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Wind Power:
An Exploration of Regulation and Litigation

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Abstract: Wind power presents an opportunity to harness a sustainable renewable energy source without the use of fossil fuels, which creates a great opportunity to mitigate climate change. However, the large turbines necessary to harness wind energy present several land use issues. This article, in addition to giving an introduction into the benefits of wind power, discusses several of these issues including comprehensive planning, moratoriums on development, and various options and land use tools local governments may use to legally implement wind power within their jurisdictions.

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This column examines a dozen recently-adopted local land use laws that regulate large wind farms or small wind turbines under municipal zoning and home rule authority. We begin with a recent case involving two upstate towns that granted special use permits for a relatively large wind energy conversion system but failed, under the State Environmental Quality Review Act (SEQRA), to properly assess the environmental impact of the facility prior to approval. This is followed by an explanation of the importance of wind generation, a discussion of concerns that have led to increased local regulation, and several examples of local land use regulations intended to allow wind generation facilities but to control and limit their adverse impacts.

In Brander v. Town of Warren Town Board,1 special use permits granted by the Towns of Warren and Stark to authorize the construction of the Jordanville Wind Power Project were annulled for failure to comply with SEQRA. The Jordanville Project is a 68 turbine wind farm that will generate 136 megawatts of electrical power that will be introduced into the state electric grid. Among other things, the court found that the boards failed to take a “hard look” and consider all reasonable options, as required by SEQRA, because they failed to evaluate possible alternatives to the proposed size and the layout of the wind project. The boards did not provide the level of detail necessary to permit proper assessment of alternatives. Nothing in the Final Environmental Impact Statement showed that a project of a different scale was infeasible.
Both Warren and Stark had adopted similar wind energy facilities laws that require the submission of an application to the town board for siting of a wind facility. The stated purpose of the regulations is to “address the visual, aesthetic and land use compatibility aspects of wind energy facilities.” The Warren law requires that all turbines be located 1200 feet from residential structures and set back 400 feet from rear and side lot lines unless the abutting parcel owners are participating in the project or have given written consent. The sound generated by the wind facilities is limited and is measured from adjacent dwelling units. If after 10 years the wind energy facility ceases to operate for a period of one year, then the owner is required to remove the facility. The facility must be de-commissioned after a period of 25 years. After five years, the owner is required to establish an interest bearing account to be used for the de-commission.

Overview of Wind Power

Wind generation can reduce the use of fossil fuel consumed by other modes of electricity generation and lower carbon dioxide emissions: the principal cause of climate change. Wind generated power is renewable and clean. Although wind generated power still constitutes a small fraction of the nation’s power needs (around one percent), it is growing quickly and could eventually meet over 20 percent of the nation’s demand for energy. General Electric, whose Renewable Energy Global Headquarters are in Schenectady, is in the process of building nearly 900 1.5 megawatt wind turbines, many in upstate New York. A 1.5 megawatt turbine can supply the power needs of over 400 single-family homes. This trend is encouraged by New York State’s adoption of a state policy that establishes a goal that 25 percent of energy consumed by 2013 will be produced by renewable sources such as wind, solar, biofuels, tidal energy, and other mechanisms.

In a response to the nation’s failure to adopt the Kyoto standards for carbon emission reduction, 780 American towns have signed the United States Conference of Mayors Climate Protection Agreement, pledging to meet the Kyoto standards for carbon emissions by 2012. One way of complying is to purchase electricity from wind farms to run locally owned utilities or to heat and cool town buildings. A village in Illinois purchases 4,500 megawatts of electricity from a nearby wind farm to provide power to its water utility, saving nearly five million pounds of carbon dioxide emissions annually.

Another climate change mitigation technique available to local governments is to permit homeowners to install individual wind energy conversion systems. Individuals are beginning to install backyard wind turbines on towers 50-70 feet high that generate enough power for their household use. In some cases excess power is created which can be directed back to the local power company grid, sometimes for credit or cash. Some claim that a single wind turbine of this size can produce enough electricity for two average size homes in an area with moderate wind speeds, raising a host of regulatory and real estate law issues. These types of “distributed generation systems” are supported by the American Planning Association’s Energy Policy Guide. Under the
state Real Property Tax Law, local tax assessors are permitted to offer property owners who construct small wind energy systems an exemption or partial exemption from local real property taxes for the increased value of the property due to the addition of the facility to the land.\footnote{\textsuperscript{v}}

Local laws are being adopted that regulate and, to a certain extent, discourage both large and small wind energy conversion systems. Local governments are adopting comprehensive plan components that express local energy and environmental policies, moratoriums that prevent wind facilities until they can be properly regulated, and a number of zoning, subdivision, site plan, special use permit, and environmental review mechanisms to balance the benefits of wind generated power and the detrimental effects such facilities can have on the community. Like the towns of Warren and Stark, they create spacing and set back requirements, limit or buffer noise, and require aesthetic controls. Other local laws regulate noise levels, views, the risk of personal injury and property damage, heights, location, size, lighting, color, or design. Some require licenses or provide for de-commissioning.

**Comprehensive Plan**

Proper planning is essential to ensure that wind energy resources are developed appropriately at the local level. The tension between the benefits and adverse impacts of siting wind energy facilities in the community can be discussed and resolved in a well considered and detailed comprehensive plan component. New York law suggests that comprehensive plans include components regarding the location of public and private utilities and infrastructure, the protection of the sensitive environmental areas and the improvement of the local economy. All of these issues are at play in developing a wind energy policy and the comprehensive plan is the proper place for these tensions to be resolved. New York State Energy Research and Development Authority (NYSERDA) has published a wind energy tool kit which contains a chapter on Wind Energy Development and the Comprehensive Plan.\footnote{\textsuperscript{vi}} An implementation strategy should be included designating the agencies or officials responsible for each action recommended. The remainder of this article constitutes a menu of possible mechanisms that could be included in a comprehensive plan to encourage and regulate wind energy facilities. Where site plan review or special use permits are required, those provisions can require conformance with the policy objectives and standards contained in the comprehensive plan. The Town of Hamberg requires compliance with its Local Waterfront Revitalization Plan prior to the issuance of a special permit for a wind generation facility.

**Moratorium**

A moratorium on development is a local law or ordinance that suspends the right of property owners to obtain development approvals while the community takes time to consider, draft, and adopt land use plans or rules to respond to new or changing circumstances not adequately dealt with by its current laws. A federal district court upheld a locally imposed moratorium on wind farm projects in *Ecogen, LLC v. Town of*
Ecogen proposed the construction of over 50 wind turbines in two towns: Prattsburgh and Italy. Although Prattsburgh approved the project, Italy was concerned with the scenic and aesthetic impacts of the facility and imposed a six-month moratorium on the construction of wind farms to give it an opportunity to adopt protective regulations. The moratorium was extended several times and finally challenged by Ecogen which argued that the moratorium constituted an arbitrary and unreasonable deprivation of its property rights. The court disagreed stating that protecting aesthetic interests is a legitimate governmental concern and that Ecogen had failed to prove that the moratorium was not rationally related to that interest.

Local Review Options

Special Use Permit and Site Plan Review

Most local regulatory schemes require that a special use permit be obtained and site plan review conducted in order to construct wind energy conversion systems (WECS). The Town of Canadice requires that applicants wishing to construct either industrial WECS or residential WECS first obtain a special use permit from the planning board. In addition, site plan review is required before a building permit may be issued with expenses associated with the review to be paid by the applicant. The special use permit will be denied if the planning board finds that the facility will be detrimental to character of the neighborhood.

Under the Town of Eden's code, applicants seeking to construct WECS of any size must first obtain a special use permit in accordance with the code's requirements. The requirements listed are aimed at regulating noise, location, safety, and connection to utilities. The Town of Tonawanda regulates both commercial and residential WECS. It also requires a special use permit application. In 2007, the town amended the code to require that the special use permit be renewed annually.

In 2007, the Town of Hamburg added Article L which requires a special use permit and site plan review for the installation of commercial WECS. The code mandates compliance with the town's Local Waterfront Revitalization Plan and a minimum lot size of two acres per tower. An inoperable WECS is declared a public nuisance. The Town of Newstead divides WECS into two types; type one is a commercial unit designed for the generation of power supplied to the local grid and type two is a unit designed to supply power primarily to a single residence. Both require a special use permit from the town board and site plan review. All variances must be approved by the town board. The City of Lackawanna regulates both commercial and non-commercial WECS. WECS are only allowed in Industrial Districts, the Bethlehem Redevelopment Area, or Mixed Commercial and Industrial Districts with the issuance of a special use permit, the completion of SEQRA, site plan review, and a building permit.

As of Right
The Town of Malone allows WECS used solely for agricultural operations located in a state or county agricultural district. These WECS are not required to obtain a special use permit provided the towers do not exceed a height of 120 feet and are set back at least one and half times the height from the property line. Before construction a sketch plan or building permit application must be submitted to the town.

The Town of Southold permits small wind energy systems which it defines as “a wind energy conversion system consisting of a wind turbine (not to exceed 25 kilowatts of production), a tower, and associated control or conversion electronics, which has a rated capacity intended primarily to reduce on-site consumption of utility power.” Applications are submitted to the building department and if the proposed system meets the height and building restrictions, a permit is granted.

Accessory Use

The Town of Riga defines WECS as a “turbine up to a maximum of 30 kw consisting of a rotor with blades connected to a generator situated on a tower whose purpose is to convert wind energy to electricity to provide power to a residence, business or farm.” WECS are considered an accessory structure provided they are incidental to the primary permitted use on the same lot. Only one system is permitted on a lot and an existing lot cannot be subdivided solely to install multiple WECS.

Overlay Zone and Use Variance

In order to construct WECS in the Town of Ellenburg, one must apply for a special use permit and a rezoning simultaneously. The rezoning is necessary to apply the standards of the Wind Overlay Zone to the applicant’s parcel. The rezoning applies only to larger WECS. No permit is required for mechanical, non-electrical WECS (old fashioned windmills) used solely for agriculture purposes. WECS can be either a principal or accessory use. Small scale WECS, designed for on-site home, farm, and small commercial use, and that are primarily used to reduce on-site consumption of utility power, require only a special use permit. The town board may grant a use variance to permit construction outside a Wind Overlay Zone or grant an area variance when the applicant cannot satisfy the dimensional requirements.

License

The Town of Eagle requires that first the planning board conduct site plan review before a wind energy conversion facility is constructed. Upon completion of site plan review, the planning board renders an advisory recommendation to the town board. If final site plan approval is obtained from the town board, the applicant must apply for a license to operate a wind facility. The license is for a minimum of ten years and is subject to annual certification. A licensing fee is assessed based on the megawatt capacity of the facility.
The Town of Wethersfield also requires that owners/operators of wind energy conversion devices/farms obtain site plan review and approval and a license.\textsuperscript{xix} In order to initiate the review process, the applicant must pay a nonrefundable fee of $500 per megawatt of generating capacity for each anticipated device. The town has limited the number of licenses it will issue to 60 town-wide. The license is renewable every five years for a fee of $500 per megawatt capacity.

**Conclusion: Overregulation and State Preemption**

Local governmental authority to regulate matters such as wind and solar power generation is vulnerable to preemption and control by state legislatures. California and Nevada already have partially stripped local governments of their power to regulate wind and solar power devices. Colorado and Connecticut have adopted legislation requiring local zoning to accommodate solar energy technology. Localities have been a creative and productive partner of states in addressing key societal problems like energy conservation and now climate change. The trends explored in this article bear watching to determine whether the proper balance between parochial and state and global interests is maintained as local regulation of these important matters proceeds.

\textsuperscript{i} 847 N.Y.S.2d 450 (N.Y. Sup. Ct. 2007).
\textsuperscript{iii} According to the American Wind Energy Association, wind energy generation capacity increased by over 27 percent in 2006 and a dramatic 45 percent in 2007. American Wind Energy Association Market Report, at 1 (Feb. 2, 2008). Over 6,500 wind turbines are in operation globally and by the end of this year that number should exceed 10,000 units.
\textsuperscript{v} N.Y. CLS RPTL § 487 (2007).
\textsuperscript{vi} New York State Energy Research and Development Authority, Wind Energy Development and the Comprehensive Plan, available at www.powernaturally.org/Programs/Wind/toolkit/comprehensiveplan.pdf.
\textsuperscript{vii} 438 F. Supp. 2d 149 (W.D.N.Y. 2006).
\textsuperscript{ix} EDEN, N.Y., WIND ENERGY CONVERSION SYSTEMS ch. 217, § 217-1 (2004).
\textsuperscript{xi} HAMBURG, N.Y., COMMERCIAL WIND ENERGY CONVERSION SYSTEMS art. L, § 280-343 (2007).
\textsuperscript{xii} NEWSTEAD, N.Y., WINDMILLS ch. 422, § 422-1 (2007).
\textsuperscript{xiii} LACKAWANNA, N.Y., WIND ENERGY CONVERSION SYSTEMS art. 11, § 230-81 (2007).
\textsuperscript{xiv} MALONE, N.Y., WIND ENERGY FACILITIES ch. 80, § 80-1, (2006).
\textsuperscript{xv} SOUTHOLD, N.Y., WIND ENERGY CONVERSION SYSTEMS art. L, § 277-1 (2007).
\textsuperscript{xvi} RIGA, N.Y., CODE § 95-76 (2007).
\textsuperscript{xvii} Ellenburg, N.Y., Local Law No. 4, Wind Energy Facilities (2005).
\textsuperscript{xix} Wethersfield, N.Y., Local Law No. 1, Town of Wethersfield Wind Energy Conversion Device/Farm Licensing, Siting and Design Regulations and Requirements Law (2006).