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Minnesota Energy Facility Permitting Scoping Officers
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Dear Public Employees:

I am writing because I want the environmental impact study prepared for this project to recognize a number of things. I live along Minnesota Highway 9 in a neighborhood consisting of over 40 residences. Other residences have been built nearby in the past two years as we transition into a town.

1st The power line will endanger Prairie Chickens (Tympanuchus cupido). It will endanger them as they fly from State and private lands where they breed to feeding grounds to the West where they especially favor soybean stubble. They typically fly at the same elevation as the proposed power line.

2nd I regularly watch the sunset and sunrise. I regularly watch the heavens since my second hobby, after bird watching, is astronomy. I use this hobby in my teaching to point out and show students the challenge of modeling planetary movement.

3rd I enjoy the peace and quiet. The State highway is not always busy and there are long uninterrupted periods of quiet that will be lost to the proposed power line. Personal utility is subjective but does have significant market value. I spend considerable time every day engaged in these opportunities at significant opportunity cost (I give up time that is otherwise spent earning wages and revenue from my consulting).

4th I object to a Federal government that has a deficit this year of over 1 trillion and a State government that has a biennial deficit of over 6 billion granting subsidies to a technology that has not proved to be efficient in other parts of the world where it is in use. (www.countryguardian.net/Whiteco2.pdf) This technology receives a Production Credit from the Federal government and it is exempt from State and local taxation in Minnesota. Wind generated power is "variable, unpredictable and uncontrollable." European experience shows "conclusively" that it is "routinely disappointing". Danish and German utilities found an 18-20% annual load factor and not the 30% assumed for Minnesota operations (the best case scenario).

5th Wind energy is 2-3 times as expensive as other methods of generating electricity and will increase the cost of a necessity adversely impacting the poor and income layers immediately above them. The source cited above calls it the "most expensive" method of CO2 avoidance.

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6th The transmission line will cross a State highway and a Federal highway with high traffic density. Ice storms bring down the transmission grid and in this case will create a public safety hazard.

7th Wind factories will have to built all across the Dakotas and Minnesota to substantially reduce the hourly frequency when actual savings of CO2 from other fossil fuel plants could occur (Final Report—2006 Minnesota Wind Integration Study, Volume 1. Prepared by Ener Nex Corporation, Knoxville, TN, November 30, 2006). Numerous transmission lines will have to be constructed and no one knows the actual cost that could be inflated by litigation and other costs.

8th Existing utilities like NSP have paid "Wind Curtailment Payments" to wind factories already heavily subsidized by taxpayers when the grid is congested. These additional costs are passed along to existing electric utility customers resulting in higher prices per kilowatt hour. This is like paying farmers to not produce with the difference that public subsidy is also adding farmers to the production base. The "Integration Cost" ($ per MWH of wind energy) ranges from $2-3 for 15% wind; $2.5-4+ for 20% wind; and $3-4.5 for 25% wind) and this does not include wind curtailment payments. Furthermore, the cost of wind generation to the power system reliability is subject to substantial inter-annual variability.

9th Given the goal of public policy to raise electricity prices to reduce the quantity demanded it seems more efficient to impose a tax. The proceeds of the tax could go toward subsidizing carbon sequestration and storage projects. See March 2009 issue of National Geographic Magazine, p. 81.

10th The State and Federal governments could subsidize more efficient electronics in residential and commercial buildings and LED lighting in commercial buildings.

11th The State and Federal governments could tax fuel inefficient cars and trucks heavily to improve automobile, light-truck, SUV, and over-the-road truck fuel efficiency. Over-the-road trucks could be converted to natural gas to reduce our dependence on imported oil with its impact on our nation's huge trade deficit.

12th Noble wind factory is proposed to be constructed in the Red River Valley of the North. This is prime farmland and this project proposes to occupy 22,000 acres. The opportunity cost of this location is the foregone production of wheat, soybeans, corn, and oilseeds. Wheat grown here is wheat for human consumption (high protein hard red spring wheat and hard red amber durum wheat) and is regularly exported in large quantity when the dollar is favorable, meaning cheap to foreign buyers. Our nation's trade deficit has doubled during this past decade and wheat is an agricultural commodity, along with soybeans that is exported and hence reduces our trade deficit. We borrow to finance our trade deficit and so taking wheat and soybeans out of production will increase US borrowing and indebtedness to countries like China, which is

still ruled by the Communist Party. This is not a good legacy for our children and grandchildren.

13th The Federal and State government could reduce our carbon footprint by subsidizing the cost of meeting strict "green building" standards. They could subsidize the installation of electric generation units in buildings where large boilers produce heat. This would create two valuable commodities from the same carbon footprint: heat and electricity.

14th Currently the Energy and Environmental Research Center at the University of North Dakota has a contract from the US Department of Defense to research the feasibility of using soybean oil to fuel our Air Force. This research could lead to a large processing facility to be built near Grand Forks, North Dakota that would produce soybean oil that it would ship to other Air Force bases. The goal of this project is national defense by making the Air Force less dependent on imported oil. This economic activity would have a much larger economic impact LOCALLY than the wind factory. The latter has a negligible economic impact locally since the power will not be sold locally, there will be a minimal employment impact (after construction only 1 person per shift would be on hand at the factory), there will be no local tax revenue generated. The local people will, however bear the costs of the subsidies through taxes and interest and higher utility prices.

15th The local people will bear the cost if these wind factories prove to be uneconomic. Electric utility ratepayers will get stuck with the bill if the wind factory cannot generate enough revenue through electric sales and subsidy to pay its costs.

16th There are negative externalities. Wind factories do not deserve to be designated green energy. This is their marketing plan, but it is not true. Wind factories produce negative externalities, or costs that members of the public bear. They, their substations, and transmission lines produce considerable noise. They contain huge quantities of oil, which can be spilled at a cost to the locals. The transformers contain dangerous chemicals that with oil spills could pollute our ground and surface water. They create a stroboscopic effect in the daytime and the nighttime as the blades intermittently block light and then don't block light. They produce considerable light at nighttime when the stroboscopic effect is worse. There are experts that believe the electrical and magnetic fields around them and large voltage transmission lines present numerous health problems to those exposed to them. Children especially should not have high voltage lines running through their front yards. Rural residents should not have to bear these costs when there are alternative ways of reducing the nation and State's carbon footprint.

17th An alternative way of generating power is via photovoltaic power generation. This technology could be subsidized by government should they feel the need to subsidize. It could be installed on the rooftops of private and commercial buildings to aid in the reduction of electricity consumption.

18th Cellulosic biofuels for vehicles are a better alternative than electric cars. Electric cars will increase electric demand, and given the unreliability of wind generation they will contribute to growth in fossil fuel electric generation.

19th Larger tax credits could be offered to homeowners and owners of commercial buildings to purchase more energy efficient furnaces, air conditioners and appliances.

20th Tax credits and/or subsidy could be used to increase food production nearby cities and urban areas. This would reduce the carbon footprint of the current transportation system. As shown in the March 2009 issue of National Geographic barges on rivers could with greenhouses grow tomatoes, cucumbers, lettuce, strawberries, peppers, melons and greens. These are called "carbon neutral hydroponic farms".

21th Tax credits and/or subsidy could be used to reduce the carbon footprint of the commercial airline industry and aviation in general. Old aircraft could be retired and replaced with aircraft that have much more efficient engines.

22nd Buildings could be insulated much better. Buildings, not cars, produce the most CO2 in the US. The State and/or Federal government could subsidize the manufacture of "structural insulated panels". This would have a much greater economic impact than subsidizing wind factories and would help restore the manufacturing and construction industries in the US.

23rd Many corporations have already shown the way to reduce energy intensity and have cut CO2 emissions by 20 percent (see National Geographic issue previously cited. These corporations include Dow, DuPont, and 3M). The Federal government is already sending teams from the Department of Energy out to discover what the private sector has already done. The governments could support the experts from the private sector teaching others how this is done.

24th The Federal and State governments could cooperate to build mass transit. They could encourage the use of these systems by raising gasoline taxes to pay for them. This would also reduce gasoline consumption.

25th Our nation could reduce the amount of electricity transported over transmission lines. For every kilowatt-hour of electricity used in homes, 2.2 kilowatt-hours are lost over transmission lines. Our current economy is an energy hog and adding wind generation will only encourage the hog to grow larger.

26th We could convert our lightbulbs to compact fluorescents and reduce CO2 from lighting by 42.4 million tons a year, or 36 percent.

27th If we turned off home computers when not in use, we would cut their CO2 impact by 8.3 million tons a year, or 50 percent.

28th Finally, our State should plant trees, especially in and around urban areas. Trees, according to the Arbor Day Foundation, lower ozone, particulates, NO2, SO2, and CO2 between April and the end of October. Trees also lower heating and cooling costs.