MEMORANDUM

TO: R. Wilson Freyermuth, Executive Director
   Joint Editorial Board for Uniform Real Property Acts

FROM: Troy A. Rule, Associate Professor
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RE: Possible Uniform Laws Relating to Wind Rights

The rapid pace of renewable energy development in recent years has led to increasing calls for clearer laws governing wind rights. A handful of states have enacted legislation aimed at addressing these issues, but many questions remain unanswered within the current patchwork of state laws regarding property rights in wind. In this era of shrinking state budgets and dwindling government subsidies for alternative energy, laws that clarify the concept of wind rights offer a low-cost way for states to eliminate some of the legal uncertainty associated with wind energy development and thereby continue promote such development within their jurisdictions.

This memorandum highlights some unresolved property law questions associated with wind energy. It seeks to educate the Joint Editorial Board about potential future drafting projects that could unify and clarify the law as it relates to wind rights. Much of this memorandum has been adapted from articles I have recently published in this substantive area.

I. Wind Energy and Wind Rights

Landowners today are increasingly selling or leasing to others the right to utilize the wind flowing across their land to generate electric power. Modern wind energy leases routinely provide for thousands of dollars in annual rent payments to property owners. For the first time in history, the right to capture wind in some areas of the country has become marketable and highly lucrative.

Unfortunately, like other assets that are bought and sold, rights in the wind can also be the subject of ownership disputes. As wind energy development continues at its rapid pace, competition for the wind will grow ever more common. In the coming years, courts and legislators will be tasked with formulating laws to govern disputes over wind rights.

A. Wind Turbine Wake Interference

The present legal uncertainty associated with wind rights is evident in disputes over wind turbine wake interference. Commercial wind turbines create a “wake” of turbulent air (like the wake behind a boat) that can diminish the wind energy productivity of other turbines behind them for
up to half a mile. Disagreements can arise whenever the wake generated by a wind turbine reduces the profitability of a neighbor’s turbine site immediately downwind.

Imagine two landowners who both plan to install a wind turbine in a windy area near the border of their adjoining parcels, each on either side of the property line. On most properties that are suitable for commercial wind energy, winds blow in the same general direction most of the time such that one of two adjacent parcels is effectively downwind of the other. If both landowners were to install their turbines, the wake from the upwind turbine would render the downwind turbine unprofitable.

In an effort to prevent turbine wake interference conflicts, a few local governments have imposed wide, wake-based turbine setback restrictions on parcels in areas zoned for commercial wind energy development. These setbacks unfortunately come at a high cost, effectively precluding the installation of turbines within large sections of prime wind energy land. Given the tremendous social benefits of wind energy, the best legal rule would allocate wind rights in ways that maximize the energy productivity of scarce land and wind resources.

Existing natural resource law is a logical starting point for crafting rules to govern wind rights. Longstanding laws already allocate interests in water, wild animals, minerals, airspace, and subsurface oil and gas among landowners. Legal scholars have drawn comparisons between wind and these other resources for decades.

Tempting as it may be to apply laws governing oil, water or wild animals to wind, such laws are not suited for the task because they fail to account for wind’s peculiar features. Wind is truly unlike any other natural resource. It is ephemeral and invisible. Unlike oil, minerals, animals or water, wind is not easily transported or diverted for use elsewhere.

Wind also differs from other natural resources in that its productive value is often location-specific. If one million barrels of oil reside in a large subsurface pool, then ultimately about one million barrels will be extracted and added to the world’s oil supply regardless of whether the extraction occurs on a particular parcel or on neighboring parcels. Similarly, the total volume of usable water in a river is roughly constant regardless of whether water is diverted and used by an upstream landowner or by someone located several miles further downstream. But such is not the case for wind. Higher average wind speeds generate far more electric power, and average wind speeds are influenced by topography and can vary significantly by location. Thus, the amount of wind energy generated from a given set of properties is often based on where upon those properties wind turbines are installed. Maximizing wind energy production from a fixed set of properties and turbines requires installing the turbines in those locations that collectively exhibit the greatest wind energy potential.
Existing laws fail to directly address neighbor conflicts over wind, so policymakers have an opportunity to devise efficient, equitable rules to govern these disputes. Should landowners be liable if wind turbines on their property decrease the productive value of wind flowing across the property line onto neighbors’ land? Or should landowners be free to install wind turbines on their property without any liability for downwind wake effects? Or might some other set of rules be better suited to allocate wind rights among neighbors?

B. A Severable Wind Estate?

There is also some uncertainty in property law as to whether landowners may legally sever a “wind estate” from their fee interest in a parcel of real property.

At least one court has held that the right to capture wind and convert it to energy can be severed from a surface estate. The California appellate court in Contra Costa Water District v. Vaquero Farms, Inc.,\(^1\) was asked to consider whether a municipal water district could sever a property’s Wind Rights from the fee estate and reserve such rights to a private landowner in a condemnation proceeding. The court cited the landowner’s thirty-year wind energy lease as “irrefutable evidence that one may have a right to use windpower rights without owning any interest in the land,” concluding that “windpower rights are ‘substantial rights’ capable of being bought and sold in the marketplace.”\(^2\) Rejecting the argument that fee ownership was inexplicably connected to Wind Rights, the court embraced the water district’s argument that “[t]he right to generate electricity from windmills harnessing the wind, and the right to sell the power so generated, is no different, either in law or common sense, from the right to pump and sell subsurface oil, or subsurface natural gas by means of wells and pumps” and that Wind Rights could thus similarly be severed from a surface estate.\(^3\)

In recent years, a small number of states have enacted legislation providing that wind rights may not be severed from the surface estate.\(^4\) Nonetheless, the practice of reserving wind rights in conveyances or otherwise severing such rights from the surface state continues in some jurisdictions. Numerous legal scholars and commentators have discussed and analyzed the possibility of concept of a wind estate within the last few years.\(^5\) One potential problem with

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\(^2\) Id. at 893.
\(^3\) Id. at 894.
recognizing a wind estate is that it could lead to conflicts between holders of mineral rights and holders of wind rights over which held the “dominant estate.” Legislation recognizing a severable wind estate could also have impacts under regulatory takings law. If a citizen held only a severed wind estate and a new government regulation effectively prohibited any economically viable use of that estate, such regulation could theoretically trigger a compensable taking under the famous rule set forth in *Lucas v. South Carolina Coastal Council.*

### C. Aesthetics-Based Restrictions on Wind Energy Development

One other property law issue related to wind energy development is the growing impact of aesthetics-based land use restrictions on turbine installations. Such restrictions have hindered installations of both large wind energy projects and small turbines.

The Kansas Supreme Court recently upheld a county’s outright prohibition of commercial wind projects anywhere within its boundaries. The undisputed impetus for the county’s prohibition was a general concern that wind energy development would compromise the aesthetic appeal of the county’s pristine rural areas, including portions of the Flint Hills. The state supreme court ultimately upheld the county ordinance, even though a developer had already expended hundreds of thousands of dollars on preliminary work for a large wind energy project within the county.

Disputes can also arise over the installation of small turbines, which comprise a rapidly growing segment of the wind energy industry. Generous government incentives have led an increasing number of landowners to seek to install these small turbines on their residential land, even though the turbines can stand as much as 120 feet high. Of course, suburban areas are often

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7 *Zimmerman v. Board of Com’rs of Wabaunsee County*, 218 P.3d 400, 405 (2009); *see also Zimmerman v. Board of Com’rs of Wabaunsee County*, 264 P.3d. 989 (2011).

8 See id. at 997 (noting that the county’s prohibition on commercial wind farms was based partly on a determination that large wind turbines would be “incompatible with the rural, agricultural, and scenic character of the county”).

9 The total U.S. generating capacity from small wind turbines doubled from January 2007 to December 2009. *See id.* at 3.

10 *See Ron Stimmel, In the Public Interest: How and Why to Permit for Small Wind Systems*, American Wind Energy Association at 6 (September 2008) (stating that the “bottom of the turbine rotor should clear the highest wind obstacle (rooftop, mature tree, etc.) within a 500 foot radius by at least 30 feet” and suggesting that typical small wind turbines are mounted atop towers that are 35 to 120 feet tall).
subject to 35-foot height restrictions or other local zoning restrictions that can effectively prohibit the turbines. In an effort to overcome these local-level obstacles to small wind turbine development, a few states have recently enacted laws in that preempt and invalidate many local restrictions on small windpower. Unfortunately, this blanket preemption approach to addressing the issue ignores the possibility that local differences may sometimes justify greater restrictions on wind energy.

II. Conclusion

This memorandum provides only a general overview of a small handful of basic legal questions involving wind rights. Should the Joint Editorial Board have any interest in further investigating these issues, I would be glad to discuss any of them in greater detail. These and other property law questions surrounding wind energy are likely to only grow in relevance as wind energy development continues to spread throughout the country in the years to come.

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12 For a description and analysis of these preemption statutes and a proposed alternative approach, see generally Troy A. Rule, *Renewable Energy and the Neighbors*, 2010 UTAH L. REV. 1123 (2010)