



“Clean Energy in Michigan” Series, Number 9

Revising Regulations for Wind Energy: Casnovia Township, Michigan

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Q: What can Casnovia Township teach us about the evolution of a wind energy ordinance?

Casnovia Township, a farming community located in West Michigan, had a wind ordinance in place ten years before they received an application for a wind farm. Despite advance preparation, the first project proposal brought 18 months of controversy to this township, leading to substantial reform in their ordinance. Casnovia’s story presents the realities of forming and adapting wind energy regulation.

Initial Ordinance Development

The prospect of wind energy in Casnovia Township was first considered in 2008, when Iberdrola, a Spanish developer, expressed interest in investigating the local wind resource’s potential for power generation. Though wind energy was not in their Master Plan, Casnovia was open to the idea and decided to put together a wind ordinance using other Michigan townships’ regulations as reference.

Kelli Ashbaugh, the township’s current supervisor, said that it was challenging to draft criteria for the ordinance without having a feel for what a wind farm might entail and how its attributes may impact citizens. Further, though the township Planning Commission and Township Board held public hearings as they drafted the ordinance, they received little to no community input.

Township officials made do with the information they had and finished the document in six months. Iberdrola proceeded to build a test tower in Casnovia, but never filed an application for a project because they believed that the wind was inadequate given the type of wind turbines that were available at the time.

Developer Interest 10 Years Later

Almost a decade later, with a change in wind energy technology that made it viable to produce power even at lower wind speeds, Sempra Energy (SRE) took interest in building a wind farm in the township. SRE started approaching Casnovia residents in October 2017 to secure land leases.

Wind Turbine. Photo by Gonz DDL on Unsplash.



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The Clean Energy in Michigan series provides case studies and fact sheets answering common questions about clean energy projects in Michigan.

Find this document and more about the project online at graham.umich.edu/climate-energy/energy-futures.



Figure 1: Location of Casnovia Township in Muskegon County, Michigan.

Data source: State of Michigan GIS Open Data

The details of SRE's plans were generally quiet until they formally submitted a wind farm application to the township in June 2018. At that time, SRE proposed the Kenowa Ridge Wind Energy Project: a 100-megawatt wind farm with 31 turbines throughout Casnovia Township and one turbine in neighboring Tyrone Township.

The word about Kenowa Ridge spread fast, drawing as many as 200 people at the first few public hearings. Most of the comments at these hearings came from citizens who were opposed to the wind farm. The bulk of their concerns were regarding feelings of inadequate information sharing about the project, setback distances in the zoning ordinance that were too small, and the noise disturbance that would be caused by the turbines.

The community insisted that it was not opposed to wind energy. Rather, community members argued that there should be more controls in place to reduce negative impacts on the many Casnovia Township residents who did not hold leases.

Some speakers were supportive of the project, many of whom were among the 69 individuals that had land lease contracts with SRE.

In November 2018, the Planning Commission voted to deny the special use permit. Subsequently, the Board of Trustees reviewed the proposal and decided in April 2019 to approve Kenowa Ridge with a series of extra conditions that attempted to address the public's concerns. The actions of the Board provoked lawsuits from the wind developer (by then, American Electric Power (AEP), who had acquired the project from SRE) and even a few Casnovia residents. Eight months later, AEP cancelled the project.

Reconsidering the Ordinance

The 2018 wind farm proposal helped fill Casnovia Township's former knowledge gap on wind energy zoning by triggering a wealth of public feedback, rigorous research efforts, and assistance from university and extension experts.

The township posted a six-month moratorium on wind farm permits immediately following the provisional approval of the Kenowa Ridge project and used the time to revise their ordinance. The resulting updates include more stringent and specific measures that aim to minimize impacts on those who do not sign up for a wind farm. For example, the original setback distance of 300 feet from a non-participant landowner's property line was increased to a distance that is four times the turbine's tip height.¹ With modern turbines often exceeding heights of 500 feet, this would translate to a setback of roughly 2000 feet.

Since the ordinance was amended in October 2019, there have been no new wind farm applications, and the outlook for future wind energy in Casnovia Township is uncertain.

Lessons from Casnovia

The case of Casnovia Township demonstrates that developing regulations for wind energy is an iterative process. The first attempt will likely not be the last or the best attempt.

Township officials' initial lack of community input in 2008 led to the formation of an ordinance that attracted a wind farm, though public comment in 2018 drew out opinions suggesting that many residents found the proposal unsuitable for their community. The Kenowa Ridge proposal subsequently prompted more robust community discussion of what a tolerable wind farm would look like in Casnovia. Township officials made use of what they learned from this experience by incorporating relevant input and advice into their ordinance for future developments.

The case also demonstrates the importance of periodically updating a wind energy ordinance to keep pace with changes in technology, new insight about how wind energy might impact those who have to live with it, or other changes in the make-up of the community that would alter where wind energy might fit.

When Casnovia Township adopted their zoning in 2008, most wind turbines in Michigan were roughly 400 feet tall and required higher wind speeds to operate. Now, turbines are commonly closer to 500 feet or taller. Additionally, when Casnovia originally adopted its ordinance there were only a couple windfarms in Michigan, and little was known about their implications on host communities. A final point is that Casnovia Township has changed demographically since 2008. While Michigan lost population statewide between 2008 and 2018, Casnovia's population grew 3% over that time period, bringing in new residents with perhaps different views on the compatibility of wind energy. Therefore, as additional information becomes available, it is important for government leaders to update their wind regulation to have a legal backing that can best serve their community as new circumstances arise.

A government body considering wind energy as a land use need not wait for a wind farm proposal to gather information on how to produce an acceptable wind ordinance. There are resources available to aid wind energy zoning, and these resources can serve as both a good starting point and as a guide down the road. Michigan State University Extension² was one resource that Ashbaugh attributed as helpful for Casnovia Township in their recent work, and it is available to help others at any stage in their wind energy endeavors.

Special thanks to Kelli Ashbaugh for telling the story of wind energy in Casnovia Township.

1 Casnovia Township. (2019). Wind ordinance. <http://www.castwp.com/WindOrdinance.aspx>

2 Michigan State University Extension Planning. (2017). Wind energy/alternative energy. https://www.canr.msu.edu/planning/zoning_ordinance_resources/wind-energy-alternative-energy