶ 23, 321 Wis. 2d 51, 67–68, 772 N.W.2d 240, 248.

¹⁹⁵ *Id.* ¶ 2.

¹⁹⁶ *Id.* The Ecker Brothers specifically referred to the restriction set by section 66.0401(1m) that “[n]o political subdivision may place any restriction, either directly or in effect, on the installation or use of a wind energy system that is more restrictive than the rules promulgated by the commission under § 196.378 (4g)(b).” WIS. STAT. ANN. § 66.0401(1m).

¹⁹⁷ *Ecker Bros.*, 2009 WI App 112, ¶¶ 19–22.

¹⁹⁸ *Id.* ¶¶ 21–24.

¹⁹⁹ *Id.*; WIS. STAT. ANN. § 66.0401.

of the local residents.²⁰⁰ The court disagreed, holding that the escape clause could only be used on a project-by-project basis through conditional use permits.²⁰¹ It could not support blanket legislation that affected all projects.²⁰²

Although allowing local zoning boards to review and approve projects will require some utility-scale wind developers to go through multiple levels of review, Wisconsin's limitations on local regulation does ensure that reviews will be more uniform, and provides some consistency and predictability to reviews. Allowing the state to set the regulations and standards for wind projects eliminates the uncertainty developers face with the discretionary power of local zoning boards, particularly in jurisdictions that lack wind specific regulations.²⁰³

By allowing local regulation under certain conditions, Wisconsin has opened the door to those conditions being challenged. As the case law indicates, the factors that allow local governments to set conditions are not clearly defined. Although there may be value in retaining some level of local control, local governments may not fully understand when they have the power to impose restrictive conditions on a project, and developers may be uncertain whether those conditions will be upheld by the WPSC or whether they are challengeable in the courts. This uncertainty not only creates potential legal hurdles for both developers and opponents to wind projects, but also affects costs and the consistency and predictability of the siting process.

B. *The Minnesota Approach—Statewide Preemption of Local Regulation for “Good Cause”*

Wisconsin's division of authority between state and local governments is unusual. In most states, the power to regulate and the power to authorize projects lies with the same governing body.

²⁰⁰ *Ecker Bros.*, 2009 WI App 112, ¶¶ 16–17.

²⁰¹ *Id.* ¶¶ 12–24.

²⁰² *Id.* ¶¶ 20–24. Oddly, the court used somewhat contrary reasoning in *Emerging Energies, L.L.P. v. Manitowoc County*, No. 2008AP1508, 2009 WL 529910 (Wis. Ct. App. Mar. 4, 2009). Decided several months before *Ecker Brothers*, the court of appeals in *Emerging Energies* ruled that a facial challenge to a moratorium in Manitowoc County on conditional use permits for wind farms was not ripe for adjudication until a permit was actually denied. *Id.* ¶¶ 11–13. The court reasoned that until a project was proposed and under review, it was impossible to determine if the moratorium would meet the requirements of section 66.0401's escape clause. *Id.*

²⁰³ However, it could be argued that continuing to allow local zoning boards to set conditions for permit approvals in certain circumstances is more appropriate than allowing a state agency to set conditions, as local boards will be more in touch and more familiar with local interests.

However, several states that have centralized the regulation, review, and approval of wind projects with a single state-level agency or commission continue to allow local governments to pass regulations impacting proposed projects. One of the benefits of centralized state control of utility-scale wind development is the consistency it creates. However, dual regulation creates inherent problems as it opens the door for local regulations that conflict with the state. In addition, projects that span multiple jurisdictions also face conflicts between neighboring local regulations. States that allow dual authority have generally created some provision for how these conflicts will be resolved, allowing the state to be the ultimate arbitrator when conflicts arise.

For example, Minnesota grants primary siting authority for large wind energy conversion systems (LWECS) to the state Public Utility Commission.²⁰⁴ Like other states with centralized statewide authority, the Public Utility Commission has the power to set standards and draft regulations governing all aspects of a wind development including setbacks, noise, environmental impacts, and all procedural requirements.²⁰⁵ Regardless of municipal boundaries, LWECS only require a permit from the Public Utility Commission, which will preempt any regional, county, or local regulation.²⁰⁶

Like Wisconsin, the Minnesota statewide permit and regulations supersede any local regulation.²⁰⁷ However, Minnesota allows local governments the authority to pass their own regulations and issue their own conditional permits for wind projects.²⁰⁸ Under section 216F.081, a local government can not only adopt more stringent requirements than the state, but the state must consider and apply those standards as part of its review, unless the board finds that there is “good cause” not to.²⁰⁹

²⁰⁴ MINN. STAT. ANN. §§ 216F.01–.05 (West 2010). Like many states, Minnesota divides wind energy projects into two sizes. Wind projects smaller than 5 MW in nameplate capacity are considered Small Wind Energy Conversion Systems (SWECS) and are governed by municipal regulations. Wind projects larger than 5 MW are considered Large Wind Energy Conversion Systems (LWECS) and are permitted by the state Public Energy Commission. *See id.* § 216F.01.

²⁰⁵ MINN. STAT. ANN. § 216F.05.

²⁰⁶ MINN. STAT. ANN. § 216F.07.

²⁰⁷ Under Wisconsin’s statutory approach, no political subdivision of the state can place a restriction on a wind project more restrictive than the state. WIS. STAT. ANN. § 66.0401(1m) (West 2014). In Minnesota, the state permit system for LWECS preempts any requirements set by local, county, and special use governments. MINN. STAT. ANN. § 216F.07.

²⁰⁸ MINN. STAT. ANN. § 216F.08. Several local municipalities and counties have established regulations for siting large-scale wind turbines. For example, the Town of Brainerd has a wind ordinance that sets setback distances, maximum tower height, rotor lengths, and several other provisions. BRAINERD, MINN., ZONING ORDINANCE § 34 (2009). The Chippewa County Wind Energy Ordinance establishes setback distances, allows conditional noise provisions, and sets decommissioning standards. CHIPPEWA COUNTY, MINN., ZONING ORDINANCE § 12 (2005).

²⁰⁹ MINN. STAT. ANN. § 216F.081.

The burden of proving good cause is on the Public Utility Commission. This “good cause” provision gives the state discretion to resolve conflicts by either choosing to ignore an overly burdensome local regulation, or choosing which of any conflicting local regulations to apply.

The “good cause” provision under section 216F.081 was tested in 2012 in the case of *In re AWA Goodhue Wind, L.L.C.*²¹⁰ AWA proposed to build a seventy-eight MW wind farm consisting of fifty towers in Goodhue County.²¹¹ This project was approved by the Minnesota Public Utility Commission.²¹²

After the project had been proposed, Goodhue County passed a local wind ordinance requiring a ten Rotor Diameter (RD)²¹³ setback from every non-participating property²¹⁴ that did not give permission for being within the setback.²¹⁵ The Minnesota Public Utility Commission decided that the provisions of the County ordinance were too burdensome and that there was good cause not to require AWA to follow them under section 216F.081.²¹⁶

The Minnesota Court of Appeals reviewed the decision and agreed (a) that the ten RD setback was unnecessary to protect human health, safety, or quality of life, and (b) that the project, as approved by the Commission, did not present any reasonable adverse health impacts.²¹⁷ Further the court agreed with the Commission that the Goodhue

²¹⁰ *In re AWA Goodhue Wind, L.L.C.*, No. A11-2229, 2012 WL 2369004 (Minn. Ct. App. June 25, 2012).

²¹¹ *Id.* at *1.

²¹² *Id.*

²¹³ The blade of a wind turbine is called a rotor. The measurement through the diameter of the sweep of the blades is called the “Rotor Diameter.” DÉSIRÉ LE GOURIÉRÈS, WIND POWER PLANTS: THEORY AND DESIGN 39 (1982). Rotor Diameter, along with tower height, is sometimes used to calculate the required setbacks from neighboring properties, roads, or schools. A ten RD setback is considerably larger than typical property line setbacks, which typically fall around three RD. See Jonathan Rogers, Nathan Slegers & Mark Costello, *A Method for Defining Wind Setback Standards* 3.2 (Dep’t of Mech. and Civil Eng’g, George Fox Univ., Faculty Paper No. 11, 2011), http://digitalcommons.georgefox.edu/cgi/viewcontent.cgi?article=1004&context=mece_fac. Troy Rule surmised that a setback of even five RD would have a significant impact on siting commercial wind development. Troy Rule, *A Downwind View of the Cathedral: Using Rule Four to Allocate Wind Rights*, 46 SAN DIEGO L. REV. 207, 215 (2009).

²¹⁴ Most states, including Minnesota, have not defined “non-participating property” within their wind energy statutes. One exception is Wisconsin, who defines it under section 128.01 of the Wisconsin Administrative Code as “real property that is not a participating property,” and a “participating property” as one that hosts a turbine, or is subject to an agreement that provides compensation or has waived any challenge of the project. WIS. ADMIN. CODE PSC § 128.01(8), (13) (2016). In general, the term is used to define properties that have not become involved in the project either as a turbine host, or as a non-host who has signed other agreements with the developer; however, the term has not been defined within the Minnesota statute.

²¹⁵ *In re AWA*, 2012 WL 2369004, at *1.

²¹⁶ *Id.* at *3–4.

²¹⁷ *Id.*

County setback was designed to stop all impacts, not just adverse impacts, and would not only preclude AWA's proposed project, but would severely hinder any future projects in the County and the overall energy goals of the state.²¹⁸

By preempting local regulations and allowing the state to ignore regulations for good cause, Minnesota's approach to wind siting eliminates the risk of NIMBY action from local governments such as passing a blanket ban on wind development or creating regulations so restrictive that they result in a de facto ban on wind development. The *Goodhue* case shows that such restrictions resulting from a local regulation are sufficient to meet the "good cause" standard set out by state statute.

This approach, however, does not prevent some of the challenges created by allowing local regulating and local permitting. Allowing local permit approval places developers in the position of meeting at least two sets of standards (both state and local) and perhaps more for projects that span multiple jurisdictions. Local regulation also creates uncertainty for developers who are unsure if a local provision will apply until their project goes before the state Public Utilities Commission.

C. *The New York Approach—Statewide Preemption of Local Regulation that Is "Unreasonably Burdensome"*

In New York, Article X of the New York State Public Service Law is similar to Minnesota in placing wind energy development under the authority of a centralized state agency and allowing local permitting and regulation. However, in New York, the state may ignore "unreasonably burdensome" regulations.²¹⁹

However, one key difference between Article X in New York and the controlling statute in Minnesota is which party has the burden to prove that a local ordinance should not be applied. In Minnesota, the burden lies with the state Public Utility Commission to show that there is "good cause" to ignore a local regulation.²²⁰ In New York, the burden lies with the challenger to show that a local ordinance is not "unreasonably burdensome."²²¹

This small difference can be significant. Placing the burden on the state utility commission, which has the knowledge and expertise to support a claim, could represent a substantially lower burden than

²¹⁸ *Id.*

²¹⁹ N.Y. PUB. SERV. LAW § 168(3)(e) (McKinney 2011).

²²⁰ *In re AWA*, 2012 WL 2369004, at *1.

²²¹ N.Y. PUB. SERV. LAW § 168(3)(e).

placing it on the challenger, or the local government, which may lack the substantial expertise, but also the resources, to gather sufficient evidence to overcome the burden.²²²

Article X was enacted in 1992, but had a sunset provision and was allowed to expire in 2003.²²³ The statute was reauthorized in 2011, but in the interim all wind energy projects were authorized and regulated by local governments.²²⁴ At least three wind projects have initiated review by the State Board on Electric Generation Siting and the Environment under Article X since its reenactment in 2011, but none have yet been approved under Article X.²²⁵

However, in 2005, the court considered the “unreasonably burdensome” condition of Article X for a fossil fuel power plant proposed in Brooklyn, New York.²²⁶ The proposed facility met the requirements for approval with the New York State Board on Electric Generation Siting and the Environment.²²⁷ However, in an effort to stop the project, Brooklyn initiated a condemnation process to secure the property and halt construction.²²⁸ The developer challenged Brooklyn’s condemnation on several grounds, one of which was the state’s authority under Article X, which restricted local laws that would impact

²²² Particularly considering that most wind farms are sited in rural jurisdictions with smaller populations, and may face tighter financial limitations.

²²³ E. Gail Suchman, *N.Y. Power-Plant-Siting Laws: Efforts to Amend Article X Fail*, N.Y. L.J. (Aug. 8, 2007), <http://www.newyorklawjournal.com/id=900005488085/NY-PowerPlantSiting-Laws-Efforts-to-Amend-Article-X-Fail?slreturn=20170118001258>.

²²⁴ *Large Wind Farm Developments*, N.Y. ST. ENERGY RES. & DEV. AUTHORITY, <https://www.nysed.ny.gov/Research-and-Policymakers/Power-Generation/Wind/Large-Wind> (last visited Jan. 18, 2017).

²²⁵ The Cassadaga Wind Project and the Lighthouse Wind Project are currently undergoing the state review process. Cassadaga Wind L.L.C., No. ER15-2056-000, 150 FERC Rep. P 61182 (CCH) ¶ 61,182 (Mar. 11, 2015); *An Assessment of Project Lighthouse Wind*, DAILY NEWS (N.Y.) (Aug. 25, 2016, 12:30 A.M.), <http://www.thedailynews.com/article/20160825/BDN06/160829037>; T.J. Pignataro, *Winds of Discontent Blow over Lake Ontario Towns Eyed for Turbines*, BUFFALO NEWS (July 30, 2016), <http://buffalonews.com/2016/07/30/winds-of-discontent-blow-over-lake-ontario-towns-eyed-for-turbines>; David Robinson, *Cassadaga Wind Project to Begin Year-Long Review*, BUFFALO NEWS (Nov. 28, 2016), <https://buffalonews.com/2016/11/28/cassadaga-wind-project-begin-year-long-review>. The Cape Vincent Wind Project, funded by British Petroleum, was initiated in 2005, before the reenactment of Article X. The project failed to get local approval due to a lack of consensus amongst the local residents, but, with the return of Article X in 2011, continued through the state process. British Petroleum finally withdrew its Article X application and canceled the project in 2014, citing the continued disagreement between pro-wind and anti-wind members of the local community. Jaegun Lee, *BP “Terminating” Cape Vincent Wind Project*, WATERTOWN DAILY TIMES (Feb. 27, 2014, 12:36 AM), <http://www.watertowndailytimes.com/article/20140227/NEWS03/702279838>.

²²⁶ *In re City of New York*, No. 22246/05, 2005 WL 3442963, *1, 13 (N.Y. Sup. Ct. Dec. 14, 2005).

²²⁷ *Id.* at *2.

²²⁸ *Id.* at *3.

the siting of electrical generating facilities.²²⁹ Brooklyn argued that the facility was incompatible with its proposed development plan for the neighborhood.²³⁰

On appeal, the New York trial court, in considering whether to uphold the local condemnation, looked to the legislative history of Article X.²³¹ With this review, the court acknowledged the legislature's determination (1) that "there is a need for the state to control determinations regarding the proposed siting of major steam electric generating facilities within the State"²³² and (2) that the purpose of Article X was to create a "one-stop certification statute"²³³ "designed to provide for the expeditious resolution of all matters concerning the location of major steam electric generating facilities [within the State] in a single proceeding."²³⁴

The court went on to acknowledge that local governments had the right to regulate, but that local governments had the burden of supporting an ordinance if the state chose not to follow it.²³⁵ The court set a high bar for local governments seeking to overturn the state board's decisions to ignore local regulations, clearly favoring the state's discretion to approve or deny electrical generation facilities.²³⁶

The approaches of Minnesota and New York open the door to duplicative and possibly conflicting regulation, but both statutory schemes offer an escape clause for the state authority to combat NIMBYism that would unreasonably stonewall or reject a wind energy project.

The different burdens for applying preemption suggest varying degrees of state support for wind development. In Minnesota, placing

²²⁹ *Id.*

²³⁰ *Id.* at *2.

²³¹ *Id.* at *10–11.

²³² *Id.* at *10 (quoting N.Y. PUB. AUTH. LAW § 1014 (McKinney 1972)).

²³³ *Id.* (quoting Governor's Memorandum, 1978 N.Y. Sess. Laws 1838 (McKinney)).

²³⁴ *Id.* (quoting *Massachusetts v. N.Y. State Bd. on Elec. Generation Siting & the Env't*, 197 A.D.2d 97, 101 (N.Y. App. Div. 1994) (alteration in original)).

²³⁵ *Id.* at *10 (quoting N.Y. PUB. SERV. LAW § 168(2)(d) (repealed 2003)).

²³⁶ The court relied heavily on the opinions of the legislature and the governor to support its perspective that Article X was intended to allow for a streamlined and centralized state process. *Id.* (quoting the governor at the time of an earlier 1972 iteration of the law, Nelson Rockefeller, who stated that "the establishment of a unified certificating procedure under the jurisdiction of the new State Board [was to] replace the current uncoordinated welter of approvals, procedures and agencies that have virtually paralyzed the construction of needed new power plants," and Governor Mario M. Cuomo, who approved Article X, who stated that the law was intended to provide a "comprehensive review of the benefits and impacts anticipated from proposed facilities without unreasonable delay" and that "one of the primary means by which the Legislature sought to ensure the State's control over siting decisions was in its grant of authority to the Siting Board to waive municipal laws or regulations that could hinder the development of electric generating facilities" *Id.* (citations omitted)).

the burden on the state to show “good cause” may increase the likelihood that a local ordinance could withstand preemption. However, the *Goodhue* case showed proving good cause is not an insurmountable burden.

In New York, placing the burden on local governments to show that their regulations are *not* unreasonably burdensome appears to show strong support for state authority.

Both the Minnesota and New York approaches illustrate models that help promote the development of wind energy through centralizing and streamlining the approval process without completely silencing the voice of local governments.

D. *The Ohio Approach—Superagency Authority*

There are no states that place all of the regulatory and siting authority for wind projects with a state agency, but Ohio comes the closest.²³⁷ Under Ohio law the state has the exclusive power to set standards, promulgate regulations, and limit the means by which projects can be challenged.²³⁸

The benefits of a strong state authority, as we also saw with the previous examples, is a streamlined process and uniform standards for all wind projects across the state, providing a level of consistency that can help encourage investment and promote development. Unlike the previous examples, however, Ohio’s “one stop” or “superagency” regime centralizes the entire process within a single agency.²³⁹

Specifically, in Ohio, economically significant wind farms are regulated through the Ohio Public Siting Board (OPSB),²⁴⁰ and local regulation is expressly preempted.²⁴¹ Thus, local governments cannot

²³⁷ Massachusetts also centralizes the review of wind projects in a single agency, but only for projects larger than 100 MW. *See* MASS. GEN. LAWS ANN. ch. 164, §69G–69H (West 2003). No such projects have ever been developed in Massachusetts, and their one-stop approach has never been tested.

²³⁸ Ohio’s Statute section 4906 sets the process for siting “economically significant wind farms,” defined as a system with an aggregate capacity between five MW and fifty MW. OHIO REV. CODE ANN. § 4906.13(A) (West 2010). Systems larger than fifty MW are still governed under the same approval, but are allowed using the minimum setback requirements. *See* § 4906.201(A).

²³⁹ *About the OPSB*, OHIO POWER SITING BOARD, <https://www.opsb.ohio.gov/opsb/index.cfm/About> (last visited Jan. 19, 2017).

²⁴⁰ *Id.*

²⁴¹ OHIO REV. CODE ANN. § 4906.13(B) (“No public agency or political subdivision of this state may require any approval, consent, permit, certificate, or other condition for the construction or initial operation of a major utility facility or economically significant wind farm authorized by a certificate issued pursuant to Chapter 4906. [sic] of the Revised Code.”).

institute bans or moratoriums, nor can they set their own regulations regarding noise, aesthetic concerns, or environmental impacts.

Even with strong centralized authority to site and regulate wind projects, Ohio has not, however, rendered local governments or their citizens powerless. Exclusive state power, with no input by local governments, would deny legitimate local concerns, so the OPSB has a hearing process as one of the steps for wind farm permit approvals.²⁴² Local governments and members of the public have an opportunity to comment and raise concerns about individual projects during this hearing process, either by intervening as an actual party, or raising comments as part of a public comment session.²⁴³

In addition to commenting, local voices have the option of recommending specific conditions for approval of a wind project.²⁴⁴ However, the OPSB has the sole authority to approve or deny permits for economically significant wind projects.²⁴⁵ Therefore, any conditions attached to permit approval suggested or recommended by local governments as intervening parties are ultimately determined by the OPSB.

Ohio's strong "one-stop" state authority and wind specific provisions have not completely eliminated legal challenges to wind projects, but in contrast with litigation faced by projects in other states, the legal battles over wind farms in Ohio have been less drawn out and governed by a consistent and speedy review process.²⁴⁶

²⁴² *Standard Application Process Flowchart*, OHIO POWER SITING BOARD, <https://www.opsb.ohio.gov/opsb/?LinkServID=AFBB7552-C587-C103-CBF9480A93645E04> (last visited Jan. 19, 2017).

²⁴³ OHIO REV. CODE ANN. §§ 4906.07–4906.09.

²⁴⁴ OHIO REV. CODE ANN. § 4906.10(A).

²⁴⁵ *Id.*

²⁴⁶ According to anecdotal comments from developers, Ohio's approach limits legal challenges and promotes a more streamlined approval process on its face; but in practice, developers have had difficulty with getting projects approved in the state, citing unfavorable statewide regulations and a strong OPSB that disfavors wind development. Ohio's anti-wind policies are also reflected in the passage of Substitute Senate Bill 310 in 2014, which froze at 12.5% the progressive Ohio Renewable Portfolio Standard (RPS) that aimed for twenty-five percent renewables by 2015. H. Pub. Util. Comm., Substitute. S.B. 310, 130th Gen. Assemb., Reg. Sess. (Ohio 2013–2014). This made Ohio the first state to roll back its RPS goals. That same year, the state legislature passed increased setback provisions that made it more difficult to efficiently site wind projects. See Tina Casey, *Ohio to Wind Power: Drop Dead*, CLEANTECHNICA (June 17, 2014), <https://cleantechnica.com/2014/06/17/ohio-wind-power-takes-lethal-blow-from-gov-kasich>; see also Kathiann M. Kowalski, *Industry: Setback Changes Will End New Wind Farms in Ohio*, MIDWEST ENERGY NEWS (June 19, 2014), <http://midwestenergynews.com/2014/06/19/industry-setback-changes-will-end-new-wind-farms-in-ohio>. Anti-wind sentiment at the state level and a strong state agency highlight a potential issue with superagency approaches: What happens when the superagency itself is opposed to the type of development it is authorized to regulate?

1. *Black Fork Wind*

In *In re Black Fork Wind Energy, L.L.C.*, several parties challenged the OPSB's approval of a wind project that spanned two adjacent counties.²⁴⁷ The wind project, proposed by Black Fork Wind Energy, L.L.C. in 2011, consisted of ninety-one turbines in portions of Crawford and Richland Counties.²⁴⁸ The nameplate capacity of the project was up to 200 MW, placing it within the siting authority of the OPSB.²⁴⁹

A litany of substantive challenges were raised at the public hearing before an administrative law judge, including potential impacts to health and safety, aesthetics and noise, public welfare, and the environment.²⁵⁰ All of these issues were presented, considered, and resolved at the OPSB hearing. As a result of the public input during the hearing process, the OPSB granted the wind permit subject to eighty conditions.²⁵¹

Some of the challengers remained resistant to the development even though the OPSB adopted all of the eighty requested conditions.²⁵² These challengers continued to fight the approval first by requesting a rehearing before the OPSB, which was denied,²⁵³ and then appealing directly to the Ohio Supreme Court, which has “complete and independent power of review as to all questions of law’ in appeals from the [OPSB].”²⁵⁴

²⁴⁷ *In re Black Fork Wind Energy, L.L.C.*, 138 Ohio St. 3d 43, 2013-Ohio-5478, 3 N.E.3d 173, at ¶ 1.

²⁴⁸ *In re Black Fork Wind Energy, L.L.C.*, No. 10-2865-EL-BGN, 2012 WL 344874, *1 (Ohio Pub. Siting Bd. Jan. 23, 2012).

²⁴⁹ *Id.*

²⁵⁰ At the public hearing, thirteen witnesses testified in favor of the project, and twelve testified against it. *Id.* Opponents raised issues of noise, shadow flicker, ice throw, loss of viewshed, and negative impacts to property values, public health, wildlife, telephone, television, and internet reception, water, and the overall environment. *Id.* Other opponents also raised claims that the developer had engaged in harassing behavior towards local property owners. *Id.* The determination of the Board outlining the issues raised and resolved at the public hearing, and the Board's final determination are outlined in *In re Black Fork Wind Energy, L.L.C.*, 2012 WL 344874.

²⁵¹ *Id.* The OPSB has the authority to grant permits subject to “such terms, conditions, or modifications of the construction, operation, or maintenance of the major utility facility as the board considers appropriate.” OHIO REV. CODE ANN. § 4906.10 (West 2010). The challengers, the board, and the applicant initially stipulated to seventy-one different conditions for approving the permit, and later amended the stipulation to add nine conditions. *See In re Black Fork Wind Energy, L.L.C.*, 2012 WL 344874. As part of their approval, the board adopted all eighty conditions requested under the stipulations. *Id.*

²⁵² *In re Black Fork Wind Energy, L.L.C.*, 138 Ohio St. 3d at ¶ 9.

²⁵³ *Id.*

²⁵⁴ *Id.* at ¶ 10 (quoting *Ohio Consumers' Counsel v. Pub. Utils. Comm'n*, 121 Ohio St. 3d 362, 2009-Ohio-604, 904 N.E.2d 853, at ¶ 13).

According to Ohio law, the standard of review applied by the Ohio Supreme Court to appeals from the OPSB is that the order “shall be reversed, vacated, or modified . . . *only when* . . . the court finds the order to be unlawful or unreasonable.”²⁵⁵ The Ohio Supreme Court affirmed the OPSB, holding that the challengers had waived their right to cross-examine certain witnesses, and thus, their due process rights had not been violated.²⁵⁶

2. *Buckeye Wind*

In another case, *In re Buckeye Wind, L.L.C.*, several interests challenged the state board approval of a seventy turbine, 126 MW capacity wind farm in Champaign County.²⁵⁷ The project went through a public hearing before the OPSB, and, as in *Black Fork*, challengers to the project were allowed to present evidence and argue against the project’s approval.²⁵⁸

Ultimately, the OPSB approved the Buckeye Wind project subject to seventy different permit conditions.²⁵⁹ However, the OPSB rejected some requested conditions, most notably a bonding requirement proposed by some of the challengers.²⁶⁰

Project opponents appealed to the Ohio Supreme Court, claiming that the hearing procedure was insufficient and that the board improperly delegated its decision to Board staff.²⁶¹

The Ohio Supreme Court split four to three with the majority upholding the OPSB decision, again citing the high “unlawful or unreasonable” standard for reversing any such decision.²⁶² Three dissenting justices believed that the process, which included some non-public proceedings,²⁶³ had “denied the citizens affected . . . their only opportunity to be heard,”²⁶⁴ with one dissenter especially concerned about the bonding issue.²⁶⁵

²⁵⁵ *Id.* (emphasis added) (citing OHIO REV. CODE ANN. §§ 4906.12, 4903.12).

²⁵⁶ *Id.* at ¶¶ 23–24.

²⁵⁷ *In re Buckeye Wind, L.L.C.*, 131 Ohio St. 3d 449, 2012-Ohio-878, 966 N.E.2d 869, at ¶ 3.

²⁵⁸ *In re Black Fork Wind Energy, L.L.C.*, 138 Ohio St. 3d at ¶ 8; *In re Buckeye Wind, L.L.C.*, 131 Ohio St. 3d at ¶¶ 4–5.

²⁵⁹ *In re Buckeye Wind, L.L.C.*, 131 Ohio St. 3d at ¶ 17.

²⁶⁰ *Id.* ¶ 6.

²⁶¹ *Id.* ¶ 7.

²⁶² *Id.* ¶ 26.

²⁶³ *Id.* ¶¶ 63–65 (Lundberg Stratton, J., dissenting) (citing OHIO REV. CODE ANN. § 4906.10).

²⁶⁴ *Id.* ¶¶ 47–48.

²⁶⁵ *Id.* ¶ 39 (Pfeifer, J., dissenting). This dissent appeared skeptical of wind power generally: “How many windmills does it take to power a light bulb? As many as the government will subsidize. It may not be geographically preposterous to build windmills in Ohio—not like

Although it is difficult to draw strong conclusions from the limited case law available, Ohio's process appears to be the most successful at restricting local authority to deny projects or set overly burdensome conditions intended to frustrate development.²⁶⁶ Here are some of its advantages:

- 1) The Ohio superagency approach creates consistency: Utility scale wind projects across the state will face one review before the OPSB, with defined wind-specific standards.²⁶⁷
- 2) Substantive challenges are handled before the Board itself, which has the benefit of having technical expertise to understand the unique impacts that wind projects create and the benefits they provide.
- 3) Despite this strong statewide control, the process allows local interests a voice in the siting and approval process. Local challenges to projects on substantive grounds are limited to the public hearing before the OPSB, however, the public hearing process allows challengers the ability to introduce witnesses, present evidence, and have a voice in what conditions are included with a permit approval.
- 4) The examples presented by the *Buckeye Wind* and *Black Fork* approvals suggest that the Board is not only open to conditions based on local concerns, but are supportive of them, accepting most conditions proposed by challengers.
- 5) Projects that cross jurisdictional lines will not face multiple review processes, at least for siting approval. With the participation of local governments and neighboring property owners during the hearing process, the OPSB is also best positioned to avoid, minimize, or mitigate the impacts to local communities while also considering the broader common good.

building a solar energy farm in Upper Sandusky—since we do have wind. But for how long will government be willing to subsidize a form of energy production that is uneconomical and undependable? The mechanical obsolescence of windmills is one matter of concern; that is, what will become of these whopping, white whirligigs when they become technologically outmoded even in comparison to other windmills?" *Id.* ¶ 40.

²⁶⁶ Since the original draft of this paper, the Ohio Supreme Court upheld the OPSB's approval of another wind energy development in Champaign County. *See In re Champaign Wind, L.L.C.*, 146 Ohio St. 3d 489, 2016-Ohio-1513, 58 N.E.3d 1142. The court followed similar reasoning to its decision in *Buckeye Wind*, upholding the procedural decisions of the board and giving deference to the board's substantive decisions. *Id.*

²⁶⁷ Most utility-scale wind projects will exceed Ohio's five MW threshold for statewide regulation.

- 6) The expedited Ohio review process—directly from the OPSB or the PUC to the Ohio Supreme Court—considerably shortens the time for a final decision, minimizing delay and uncertainty for projects. For example, the time between the initial OPSB permit decisions in both *Black Fork* and *Buckeye Wind* and the Ohio Supreme Court’s decisions on appeal was less than two years.²⁶⁸
- 7) The high standard of review applied to OPSB decisions places strong reliance on the agency and creates greater certainty in their reliability.

IV. A CASE STUDY OF HOW NIMBY CAN TURN TO NOPE

An emphasis on statewide siting has significant benefits. The lack of strong state involvement in wind regulation and wind siting can pose sometimes insurmountable challenges to wind development, and the states that have adopted some degree of statewide authority show clear advantages to centralization of authority with a state agency. The different state-centered approaches described above show that limiting, without eliminating, local authority can promote projects without ignoring local concerns. This final Part will employ New York’s history of wind energy regulation as a case study for how purely local regulation can not only promote NIMBYism, but also result in NOPE outcomes.

A. *New York Wind Siting Regulation*

New York has gone through dramatic changes in its regulatory approach to utility siting over the past thirty years, alternating between approaches that employ strong state authorization at some times and, at other times, almost total delegation to local authorities.²⁶⁹

Prior to 2003, the siting of large-scale utility projects in New York was reviewed and approved by the New York State Board on Electric Generation Siting and the Environment under Article X of the New York State Public Service Law.²⁷⁰ Article X gave the State Board the final say on all power generation projects greater than eighty MW in

²⁶⁸ See *In re Black Fork Wind Energy, L.L.C.*, 138 Ohio St. 3d 43, 2013-Ohio-5478, 3 N.E.3d 173; *In re Buckeye Wind, L.L.C.*, 131 Ohio St. 3d 449.

²⁶⁹ See Gregory D. Eriksen, Note, *Breaking Wind, Fixing Wind: Facilitating Wind Energy Development in New York State*, 60 SYRACUSE L. REV. 189 (2009).

²⁷⁰ See *id.* at 193.

capacity.²⁷¹ Article X also established regulations for addressing environmental impacts, as well as a hearing process for local governments and residents to challenge the final decisions by the Board.²⁷² The New York legislature allowed Article X to expire in 2003 due to financial concerns following the collapse of Enron and due to increased pressure from environmental groups.²⁷³ Without Article X, the authority for siting large-scale energy projects defaulted back to local governments.²⁷⁴

In the early 2000s, New York saw a surge of new wind development.²⁷⁵ With Article X no longer in effect, local governments moved to pass legislation to regulate the rapidly growing wind energy industry. What resulted was a series of legal challenges that stymied wind projects across the state.²⁷⁶

With siting decisions falling under local control, municipalities became the lead agencies for these reviews. The details of these cases varied greatly, but generally involved procedural challenges to local zoning board decisions to approve wind projects.²⁷⁷ One common

²⁷¹ See Nicholas Faso & Teresa Bakner, *The Return to Article X: A New Paradigm for Approving Energy Projects in New York State*, N.Y. ZONING L. & PRACTICE REP., Sept.–Oct. 2011 (citing 1992 N.Y. Sess. Laws 1478, 1479–80).

²⁷² Article X was enacted in 1992 and replaced an earlier statute, Article VIII, which was enacted in 1972. Article VIII had a lengthier hearing process, lacked some of the environmental regulations, and had more limits on the input of local governments than Article X. Article X was intended to both streamline the review process, but also to take into account an increased understanding of the environmental impacts caused by large-scale energy projects. *Id.*

²⁷³ Suchman, *supra* note 223.

²⁷⁴ *Large Wind Farm Developments*, N.Y. ST. ENERGY RES. & DEV. AUTHORITY, <http://www.nyscrda.ny.gov/Cleantech-and-Innovation/Power-Generation/Wind/Large-Wind> (last visited Jan. 4, 2017); see also Eriksen, *supra* note 269, at 193–95.

²⁷⁵ In 2000, New York had fifteen MW of installed wind capacity. By 2009, the installed wind capacity had increased to 1,274 MW. Eric Garofano, Note, *Losing Power: Siting Power Plants in New York State*, 4 ALB. GOV'T L. REV. 728, 746 (2011).

²⁷⁶ Many of these challenges to State Environmental Quality Review Act (SEQRA) decisions, which required municipalities to address environmental impacts of development projects, were brought under Article 78 of the New York Civil Practice Laws and Rules (NYCPLR). See N.Y. ENVTL. CONSERV. LAW §§ 8-0101 to -0117 (McKinney 2005). For a detailed discussion of SEQRA decisions challenged under Article 78 of the NYCPLR, see Eriksen, *supra* note 269, at 196, 198–201.

²⁷⁷ Eriksen offers a detailed discussion of some of the legal challenges to wind projects in New York, citing *In re Trude v. Town Board of Cohocton*, No. 95,747, 2007 WL 2811372 (N.Y. Sup. Ct. Sept. 24, 2007) (local residents unsuccessfully challenged a local wind regulation claiming its noise and setback provisions failed to meet SEQRA requirements and did not comply with the comprehensive plan's goals to maintain the "rural character" of the community); *In re Brander v. Town of Warren Town Bd.*, 847 N.Y.S.2d 450 (Sup. Ct. 2007) (residents successfully challenged zoning board approval of a project for failing to consider alternatives as required under SEQRA); *In re Friedhaber v. Town Bd. of Sheldon*, 59 A.D.3d 1006 (N.Y. App. Div. 2009) (unsuccessful procedural challenge to a zoning board approval to grant variances for a wind development project); *In re West Beekmantown Neighborhood Ass'n v. Zoning Bd. of Appeals of Beekmantown*, 53 A.D.3d 954, 955 (N.Y. App. Div. 2008)

thread in these cases is that local municipalities made the challenged decisions, and these decisions were often the result of shoehorning wind projects into zoning regulations that contained no wind-specific provisions.

This highlights some of the problems with the default option—so prevalent across the country—of giving local governments the authority to make siting decisions. Zoning regulations that lack wind-specific provisions may not adequately cover the types of concerns and impacts wind projects present given the unique impacts that wind energy projects create.²⁷⁸ Additionally, local governments may lack the technical expertise to properly regulate or review wind projects, failing to understand the nature of the impacts or how siting decisions may affect the efficiency of a project.²⁷⁹ Additionally, local review boards may also be unfairly influenced by strong local interests in favor of, or opposed to, a project, and fail to give projects an unbiased review that takes into consideration statewide or regional energy needs.

Another problem raised with granting unrestricted authority over wind energy development is that large scale projects crossing jurisdictional boundaries are likely to encounter differing, or even conflicting, regulatory requirements and conflicting opinions regarding wind energy projects among different authorizing bodies²⁸⁰ or review courts.²⁸¹ Duplicate or conflicting regulations not only run the risk of discouraging wind energy development, but also provide no sure guarantee that local interests will be protected.

(unsuccessful challenge of a wind project approved by a local zoning board, claiming that the board incorrectly defined a wind project as an “essential service”); *see also* Eriksen, *supra* note 269, at 198–200.

²⁷⁸ *See generally* Tioga Pres. Grp. v. Tioga Cty. Planning Comm’n, 970 A.2d 1200, 1202 (Pa. Commw. Ct. 2009); discussion *supra* Section II.C.

²⁷⁹ *See generally* PPM Atl. Renewable v. Fayette Cty. Hearing Bd., 13 Pa. D. & C.5th 458 (Pa. Ct. C.P. 2010); discussion *supra* Section II.C.

²⁸⁰ *See generally* PPM Atl. Renewable v. Fayette Cty. Hearing Bd., 13 Pa. D. & C.5th 458 (Pa. Ct. C.P. 2010); discussion *supra* Section II.C.

²⁸¹ Contrast the language of Judge Pfeifer’s dissent in *In Re Buckeye Wind, L.L.C.*, 131 Ohio St. 3d 449, 2012-Ohio-878, 966 N.E.2d 869, 878–79, at ¶¶ 40–43 (Pfeifer, J., dissenting), with the supportive language about renewable energy development in Judge Leskinen’s opinion in *PPM Atlantic Renewable*, 13 Pa. D. & C.5th at 466 (“While windmills have been around for centuries, wind turbines as a source of clean renewable ‘green’ electric energy have recently become heavily emphasized as one of the best ways to reduce our collective dependence on more established technologies dependent on fossil fuels.”).

B. *The Ecogen Saga*

Perhaps no series of cases better highlights the legal challenges posed by local control of wind turbine siting than a proposal to develop a wind energy project in Western New York by Ecogen, L.L.C. Ecogen's efforts have spanned almost fifteen years and resulted in ongoing litigation with no fewer than ten reported decisions.²⁸² As a result, the project has still not been built.

In 2001, Ecogen began investigating the development of a wind energy project in two adjacent New York counties.²⁸³ Over ninety-nine different site locations were considered, but ultimately, Ecogen settled on a layout that placed fifty-three turbines in Steuben County within the Town of Prattsburgh.²⁸⁴ In addition, Ecogen planned to build an electrical substation in the neighboring Town of Italy, located in Yates County.²⁸⁵ Because Article X had expired at the time the project was initiated, the siting authority rested with the local governments, and therefore the project required approval of both the Town of Prattsburgh in Steuben County and the Town of Italy in Yates County.

The zoning board in Prattsburgh was initially supportive of the project. In 2009, it ruled that the project could move forward with no further approval from the board.²⁸⁶

Support for the project in the Town of Italy was not as strong even though neighboring Prattsburgh had given Ecogen a green light. In an effort to halt the project, the Town of Italy passed a moratorium on all wind development within its borders.²⁸⁷ The Town of Italy extended the

²⁸² For opinions related to the Town of Italy challenges, see *Ecogen, L.L.C. v. Town of Italy*, 461 F. Supp. 2d 100 (W.D.N.Y. 2006); *Ecogen, L.L.C. v. Town of Italy*, 438 F. Supp. 2d 149 (W.D.N.Y. 2006); *In re Ecogen Wind, L.L.C. v. Town of Italy Town Board*, 106 A.D.3d 1457 (N.Y. App. Div. 2013); *Finger Lakes Preservation Association v. Town Board of Italy*, 887 N.Y.S.2d 499 (Sup. Ct. 2009). For opinions related to the Steuben County challenges, see *In re Ecogen Wind, L.L.C. v. Town of Prattsburgh Town Board*, 112 A.D.3d 1282 (N.Y. App. Div. 2013); *In re Advocates for Prattsburgh, Inc. v. Steuben County Indus. Development Agency*, 48 A.D.3d 1160 (N.Y. App. Div. 2008); *In re Advocates for Prattsburgh, Inc. v. Steuben County Industry Development Agency*, 48 A.D.3d 1157 (N.Y. App. Div. 2008); *In re Advocates for Prattsburgh, Inc. v. Steuben County Industry Development Agency*, No. 06/04099, 2007 WL 4877911 (N.Y. Sup. Ct. Jan. 5, 2007); *Advocates for Prattsburgh, Inc. v. Steuben County Industry Development Agency*, 35 A.D.3d 1292 (N.Y. App. Div. 2006); *In re Advocates for Prattsburgh, Inc. v. Steuben County Industry Development Agency*, No. 06/04099, 2006 WL 5110569 (N.Y. Sup. Ct. June 19, 2006).

²⁸³ *Ecogen, L.L.C.*, 438 F. Supp. 2d at 152.

²⁸⁴ *In re Advocates for Prattsburgh, Inc.*, 2007 WL 4877911, at *2.

²⁸⁵ *Ecogen, L.L.C.*, 438 F. Supp. 2d at 151.

²⁸⁶ *Ecogen Wind, L.L.C.*, 112 A.D.3d at 1283–84.

²⁸⁷ *Ecogen, L.L.C.*, 438 F. Supp. 2d 149.

moratorium several times, to the point that Ecogen decided that the Town would never allow the project to move forward.²⁸⁸

In response to the moratorium, Ecogen filed suit against the Town of Italy in 2006, claiming that the Town lacked the authority to pass the moratorium and that it was unreasonably long.²⁸⁹ The court did not overturn the moratorium, but required the Town of Italy to develop the necessary regulations for approving the project within ninety days.²⁹⁰

Unfortunately for Ecogen, this small victory did little to advance the project. While Ecogen's project was held up by Italy's moratorium and the subsequent lawsuit, there were significant changes to the zoning board in the Town of Prattsburgh. This newly-elected zoning board in the Town of Prattsburgh now opposed the Ecogen project.²⁹¹

Ecogen's project in Italy and Prattsburgh is a case study for how local NIMBY regulation can lead to NOPE results, especially when projects cross jurisdictional lines. Unlike conventional fossil-fuel generation power plants, wind development is more likely to cross jurisdictional lines given the extensive acreages required for large-scale wind energy projects. This means that wind projects, which are more likely to cross jurisdictional lines, are especially vulnerable to the vagaries of differing local regulations. States that lack some sort of statewide siting regime for wind siting run the risk of allowing conflicting municipal requirements or conflicting local interests either to hold up proposed wind developments, to create additional complications and costs through differing regulations across borders, or to halt development entirely.

In 2011, Governor Andrew Cuomo signed into law the Power Act of 2011.²⁹² The Act included a provision that reauthorized and updated Article X of the Public Service Law.²⁹³ The reenactment of Article X returned the exclusive authority to site large-scale utility projects to the State Board on Electric Generation Siting and the Environment.²⁹⁴ In addition, the Public Service Law expanded the reach of state authority by decreasing the threshold for projects requiring state approval down to a nameplate capacity of twenty-five MW.²⁹⁵ Unlike the 1992 version,

²⁸⁸ *Id.* at 153.

²⁸⁹ *Id.* at 153–54.

²⁹⁰ *Id.* at 163.

²⁹¹ *In re Ecogen Wind, L.L.C.*, 112 A.D.3d at 1283–84.

²⁹² Power Act of 2011, S. 5844, S. Assemb., Reg. Sess. (N.Y. 2011); Faso & Bakner, *supra* note 271.

²⁹³ Faso & Bakner, *supra* note 271.

²⁹⁴ N.Y. PUB. SERV. LAW § 168 (McKinney 2011).

²⁹⁵ N.Y. COMP. CODES R & REGS, tit. 16, § 1000.2(v) (2017) (defining a “Major Electric Generating Facility” as “[a]n electric generating facility with a nameplate generating capacity of twenty-five megawatts or more”).

the updated law included some specific requirements for wind-powered facilities.²⁹⁶

Article X now granted the State Board the exclusive authority to preempt other state or local laws that might conflict with siting decisions if the board found them to be “unreasonably burdensome.”²⁹⁷ A local government is allowed to challenge the decision of the state board and force the state to apply the local law, but the local government also carries the burden of showing that the local law or regulation is not unreasonably burdensome.²⁹⁸

Article X would have dramatically changed the circumstances Ecogen Wind, L.L.C. faced in the Towns of Prattsburgh and Italy by removing the complications of different municipalities imposing different restrictions or independently challenging portions of the projects. The local governments and residents would still have the ability to challenge the development through the hearing before the State Board, but Ecogen would now face a single approval process through a centralized authority that also has the power to overrule any local regulations that are holding up the project. The efficiency of a centralized process thus presents a more streamlined and predictable approach, decreasing the uncertainty of patchwork local regulation.

C. *Shift to Statewide Siting*

The impact that New York’s Article X has had on the development of, and legal challenges to, large-scale energy development is visible largely in the difficulties that its absence created. The Ecogen battles occurred in the gap from Article X’s expiration in 2003 and its reenactment in 2011. Although no wind development projects have been challenged under either iteration of Article X,²⁹⁹ examples from other New York projects provide insight into its benefits.

In *In re City of New York*, TransGas initiated the acquisition of a property for the construction of an electric generating plant in Brooklyn, New York.³⁰⁰ Article X applied because the project was initiated before the Article’s expiration in 2003. Brooklyn planned to

²⁹⁶ The new version requires studies to evaluate impacts to bat and avian species as well as impacts to human health. Faso & Bakner, *supra* note 271.

²⁹⁷ PUB. SERV. § 168(3)(e); Faso & Bakner, *supra* note 271.

²⁹⁸ *See id.*

²⁹⁹ At least three wind projects have initiated review by the State Board on Electric Generation Siting and the Environment under Article X since its reenactment in 2011. *See supra* note 225.

³⁰⁰ *In re City of New York*, No. 22246/05, 2005 WL 3442963, *1 (N.Y. Sup. Ct. Dec. 14, 2005).

develop part of the project area as a park.³⁰¹ The developers agreed to alter their plans to be more compatible with Brooklyn's interests, and even offered to fund part of the park construction.³⁰² However, Brooklyn still fought the project and proposed their acquisition of the proposed parcel of land under eminent domain.

TransGas sought relief from the courts, declaring in part that the condemnation of the property violated Article X.³⁰³ Relying heavily on the stated purpose of Article X, as expressed by the state legislature and the Governor,³⁰⁴ the court set a high bar for Brooklyn. The court noted that the intent of Article X was to create a streamlined process to promote the construction of power generative facilities and that local governments had the burden to prove laws or regulations were not "unreasonably restrictive."³⁰⁵ Brooklyn was allowed to present evidence during the hearing to show that its local action was not unreasonably restrictive.³⁰⁶ Ultimately, the court determined that "the City's proceeding to condemn the Site is intended to circumvent the Siting Board's jurisdiction" and that "[s]uch a result cannot be permitted."³⁰⁷

The court in *In Re City of New York* was applying the 1992 version of Article X, but the 2011 version of the law contains similar provisions, placing siting authority squarely under the authority of the State Board.³⁰⁸ The Article X statewide siting regime gives the State Board strong deference in deciding whether to apply local regulations and places the burden on local governments to show why their regulations are not unreasonably burdensome.³⁰⁹

This represents a substantial change in the siting process that hindered Ecogen's development in the Towns of Italy and Prattsburgh. Under Article X, local governments would be unable to block projects by passing bans or moratoriums, and the decision to approve or deny a project would lie squarely with the state agency. Furthermore, under Article X, New York shifted from a locally-driven regulatory scheme—which resulted in numerous legal battles and regulatory uncertainty—to a more state-centered approach. Despite the shift, the Article X process

³⁰¹ *Id.* at *1.

³⁰² *Id.* at *2.

³⁰³ *Id.* at *3.

³⁰⁴ *Id.* at *10.

³⁰⁵ *Id.* at *10–11.

³⁰⁶ *Id.* at *10.

³⁰⁷ *Id.* at *13.

³⁰⁸ The sunset provision expired for the 1992 iteration of Article X in 2003. It was not renewed and revised until 2011. This case was decided in 2005, discussing events that occurred prior to the 2003 expiration. *See supra* note 272.

³⁰⁹ N.Y. PUB. SERV. LAW § 168(3)(e) (McKinney 2011).

still continues to provide a voice for local governments without allowing local opposition and NIMBYism to lead to NOPE results.³¹⁰

CONCLUSION

The conclusions of this Article are based upon three assumptions. First is the assumption that litigation is a good barometer for the effectiveness of wind siting regulations. The limited case law identified while researching this Article may be a positive thing; it may indicate that most wind energy projects are approved by state agencies or local governments with few legal challenges. However, the examples of protracted litigation discussed in this Article illustrate that some regimes for wind siting seem to be less effective than others due to the delay and costs to all parties. As wind development increases throughout the United States, the authors hope that areas with new wind development can learn from the examples discussed here.

The second assumption is that wind power development plays a significant role in meeting state, national, and global goals for addressing climate change through alternative non-carbon-producing sources of electricity generation. This review suggests that widely varying local control of wind siting, which is currently the default in most states, may significantly interfere with the nation's efforts to deploy these alternative renewable energy sources. Discretionary authority scattered amongst counties, townships, and cities, allows competing local interests to decide what wind projects are approved, and which are rejected. Local regulators are more likely to focus on the demands of their constituents with NIMBY motives. As the cases discussed here show, these attitudes can not only add costs and delays to projects, but can also completely prevent them from being developed—a NOPE result.

Finally, the third assumption is that the best wind siting regimes create a balance between predictable and timely wind power siting and local concerns. One clear conclusion that can be drawn, particularly looking at the stark contrast between states like Pennsylvania and Ohio, is that attempting to regulate wind energy projects through existing zoning regulations creates an uncertain regulatory environment open to legal challenges that ask courts, and local governments, to interpret laws

³¹⁰ What is unclear, due the lack of wind projects reviewed under Article X, is how well legitimate local concerns are protected. The court's ruling in *In Re City of New York* suggests that the court has set a high burden for local governments restricting wind development. However, in Ohio, the hearings before the OPSB do result in conditions that protect local interests. See *supra* Section III.D.

that simply do not apply to the projects they are seeking to regulate. Furthermore, while local input on siting decisions is favorable to address legitimate concerns, leaving sole discretion at the local level empowers NIMBY interests and leads to communities saying NOPE to wind altogether.

States that have recognized the need for a greater emphasis on statewide siting often charge state agencies with regulating wind development. These agencies have chosen different tools for dealing with that development and the protection of local interests. As this Article has outlined, each of these approaches has advantages and disadvantages when balancing efficient and consistent regulatory siting review with preserving the voice of local governments and residents.

Ultimately, the case law supports the conclusion that increasing state involvement and limiting local discretionary authority reduces the complications in the siting process. The method that best balances state and local interests may depend on the interests of the state itself. However, through YESS—Yes an Emphasis on Statewide Siting—states can have a strong voice in setting standards for wind development while also guiding the process to avoid local regulations intended to hinder wind development, thus preventing NIMBY from becoming NOPE.