

# Comparing the Newest Wind Energy Facility in Michigan with the Rest of the US



Pine River Wind Park only produces electricity 36% of the time

July 12, 2019

By [Aaron Lehman](#)

Despite claims by Michigan's largest electric company that the Pine River wind facility is the most cost-effective wind project in the state, it does not compete with similar projects in other states.

On March 8, DTE Energy started producing electricity at the Pine River Wind Park in Gratiot and Isabella counties. This new industrial wind generation facility is billed by the utility and media as "DTE's most cost-effective and cost-efficient wind project to date." But this claim deserves a closer look.

Pine River currently has 65 turbines that, together, have a theoretical capacity of 161.3 megawatts of electricity, which represents the most energy it could generate. But according to the Michigan Public Service Commission, Michigan industrial wind projects only have an annual capacity factor of [36%](#). This means that, on average, they only produce electricity 36% of the time, or about 8.5 hours each day. DTE claims that Pine River can provide power to 54,000 Michigan homes. But the company can reliably serve those homes only if it has other energy sources to provide electricity during the 64% of the time when

the wind isn't blowing, or is blowing too hard. These other sources will almost always be coal, natural gas or nuclear power.

Additionally, when considering construction and installation costs, Pine River certainly does not deserve to be described as "the most cost-effective and cost-efficient." In reality, it's just plain-old average. According to DTE Energy, the approximate [installation cost](#) of Pine River was \$1,615 per kilowatt, or an estimated total of \$260.5 million for the entire generation facility. But these installation costs are about the same as those for any other current wind installation project in the country. There's really nothing extraordinarily efficient about this project at all.

It's also important to look at the contract cost per megawatt hour for the electricity the project produces. In layman's terms, that's the amount the MPSC – the state body responsible for approving electricity rates – [has allowed the utility to charge its customers](#) to recover the cost of operating the facility.

The MPSC recently reported that the contract cost of Pine River is \$59.67 per megawatt hour. (Under the requirements of Public Act 295 of 2008, the MPSC must publish an annual report detailing the progression and costs of renewable energy generation in Michigan.) But the average contract cost for wind facilities across the U.S. in 2017 is only one-third of Pine River's approved costs. In fact, the U.S. Department of Energy stated in its 2017 Wind Technologies Market Report that the national average for a wind energy contract had decreased to approximately \$20 per megawatt. Of course, that figure includes "favorable tax policy and other factors" – which the Pine River project also benefits from.

It's clear that, when compared with other subsidized wind generation facilities across the country, Pine River is far from "cost-effective" or "cost-efficient." At best, its construction costs are just average, but DTE is selling the electricity it produces at rates three times higher than the national average for similar facilities.

We are left wondering, Why is there such a massive discrepancy between Michigan's newest, most up-to-date and "cost-effective" wind project and other wind generation projects across the country? Before the state's utilities get the approval to build any more of these allegedly cost-effective, yet clearly underperforming industrial wind facilities, they should answer this question for their customers.

*Permission to reprint this blog post in whole or in part is hereby granted, provided that the author (or authors) and the Mackinac Center for Public Policy are properly cited. Permission to reprint any comments below is granted only for those comments written by Mackinac Center policy staff.*

(989) 631-0900 | 140 W. Main Street Midland, MI 48640 P.O. Box 568 |  
mcpp@mackinac.org  
©2019 Mackinac Center for Public Policy