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Wind is Nebraska's Future, With or Without the Clean Power Plan

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The Clean Power Plan was issued in October 2015. President Trump called for a review of the plan this March and on October 16th, 2017 the EPA released a proposal to repeal it. The Clean Power Plan would have reduced Nebraska's state emissions to 22,250,000 tons of carbon dioxide by 2024, down by about 5 million tons compared to 2012 emissions.¹ The new projection for 2020 without the plan is 34 million tons of CO₂ emitted.

Coal and other fossil fuel energy sources are the main culprits of these carbon emissions, and here in Nebraska coal power plants generate 60% of electricity used.² Switching quickly to renewable energy sources such as hydroelectric dams, solar panels, and wind turbines is the only way to limit the rise of global temperatures due to increased CO₂ in the atmosphere. Nebraska is falling behind other states who are investing in renewables regardless of the future of the Clean Power Plan.

In the past 10 years the MidAmerican Energy company in Iowa, owned by our own Warren Buffett, has increased its wind power from nothing to 48% of its total generation capacity, all while keeping electricity rates 37% below the national average.³ Their goal is to generate power from all renewable sources in the near future. Meanwhile, Nebraska public utility companies are sitting at a mere 8.3% of electricity generation from wind even though available wind resources here are similar to Iowa's.²

In the past, the major electricity providers such as the Omaha Public Power District (OPPD) and the Nebraska Public Power District (NPPD) have resisted tapping into renewable energy resources stating that they feared prices would increase for their customers. However, wind is a very cheap energy source because once wind farm construction is complete there are no operating costs on a day to day basis besides maintenance costs. In fact, in the Southwest Power Pool that NPPD and OPPD are a part of, wind generators from Kansas, Oklahoma, and South Dakota are outcompeting all fossil fuel plants because they can sell their electricity at lower prices.

This competition means that the coal plants are not constantly being used, they must be powered up and down again when wind and natural gas sources do not provide enough energy to meet demand. This leads to high operating costs for coal dependent providers like NPPD. Wind energy wouldn't increase electricity prices, but sticking to coal sources while everyone else moves on to renewables would.

That is why Nebraska utility companies are resisting the natural transition to wind, they won't shut down coal plants because they were so expensive to construct even though they become expensive to operate as wind production increases. The Whelan Energy Center Unit 2 was built in 2011 and cost public power entities \$620 million to construct.⁴ They will be trying to pay off this plant, and others like it, for decades instead of investing in new and sustainable technology. All Nebraskans are paying the price for their impractical investments.

Fear of raising electricity price isn't the only excuse used, it is often pointed out that the wind projects of private companies are only economically feasible because they are eligible for federal renewable tax credits. However, Nebraska's utilities can enter into power purchase agreements with taxable entities to take advantage of these credits like Lincoln Electric Systems is already doing.⁵

Intermittent energy output is another issue that is often raised. MidAmerican, the leading rate-regulated utility in wind power, is increasing its wind generation as much as possible and using coal when the wind isn't blowing. Improved energy storage technology is needed to make 100% renewables feasible, but NPPD and OPPD should at least use fossil fuel plants to supplement wind generation instead of trying to run them as much as possible for baseload generation.

Currently there is a focus on objections to wind farms in the Sandhills because of habitat destruction. The average wind turbine in Nebraska only takes up 1.39 acres including access roads.⁶ Yes, some small parts of the Sandhills would unfortunately be destroyed, but without renewables the entire ecosystem will be lost due to global warming. Nebraska will warm about 7 degrees Celsius by 2100 if nothing is changed.² This will increase the frequency and severity of droughts and wildfires in the region, destroying the wetlands the area is known for and increasing overgrazing and erosion.

Wind power leads to lower prices for consumers, improved air quality, and fewer carbon emissions. The state legislature needs to work with the public utilities to develop a renewable energy requirement or incentive plan that will finally bring renewables to Nebraska. Without the Clean Power Plan, it is up to state governments to take the lead on clean electricity generation.

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