

One Energy Plaza, Detroit, MI 48226-1221



**DTE Energy**

November 6, 2017

Burnside Township Planning Commission  
7045 Burnside Road  
Brown City, Michigan 48416  
c/o Township Clerk

Re: Proposed Zoning Ordinance Amendment Relating to Wind Power

Dear Planning Commissioners:

DTE Energy is one of the state's leading producers of electricity from clean, renewable sources such as wind and solar. Since 2008, it has been both the state's largest investor in, and producer of, wind energy, now producing enough energy from renewable sources to power nearly 450,000 homes.

DTE's investment in renewable energy has been driven in part by priorities set by the State of Michigan. Michigan law now requires 15 percent of DTE's electrical generation to come from renewable sources within the next five years, an increase of 50 percent over the previous renewable standard set by the Michigan legislature.

The investment has also been driven by common sense and a desire to generate energy in a safer, cleaner, and more affordable way that not only benefits some - but all - residents of the state. Michigan ranks among the top 15 states nationwide in terms of wind energy potential due to its location in the center of the Great Lakes region and relatively flat topography. Once in place, the operating cost of producing wind-based electricity is on par with coal and gas-generation. While the federal production tax credit helped create a market for wind energy, that credit is being phased out over the next two years, so federal tax benefits are not driving new wind projects.

Wind energy has minimal environmental impacts. There are no air or water emissions. Impacts on ecosystems and avian species can be minimized through careful site planning, making wind turbines less of a hazard than other types of land uses. Sound and shadow flicker can be managed so as not to create a nuisance for adjoining property owners and without reliance on excessive setback requirements or sound decibel limitations. Finally, there are no peer-reviewed research studies that support claims that wind parks lower adjacent property values or cause health issues. In fact, the peer-reviewed academic studies that do exist show no impacts.

Being involved with 13 Michigan wind parks, DTE has considerable expertise in the field. As a Michigan-based wind developer, DTE is committed to sharing its expertise with communities where there is likely to be interest in wind development even without having a specific project planned in the community, as is the case for Burnside Township. DTE is equally committed to public safety, its customers and its workers in everything it does. This is why we are sharing our concerns about the proposed amendments to the Township's wind power zoning regulations.

Our analysis of the changes - particularly the setback requirements - indicates that these requirements will result in wind energy development being excluded entirely from many township sections and quite possibly the entire township. We would be willing to provide an exhibit that illustrates the impacts of the restrictive setback requirements of the current ordinance draft at a later date.

Additionally, we are concerned that this effort to amend the zoning ordinance is being undertaken without a careful planning study that includes a review of peer-reviewed scientific research on the impact of wind parks on adjacent landowners and local communities. The existing ordinance was drafted in reference to the Michigan Siting Guidelines for Wind Energy Systems. The proposed ordinance now disregards those guidelines for no apparent reason.

Finally, we are concerned that the proposed amendments indicate a bias against wind energy development in the township. If that is not the case, then why do the proposed wind power amendments subject utility-grid wind energy generation to more restrictive zoning requirements than communication towers, asphalt batching plants, and fireworks storage – all of which pose special siting considerations?

We are enclosing a list of specific comments on the draft wind power ordinance amendments that the Planning Commission should address prior to making its recommendation to the Township Board. Additionally, we suggest that the Planning Commission recommend the following to the Township Board that:

1. Turbines ("utility grid wind energy systems" per the ordinance) be setback from road rights-of-way and non-participating property lines a distance equal to 1.5 times the height of the turbine as measured from the base of the turbine to the top of the blade in its vertical position, as recommended by the Michigan Siting Guidelines for Energy Systems (2007). To facilitate turbine placement that best suits the needs of participating property owners, a setback equal to the height of the turbine as measured from the base to the top of the blade be permitted for turbine sites adjoining other participating property.
2. Turbine sound be limited to 55 dBA, or 5 dBA above ambient if the ambient sound level is greater than 55 dBA, as measured at a sound receptor (not a property line where there is no sound receptor). Short of that, the sound limitation should be measured at a non-participating property line as recommended by the Michigan Siting Guidelines, and non-participating property owners be permitted to consent in writing up to 65 dba at the property line; and
3. Required studies be prepared by consultants selected by the applicant and, if desired, reviewed by a consultant selected by the Township to provide a balanced presentation of the issues.

DTE would welcome the opportunity to discuss the considerations that influence its siting of wind turbines and design of wind parks if that information would be of assistance to the Planning Commission.

Sincerely,



Michael Sage  
Program Manager, Renewable Energy Development

cc: Chad Dempsey, Burnside Township Supervisor

Attachment



**DTE Energy Comments on Proposed Amendments to  
Burnside Township Zoning Ordinance § 4.3.76**

**Summary:**

- The township does not appear to have considered WECS siting as part of a land use planning process, though Michigan law requires zoning to be based on a plan. What scientific or economic studies are being relied upon here?
- While the existing ordinance was patterned on the Michigan Siting Guidelines for Wind Energy, the proposed amendments depart from the Guidelines. What scientific or economic studies are being relied upon in substitution of the Siting Guidelines?
- What is the basis for subjecting WECS to more restrictive zoning requirements than communication towers, asphalt batching plants, and fireworks storage?
- The 1640' road right-of-way setback limits turbines to no more than one per one square mile section (a density that precludes utility grid generation). With the added effect of a 1640' setback from any non-participating property line and 1640' setback from any structure other than a shed or barn, utility grid generation is there will be no place for utility grid generation.
- What is the basis for requiring sound levels (45 dbA) below the levels of normal conversation (50 to 65 dbA) at non-participating property lines when structures reduce 55 dbA sound levels to less than 30 dbA indoors?
- Why are there no waivers for setbacks or sound limitations?

**Specific comment:**

1. The definition of inhabited structure is overly broad; it includes any structure other than a storage shed and barn.
  - a. Agricultural districts allow asphalt/concrete batching plants, grain/seed elevators, livestock auctions, mining operations, all which are "inhabited structures" under this definition. Why is it necessary for turbines to be located one-third of a mile from these uses? Same for similar uses in the Industrial District where turbines are special land uses?
2. The ordinance refers to "leases" with a landowner, though agreements with landowners take other forms such as easements.
  - a. What is the authority for a zoning ordinance to dictate the restoration terms incorporated into a landowner agreement? Does the township use zoning to dictate the

- terms of agricultural leases? What if a landowner prefers certain improvements like access roads and underground collection lines to remain in place?
- b. Landowner consent is a matter of public record (memorandums recorded with Register of Deeds). Are applicants for other land use approvals required to provide copies of leases and easements?
3. If the township does not require site plans for other special land uses to be prepared by a professional engineer licensed in Michigan, then why here?
4. The required content of a visual impact study is vague and not adequately defined.
5. The required content of an environmental impact study is vague and not adequately defined.
- a. Why is an applicant restricted to using a consultant approved by the township or township engineer? Does this township impose the same requirement on other professionals who prepare documentation supporting a special land use application?
6. There are no standards for determining an adequate shadow flicker study or for determining when shadow flicker mitigation has been sufficiently achieved.
7. The Planning Commission lacks authority to set review fees.
8. The required 1640' setback from non-participating property lines and public rights-of-way is three to four times the height of a typical turbine. What's the basis for these requirements?
- a. At best, these provisions may allow one turbine per section, which is an insufficient density for utility-grid generation that imposes unwarranted increases infrastructure costs, and more will result in entire sections being excluded from utility grid generation, thereby excluding utility-grid electrical generation entirely from the township.
- b. The exclusionary effect of the setback requirements is reinforced by the addition of a 1640' setback from the overly broad category of inhabited structures.
9. What is the basis for the township to require setbacks from public utilities? What setback is required?
10. The purpose of sound limitations at property fence line is of questionable benefit. Nevertheless, if the Michigan Siting Guidelines for Wind Energy recommendation is 55 dBA, what is the basis for reducing allowable sound levels from 55 to 45 dBA when normal conversation falls within the range of 50 to 65 dBA?
- a. A 45 dBA requirement does not account for sound reduction resulting from the distance between the property line and a residential structure or resulting from building walls.
11. What constitutes a wind energy system of similar operation for purposes of paragraph e.6.