The Honorable Mark Parkinson
Lieutenant Governor
State of Kansas
Topeka, Kansas

Dear Governor Parkinson:

A friend from Kansas recently called my attention to your comments about wind energy that appeared in the January 17, 2007, issue of *The Topeka Capital Journal*. Based on those comments, assuming they are reported accurately, it appears that you may not be aware of facts about wind energy that have been uncovered during the past two years.

Facts now demonstrate that much of the information about wind energy distributed by the wind industry and its advocates simply isn't correct. The public, media and government officials have been misled. Accepting the misinformation and adopting policies based on it isn't in the best interest of electric customers, taxpayers, or the environment – even though "wind farms" are highly profitable for organizations that enjoy the huge tax breaks and subsidies. Income for landowners who lease land for turbines is often at the expense of their neighbors.

Two of the points attributed to you in the *Capitol Journal* article deserve particular attention:

1. *The State of Kansas "…has the second- or third-greatest potential for making electricity from wind."* In fact, assessments of "wind energy potential" are, for many reasons, highly misleading bits of information distributed by wind energy advocates. One important reason is that the availability of any *potential* "energy resource," whether wind, biomass, solar, oil, natural gas, coal or nuclear energy has *real* value only if that resource can be captured and used in ways that are technically, economically and environmentally acceptable.

   The fact that winds in Kansas are often prevalent and strong does not mean that those winds can be turned into electricity at a reasonable cost to the electric customers and taxpayers of Kansas. Ample evidence now exists that the adverse environmental, ecological, economic, scenic and property value impacts of wind energy are much greater than have been claimed by wind energy advocates. Certainly "wind farms" would not be built if it were not for the extraordinary tax breaks and subsidies now available to "wind farm" owners. These tax breaks and subsidies merely transfer wealth to a few "wind farm" owners (and a few landowners) from the pockets of ordinary taxpayers and electric customers.

   Please keep in mind that electricity generated from wind has less real value than electricity generated from reliable ("dispatchable") generating units that can be counted on to be produce electricity when it is needed to serve customers demand. (Electricity from wind is intermittent, volatile and unreliable and most likely to be available at times when it is not needed to meet high electricity demand.) If

electricity generated in Kansas from wind energy were to bear anything near its true cost (and considering transmission costs discussed below) there is no realistic basis to believe that it would be competitive with electricity from reliable generating units located near population centers.

2. *"In addition, Parkinson said, transmission lines necessary to bring electricity from the wind-swept hills of Kansas to population centers don't exist."* The wind industry and its lobbyists are pushing hard in many states and in Washington for more transmission capacity to serve wind farms – as long as that capacity is paid for by someone else. Quite likely, additional transmission lines would make it possible to move more electricity produced by "wind farms" but that does not mean that adding such transmission capacity makes economic or environmental sense.

Two facts about the relationship between wind energy and transmission lines are particularly important:

a. Electricity from wind turbines makes inefficient use of transmission capacity and, therefore, the true unit cost of moving wind-generated electricity is high. Specifically, the output from wind turbines is intermittent, highly variable and largely unpredictable. The output varies from zero to the full rated capacity of the turbines making up a "wind farm." In effect, transmission capacity must be adequate to handle the full rated capacity of a "wind farm" even though that full capacity is seldom fully used or accurately predicted. Most of the time, the actual output will be well under ½ of the rated capacity. Therefore, when the true cost of providing the transmission capacity is divided by the actual kilowatt-hours (kWh) of electricity moved, the unit cost per kWh is large.

b. The electricity that would be produced from "wind farms" in Kansas would generally have to be transmitted a long distance to reach population centers. Significant losses occur when electricity is transmitted over long distances. Therefore, the amount of electricity that actually reaches an electric customer is significantly less than the amount produced by a wind turbine. Again, this means higher true cost per kWh of electricity from wind.

Adding transmission capacity to serve "wind farms" has serious cost implications for electric customers because, clearly, the wind industry intends that the costs of providing additional transmission capacity will be borne by electric customers – not by the "wind farm" owners. Apparently, the wind industry's intention is that electric utilities will be encouraged (or forced) to build the transmission lines, that state regulators will include the cost in the utilities' "rate base," the utility would earn a return on that cost, and all the resulting costs would then be passed along to electric customers.

When this occurs, the cost per customer may appear quite small. Those who sanction the action and those who profit from it hope that customers will not notice

– or at least not notice enough to retaliate against the political leaders who make the higher costs possible. In fact, the true *total* cost of adding transmission capacity to serve "wind farms" would be significant and electric customers should be concerned. (Thus, Senator Lee, also quoted in the *Capitol Journal* article, is exactly right.)

If the state government decides to subsidize part of the cost of constructing transmission lines with tax dollars, then it is ordinary taxpayers who bear that cost burden.

Whether the true costs of capturing and moving electricity – including the extraordinary subsidies that flow to "wind farm" owners is borne by the citizens of Kansas in their role as electric customers or as taxpayers, they deserve to know whether building more "wind farms" really makes sense. As indicated above, there are ample reasons to doubt that producing electricity from wind really makes sense when the *true* environmental, energy and economic costs and benefits are evaluated objectively.

I don't have an email address that will permit sending attachments to you so I will send via fax two recent papers on wind energy that I hope you find useful: (1) "Misplaced State Government Faith in Wind Energy," March 1, 2005; and (2) "Stretching or Ignoring Facts and Making Unwarranted Assumptions when Attempting to Justify Wind Energy," October 31, 2006.

Many additional factual papers on wind energy have become available on the Internet during the past two years. Some of those facts are finding their way into the media. One example is Matthew Weald's article, "*Wind energy turns out to have a complication: reliability,"* that appeared in the *New York Times, International Herald-Tribune,* and other newspapers on December 28, 2006. That article is especially pertinent to your situation in Kansas if you must have additional electric generating capacity to meet growing demand.

I hope the above information and the attachments that will be sent via fax are useful to you.

Respectfully,

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Two attachments were included with this letter: "Stretching or Ignoring Facts and Making Unwarranted Assumptions, when Attempting to Justify Wind Energy", October 31, 2006
and "Misplaced State Government Faith in Wind Energy," March 1, 2005.