

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 A.M. on February 14, 2007 in Room 241-N of the Capitol.

All members were present except:

Bill Light-excused

Committee staff present:

Dennis Hodgins, Kansas Legislative Research

Jason Long, Revisor's Office

Rena Hansen, Committee Assistant

Conferees appearing before the committee:

Alan Pollom, Nature Conservancy

Rose Z. Bacon, Morris County Rancher

Ron Klataski, Kansas Audubon

Terry Holdren, Kansas Farm Bureau

Tom Thompson, Sierra Club

Gordon Homeier, Ellsworth Kansas

Richard Plinsky, Lincoln Kansas

Others attending:

Twenty-six including the attached list.

Hearing On:

**HB 2492: Counties; wind power siting approval procedures.**

Revisor Jason Long gave a briefing on **HB 2492**.

Proponents:

Alan Pollom, Nature Conservancy, (Attachment 1), presented testimony in favor of **HB 2492**. He cited some of the history of this bill and how it came to be crafted. Included in his testimony was an overview of the National Wind Coordinating Committee.

Questions were asked by Representatives: Vern Swanson, and Josh Svaty.

Rose Z. Bacon, Morris County Rancher, (Attachment 2), offered testimony in support of **HB 2492**. She noted that currently there are no safe guards for an un-zoned county. Her testimony included a statement by Timothy D. Keane, PhD, a news excerpt on fires, an article on wind turbine syndrome, a report on wind power facts from a London research company, and a before and after picture of the Elk River project in Kansas.

Ron Klataski, Kansas Audubon, (Attachment 3), presented testimony in favor of **HB 2492**. He noted why it is important to have a plan for zoning and a formal procedure for local individuals to have a voice.

Written Proponents:

Virgil Huseman, Ellsworth Kansas, (Attachment 4), offered written testimony to the committee on **HB 2492**.

Questions were asked and comments made by Representatives: Josh Svaty, Annie Kuether, Tom Sloan, and Revisor Jason Long.

CONTINUATION SHEET

MINUTES OF THE House Energy and Utilities Committee at 9:00 A.M. on February 14, 2007 in Room 241-N of the Capitol.

Opponents:

Terry Holdren, Kansas Farm Bureau, (Attachment 5), offered testimony in opposition to the concepts of **HB 2492**. Kansas Farm Bureau believes this bill prohibits growth of wind in the state of Kansas in any un-zoned counties where this legislation, if enacted, would then become a mandate. Farm Bureau believes that **HB 2406** is a better alternative to **HB 2492**.

Tom Thompson, Sierra Club, (Attachment 6), presented testimony in opposition of **HB 2492**. He noted this bill would allow only a handful of neighbors with a petition and one commissioner to stop a project. Sierra Club also believes that citizens should be able to challenge decisions made by county commissions in such matters, in a fair and democratic manner.

Gordon Homeier, Ellsworth Kansas, (Attachment 7), offered testimony in opposition of **HB 2492**. He noted that this bill represents the narrow agenda of a small minority that wants to halt green technology in Central Kansas.

Richard Plinsky, Lincoln Kansas, (Attachment 8), believes **HB 2492** is an attempt to deny his rights as a private land owner to develop wind energy.

Questions were asked and comments made by Representatives: Peggy Mast, Tom Hawk, Vern Swanson, Tom Moxley, Josh Svaty, Annie Kuether, Peggy Mast, Vaughn Flora, Forrest Knox, and Revisor Jason Long.

Representative Tom Sloan presented recommendations, (Attachment 9), for different siting guidelines than those presented in the bill.

Hearing on **HB 2492** was closed.

The next meeting is scheduled for February 15, 2007.

Meeting adjourned.

# HOUSE ENERGY AND UTILITIES COMMITTEE GUEST LIST

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NAME	REPRESENTING
Dana Sprague	Curb
<del>Dave Hollman</del>	KEC
Phil Wagos	KEPCO
Tom Thompson	Sierra Club
Tom Day	KCC
Mark Schreiber	Westar

Testimony on HB 2492

February 14, 2007

Alan Pollom

On behalf of the Kansas Chapter of *The Nature Conservancy*

700 SW Jackson, Suite 804

Topeka, KS 66603

Before the Kansas House Energy & Utilities Committee

Mr. Chairman Holmes and Members of the Committee, thank you for the opportunity to testify in favor of HB 2492.

The Nature Conservancy is a nonprofit conservation organization dedicated to preserving the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and water they need to survive. The Nature Conservancy and its one-million-plus members (over 7,000 in Kansas) have been responsible for the protection of more than 72,557 acres in Kansas and more than 15 million acres nationally.

Late in the year 2003, a large number of proposals for the development of wind energy projects in the Flint Hills region of Kansas provoked a heated public debate about the wisdom of allowing such developments in the largest remaining example of tallgrass prairie remaining in the nation. In an attempt to address the growing concerns, Governor Sebelius directed the State Energy Resources Coordination Council to convene a special Wind and Prairie Task Force whose "primary goal should be to develop recommendations that will help decision-makers find an appropriate balance that promotes our state's wind-energy potential and preserves those natural ecosystems and places of scenic beauty, like the Flint Hills and the Tallgrass Prairie, that cannot be easily replaced."

I was privileged to serve on the Wind and Prairie Task Force (WPTF) and am very pleased to see that this bill seeks to adopt one of the key consensus recommendations of the WPTF. The task force final report lists as its Recommendation # 8: "Landowners, wind developers, and county authorities should use siting guidelines developed by WPTF and the Kansas Renewable Energy Working Group."

The siting guidelines recommended by the WPTF were drawn from two primary sources:

- 1) The National Wind Coordinating Committee's (NWCC) handbook on Permitting of Wind Energy Facilities.
- 2) Guidelines from the NWCC handbook were further refined for Kansas specific considerations by the Kansas Renewable Energy Working Group (KREWG).

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I realize that the number of committees and organizations mentioned here can become a bit confusing. But it bears pointing out that all of these entities were formed with the same purpose in mind, to support the development of an environmentally, economically and politically sustainable wind industry. They all contained members from a broad cross-section of stakeholders including members of the wind industry, landowners, utilities, environmental organizations, federal, state and local officials. These stakeholders put forward guidelines deemed reasonable and appropriate by all parties, clearly not in an effort to block wind energy projects but rather to see wind energy developed in a socially responsible way that *advances* the industry's potential rather than inviting the prospect of a public backlash caused by ill considered projects.

Should unzoned counties choose to rely on these guidelines (which is optional and not required by this bill) it would likely have the effect of discouraging wind projects in some native prairie habitats. As you might imagine, The Nature Conservancy believes it is appropriate to avoid negative impacts to our declining prairie resources. It is also appropriate to steer wind projects into cultivated lands if you are interested in seeing new income opportunities for the greatest number of rural landowners. Because the ownership pattern in cultivated areas involves smaller acreages than those of our major grazing lands, a typical 10,000 acre commercial wind facility located in cultivated lands will invariably result in lease payments to more rural Kansas landowners than the same facility located on native prairie.

In summary, this bill:

- 1) Provides local control and protections to unzoned counties who otherwise will have no ability to address a matter of over-riding importance in their community and to their constituents.
- 2) Neither adds to, nor detracts from, authority currently exercised by zoned counties.
- 3) Does not represent any new financial burden to the subject counties. The only note worthy requirement in this area is that a public meeting be held, which a county commission could elect to conduct as part of its regularly scheduled meeting.
- 4) Provides options that a county may elect (but is not required) to employ to protect public safety and prevent uncompensated damage to roads, bridges and other public services.
- 5) Incorporates siting guidelines carefully developed by a broad cross-section of wind industry, landowners, utilities, environmental organizations, federal, state and local officials. A county may elect (but is not required) to consider these guidelines as part of their deliberations prior to approving a permit for a wind power generation facility.
- 6) Provides a process for siting wind projects in a responsible manner that will lead to greater public acceptance and advance the wind industry in Kansas.

The Nature Conservancy strongly supports the development of appropriately sited wind energy facilities and for that reason; I encourage this committee to take action in favor of HB 2492.



# *National Wind Coordinating Committee*

## *Overview*

*Spring 2005*

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### COLLABORATIVE OBJECTIVES

The National Wind Coordinating Committee (NWCC) is a consensus-based collaborative that identifies issues that affect the use of wind power, establishes dialogue among key stakeholders, and catalyzes activities to support the development of environmentally, economically, and politically sustainable commercial markets for wind power. NWCC members include representatives from a broad spectrum of interests (see back page). All NWCC business, including meetings and workshop information, white papers, member listings, and other wind related events are available on the NWCC web site, [www.nationalwind.org](http://www.nationalwind.org).

NWCC activities are currently designed to explore and address issues such as:

- The electric transmission of wind energy and the integration of wind power into the utility system;
- Environmental and siting issues related to wind power, including wildlife impacts and other siting considerations.
- Tracking economic development activities related to wind energy.

### NWCC MEMBERSHIP

One of the NWCC's key strengths is a broad, balanced membership. The NWCC consists of supporters of wind energy as well as those who see potential concerns with development. Members provide diverse perspectives and represent the following sectors:

- Electric Power Generators
- Environmental Organizations
- The Wind Industry

- State Utility Regulators, Energy Officials, and Consumer Advocates
- State Legislators and Staff
- Local, Regional, Tribal, State & Federal Agencies

The NWCC is managed and facilitated by *RESOLVE Inc.*, ([www.resolve.org](http://www.resolve.org)), a non-profit dispute resolution organization.

### CURRENT NWCC ACTIVITIES AND OUTREACH INITIATIVES

The NWCC has published over a dozen different resource documents, case studies, principles and guidelines. To obtain copies of any documents, see the NWCC catalog on the NWCC website, [www.nationalwind.org](http://www.nationalwind.org) or contact NWCC staff at our toll-free phone number, **1-888-764-WIND**. All papers are free to download from the website. Topics covered in these papers include:

- Siting and Permitting
- Wildlife Issues
- Economic Development
- Wind Energy Transmission & Utility System Integration

NWCC member organizations distribute these publications to their constituent groups and are available for handouts at meetings, by request.

The NWCC also conducts research and workshops to explore key issues related to wind power. Recent issue forums have included discussions on wind energy and water resources management and on credit trading; upcoming sessions will explore the relationship of wind energy with natural gas market changes, and the potential improvements in air quality that can result from wind energy.

**Testimony as a Proponent for HB-2492  
Concerning industrial wind complex development in un-zoned counties.**

**By  
Rose Z. Bacon, Rancher and Wind & Prairie Task Force Member**

**Thank you for allowing this time to give comments relative to HB 2492. I am Rose Bacon. I ranch full-time with my husband in southern Morris County. I have been involved in researching the industrial wind developments for the last 4 years and was honored to serve on the Governor's Wind/Prairie Task Force.**

**Since Morris County is an unzoned county, I am very pleased that this bill is being considered with the KREWG Siting Guidelines as part of the bill. This underlines the growing awareness of the importance of following those guidelines to allow for responsible development, responsible care of our environment, and consideration of ALL landowners rights and concerns.**

**I believe one of the main points concerning wind development that has been virtually ignored up to this time is the fact that: THERE ARE NO REGULATIONS THAT GOVERN THE WIND INDUSTRY...NO FEDERAL, STATE, EPA, KDHE, NO ONE OR NO ENTITY TO TURN TO IN AN APPEAL; NO SAFEGUARDS OR PROTECTIONS FOR THE PEOPLE IN AN UNZONED COUNTY.**

**HB 2492 is a good first step towards giving residents of unzoned counties some voice in their future and the development of their counties.**

**Property rights are important to all of us, but we also know that ownership of property does not give us free rein to do anything we want. Even in an unzoned county, most large industrial developments and many agriculture developments are subject to some type of Federal or State regulations or oversight. Since that is not the case with wind developments, it leaves the counties and neighbors of these projects without protection of any kind. There are no other industrial developments that impact so many acres and so many people that are totally without regulations.**

**Concerns of neighboring landowners include eminent domain, limiting neighbors' options for enrolling in GRP or Conservation Easements, water and erosion issues, fires, lights, noise & safety issues, and property values. I have included several attachments to this testimony that address some of these concerns in more detail.**

**Most rural County Commissioners are ill equipped with both limited time and resources to fully investigate the promotion claims of the wind developers or the full impacts of development. In many rural communities the Commissioners may know or be related to landowners that are leased and may be less than objective. But even the most well-intentioned County Commissioners are no match for the experience of the wind developers. It has taken us four years in Morris County just to obtain road maps of the wind development proposed there. These rural commissioners are just**

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starting on the learning curve of wind developments, while the developers have this process very well rehearsed and have generous time and money resources.

The benefits promised by some developers are often exaggerated and the payments in lieu of taxes offered to a county are not a sure thing. Even with a written agreement, if the wind developer does not pay, there is little legal recourse because this is technically a "gift" and the contract is given "without consideration" and therefore unenforceable. HB 2492 would allow time for county residents to look into these promises and compare them with actual results from other developments.

These developments change not only the face of the landscape, but affect the very culture of our rural communities. These are not local developers that operate with the same standards that rural Kansans are used to. The secrecy and misinformation that characterizes these developments turns communities that are used to working together into communities of dissention, and creates division and distrust among friends, families and neighbors. Lack of any voice in planning or decisions add to this dissention.

In addition, the very heart and culture of caring for the prairie is at stake here. We are very concerned about the very massive scale of wind developments and the impacts on both the land and on us as neighbors. The photos on the handout you were given shows less than half of the Elk River wind development. The statement is often made that only around 100 acres out of the thousands of acres within the project boundary is impacted by the development. But you can see from these photos that the development does impact the whole of the landscape and is not similar to a single cell tower that might be built. These projects do affect all of the leased area as well as neighboring landowners and residents.

As ranchers we strive to be good stewards of the land, to leave it better than we found it. The prairie has been maintained by ranchers who work in synergy with it. It is made more productive not by disrupting it, but by the ability to nurture the native environment. The industrial wind developments are changing our Kansas prairies forever with little consideration of the full impacts on the land or culture.

Thank you for your time and your willingness to consider all aspects of this very important issue. I commend the Committee for considering this bill and strongly urge you to accept it.

**Rose Z. Bacon, Rancher and Wind & Prairie Task Force member  
1181 Four Mile Road, Council Grove, KS 66846 Ph. 620-767-7048**

Enclosures: [email>rkcattle@excite.com](mailto:email>rkcattle@excite.com)

#1. Impact of Industrial Wind Developments on Kansas Watersheds and Hydrology;

By Dr. Timothy Keane PhD. Assoc. Professor at KSU

#2. California Fire Caused by Malfunctioning Wind Turbine; Kern County Calif. Fire Department

#3. Wind Turbine Syndrome; Dr. Nina Pierpont of Malone, N.Y.

Testimony for the New York State Legislature Energy Committee

#4. 2006 Wind Power Report by ABS Energy Research, London, UK

#5. Elk River Before & After Photos



## Impact of Industrial Wind Development on Kansas Watersheds & Hydrology.

I am Timothy D. Keane, PhD., Associate Professor of Landscape Architecture/Regional and Community Planning at Kansas State University. I submit this statement as an affirmation and I swear to the truth thereof.

For the past three years, I have intensively studied the streams of Kansas. My studies and measurements have focused upon “stable” or “reference” streams, which may be defined as: streams which transport the water and sediment delivered to them from their watershed; maintain a consistent pattern, profile and dimension; neither aggrade (fill) nor degrade (cut); and are representative of the balanced streams of the particular hydrophysiographic province in which they occur. Of the 55 streams I have surveyed and assessed, 24 have been in the Flint Hills physiographic region with most of these being in the uplands of this region.

Collection, analysis and consideration of stream data from the Flint Hills region has revealed several characteristics. These characteristics are not unknown to long-time inhabitants of this grassland area. Due to relatively steep side slopes; shallow, clay-rich soils; and precipitation which originates primarily from frontal system storms, Flint Hills streams have developed to handle relatively large amounts of runoff. Once the shallow, upland soils reach saturation, most of the rainfall will flow overland to the streams. In fact, the Flint Hills hydrophysiographic province has the highest discharge (volume of water in the channel) per unit of drainage area (watershed) of any region of Kansas. Although runoff percentages are high, water quality has remained good due to the native grasses and their ability to hold soil in place and to filter particulates from overland flow.

While the runoff percentage in the Flint Hills is high, not all precipitation runs off. If this were the case, the streams would only flow during, and shortly after precipitation events. Some of the moisture that falls on the land, infiltrates the soil. This water also flows downhill, both above and below the water table, towards stream channels. This movement is much slower than overland flow because of greater resistance but it is this water, called baseflow or spring flow – that keeps many Flint Hills streams flowing during rain-less periods. Many recognize that Flint Hills streams are “spring fed” but not all realize that baseflow is of local origin – it is rainwater that has fallen within the stream’s drainage basin (usually within a mile or less of the channel).

Flint Hills ranchers have long relied upon “spring fed” streams to provide water for stock on summer range and often, in winter-feeding areas. The vegetation next to the stream channels, its associated insects, birds, and other wildlife, as well as the in-stream biota also rely upon the baseflow. If changes occur in the watershed that reduce infiltration then baseflow will also be reduced.

The construction of industrial wind turbine complexes in the Kansas Flint Hills uplands will change the infiltration capacity of the soils. Compaction resulting from construction as well as maintenance activities will reduce infiltration and increase runoff. Decreased vegetation density across the construction impact zone (much more than just the tower pads) will lead to accelerated soil erosion. Once these soils are compacted it is difficult, if not impossible to restore pre-disturbance permeability. The area disturbed, compacted, permanently changed will be

extensive. Access roads, parking areas, equipment and material storage areas, thousands of truckloads of concrete, rock trenching to connect turbines underground, and access for cranes capable of setting 300-400 feet towers will result in significant change to the uplands of the Flint Hills. Such change will also be seen in the streams that begin there.

While I cannot forecast the rate of change in Flint Hills streams impacted by wind power development, I can describe the pattern of change that will occur. This pattern is one that has been observed countless times as areas become urbanized. Development leads to increased impermeable surface area and greatly reduces permeability in the remaining un-built area. This means more and more rainfall runs off and less infiltrates. Streams in these areas become “flashy” meaning they flood more easily, more rapidly and more frequently than before development. These streams are also dry for significant periods due to lack of baseflow. The impacts of wind power development on the flow regime of Flint Hills streams will follow the same pattern as caused by urbanization.

Changes in channel shape, bank stability, and streamside vegetation will also follow predictable patterns. Increased runoff means increased discharge (channel flow) and increased velocity which will begin to degrade (down-cut) the bed of the stream. As the stream incises it loses contact with its floodplain and usually will become more straight—both of which increase erosive force. Also, as the stream bed goes down the local water table goes down with it, affecting streamside vegetation. Down-cutting proceeds until bedrock or hard clay is reached and then the water begins to erode the banks. The stream is attempting to regain width and length it lost in the degradation. Here we will see raw, vertical banks from accelerated bank erosion. Many decades will likely pass before the stream is able to reestablish a balance or stable pattern, profile and dimension, albeit at a lower elevation. This reestablishment of stability will only happen if discharge and sediment loads remain consistent.

The development of industrial wind energy complexes in the Kansas Flint Hills will negatively impact the streams that form there. Streams that once flowed year-round will now be dry for significant periods. Meandering streams with low banks covered with native grasses or shrubs will become gullies with mud bottoms and “weedy” annual vegetation alongside. Water quality will decrease. Thus, industrial wind power development will impact the flow regime, the physical stability, the biotic diversity and the chemical quality of Flint Hills streams in developed watersheds. Ranchers who once relied on these streams will need to find alternate water sources due to the likelihood of significant dry periods. They will also have less valuable pasture as the compacted soils will only support forage of lesser density and nutritional value as compared to un-compacted soils. Counties and townships will also be faced with the replacement of bridges and culverts as streams adjust to handle the changed hydrological parameters. The hydrologic impacts of wind power development in the Flint Hills will extend beyond property boundaries.

***'The fire was caused by burning debris from a wind turbine that caught fire due to a malfunction.'***

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Courtesy of the Kern County Fire Department  
 By News Staff Report  
 Description: Flames lap Oak Creek pass  
 Posted by editor - Fri Jun 2, 2006 18:22:48 PDT

Flames that marched across the hills of Oak Creek Pass on May 26 brought firefighters from several jurisdictions to battle the area's first large-scale fire of the season.

The fire began about 2:10 p.m. west of Tehachapi-Willow Springs Road approximately one mile south of Oak Creek Road and burned approximately 900 acres of desert brush and grass. The fire was 40 percent contained by 10 p.m.

According to Kern County Fire Department inspector Tony Diffenbaugh, 241 firefighters battled the fire.

"Crews were assisted by airtankers, helicopters and bulldozers, however, the air operation was halted after about two hours due to high wind conditions," he said. Diffenbaugh also said that rugged terrain along with the high wind conditions hampered containment efforts.

He said firefighters constructed a fire break approximately seven miles long and used Tehachapi-Willow Springs Road to stop the spread of the fire.

"Several spot fires on the east side of Tehachapi-Willow Springs Road that were started by wind blown embers were quickly extinguished by firefighters," Diffenbaugh said.

He said that several structures in the area, including homes and wind energy producing equipment, were threatened by the fire.

Cooler temperatures and higher humidity overnight aided firefighters in their efforts to secure the perimeter of the fire.

Diffenbaugh said that by 7 a.m. on May 27, the fire was 80 percent contained. He said firefighters stayed on remained on the fire until May 28 until the fire is completely controlled.

"The reduction in the final acreage of 787 is due to more accurate mapping performed by the KCFD Geographical Information Systems (GIS) Unit," Diffenbaugh said. "Using GPS equipment, GIS personnel mapped the entire perimeter of the fire."

He said that by using a specialized computer program, the information was converted into a highly accurate map of the fire.

The fire was caused by burning debris from a wind turbine that caught fire due to a malfunction.

The firefighting operation was conducted under the command of KCFD Battalion Chief Hiedi Dinkler. California Department of Forestry, United States Forest Service, CCI fire crew and Los Angeles County Fire Department assisted with the fire.

Contributing writer Nick Smirnoff contributed to this article.

## News Articles

### Wind Turbine Syndrome

*Here is a picture of the d'Entremont home in Nova Scotia, where their ancestors have lived since the 1870s. Daniel and Carolyn d'Entremont, with their 5 children, had to abandon it on Feb. 21, 2006, because of "wind turbine syndrome," the cluster of symptoms being found around the world where people live near giant wind turbines.*

*March 12, 2006 in Kirby Mountain blog*



Dr. Nina Pierpont of Malone, N.Y., has interviewed them as part of her research into this problem. She testified before the New York State Legislature Energy

Committee on March 7. A 68-KB PDF of her testimony is available at [AWEO.org](http://AWEO.org). Here is an excerpt.

Three doctors that I know of are studying the Wind Turbine Syndrome: myself, one in England, and one in Australia. We note the same sets of symptoms. The symptoms start when local turbines go into operation and resolve when the turbines are off or when the person is out of the area. The symptoms include:

1. Sleep problems: noise or physical sensations of pulsation or pressure make it hard to go to sleep and cause frequent awakening.
2. Headaches which are increased in frequency or severity.
3. Dizziness, unsteadiness, and nausea.
4. Exhaustion, anxiety, anger, irritability, and depression.
5. Problems with concentration and learning.
6. Tinnitus (ringing in the ears).

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Not everyone near turbines has these symptoms. This does not mean people are making them up; it means there are differences among people in susceptibility. These differences are known as risk factors. Defining risk factors and the proportion of people who get symptoms is the role of epidemiologic studies. These studies are under way. Chronic sleep disturbance is the most common symptom. Exhaustion, mood problems, and problems with concentration and learning are natural outcomes of poor sleep.

Sensitivity to low frequency vibration is a risk factor. Contrary to assertions of the wind industry, some people feel disturbing amounts of vibration or pulsation from wind turbines, and can count in their bodies, especially their chests, the beats of the blades passing the towers, even when they can't hear or see them. Sensitivity to low frequency vibration in the body or ears is highly variable in people, and hence poorly understood and the subject of much debate.

Another risk factor is a preexisting migraine disorder. Migraine is not just a bad headache; it's a complex neurologic phenomenon which affects the visual, hearing, and balance systems, and can even affect motor control and consciousness itself. Many people with migraine disorder have increased sensitivity to noise and to motion -- they get carsick as youngsters, and seasick, and very sick on carnival rides. Migraine-associated vertigo (which is the spinning type of dizziness, often with nausea) is a described medical entity. Migraine occurs in 12% of Americans. It is a common, familial, inherited condition.

**Web link:** <http://kirbymtn.blogspot.com/>

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<http://www.windwatch.org/news/2011>

3/15/2006

## Wind power report shows facts instead of myths

Power Management DesignLine  
(08/11/2006 0:18 PM EST)

ABS Energy Research's ([www.absenergyresearch.com](http://www.absenergyresearch.com)) 2006 Wind Power Report details an eventful year in this sector of the renewable energy industry. While generating capacity is up, solid new evidence suggests that some of the costs of producing electricity using the breeze sometimes mean that wind generation is not always unambiguously good. So are industry critics quoting facts or tilting at windmills?

The report shows continued growth in wind power generating capacity. Capacity in this type of renewable energy increased by 11.3 GW in 2005 to reach a total of 59 GW. Germany is the world leader, with 31 percent of the world's installed capacity, followed by Spain, the USA, India and Denmark.

The big surprise among the five leaders was the recovery and surge in production in the USA after years of stagnation. Guaranteed production tax credits, valid for a three year period instead of annually have justified the new investment in renewable energy.

Growth is expected to continue. As the leaders consolidate and re-power smaller installations with larger turbines, the market is now widening and entering a new phase with many new countries entering the market for renewable energy resources, such as wind.

The most important findings of this report highlight studies that raise critical concerns challenging some of the claims made for wind power. Badly needed evidence is now available after three years of large scale operation of wind turbines in five countries. In one such country, Ireland, the government placed a moratorium on wind power development, although this has been rescinded.

These studies are the first real evidence showing how wind actually works, as opposed to what has been claimed, and come from some of the most authoritative voices on energy in the world. Reports from E.On Netz, the system operator with the largest wind power feed-in in the world, and Eltra of Denmark, which had the largest percentage wind power contribution, show disturbing results.

E.On cites a study from the Deutsche-Energie Agentur. The report was sponsored by the German government and all sides of the industry. Among bombshells contained inside, the study suggests that while wind power capacity will reach 48 GW by 2020 in Germany, the source is so intermittent and unreliable that it is equivalent to only 2 GW of stable fossil fuel capacity.

The evidence also shows a mismatch of supply and demand. High pressure weather systems bring cold winters and hot summers which unfortunately coincide with low wind levels. These meteorological realities mean that wind makes its maximum contribution when demand is lowest and its minimum contribution when demand is highest. In 2004, wind accounted for 20 percent of total electricity production in Denmark but supplied only 6 percent of consumption, because it produced a surplus at periods of lowest demand. What's more, 84 percent of Danish wind-generated electricity was exported to Norway, and sold at a loss for Denmark. Furthermore, the Norwegian electricity system uses carbon free hydro power, so the effect of carbon reductions realized in power produced by windmills was nullified.

Also, because of this variability in wind, back-up fossil fuel plants must be operated at low load to maintain system reliability. There is new evidence that shows that switching base load fossil fuel plants on and off to balance a system produces higher carbon emissions than continuous operation, certainly not a supposed benefit from switching to renewable energy sources.

Because wind installations tend to be concentrated in areas with high wind speeds, regional grids are heavily overloaded at times of maximum feed-in. Each country studied reported extreme difficulties in balancing the grid. A further 2,700 km of costly high voltage transmission lines will be required in Germany to accommodate new wind capacity.

It is clear that wind-generated electricity can only work as part of a generation portfolio. The US Department of Energy advocates small local targets within states, most recently proposing targets of 100 MW in each of the 30 states, rather than the huge wind parks favored in Europe.

ABS Energy Research's report does not relegate wind power to the dustbin. But it does show how essential proper analysis is to establish what renewable energy can and cannot deliver and how it must be accommodated within a total electricity generation system. Objective analysis is essential. Nearly every one of the points described in the study has been labeled a "myth" by a lobby group.

ABS Energy Research's ([www.absenergyresearch.com](http://www.absenergyresearch.com)) extensive report was compiled through a comprehensive literature search, the help of the regulators and assistance from governments, energy organizations and metrological bureau.

For more information, please contact Melany Krangle at: ABS Energy Research, 8 Quarry Road, London SW18 2QJ, UK. Tel:

[http://e9.email.excite.com/msg\\_read.php?m=0&s=1&d=1&mid=6700&sl=0&ArdSI=6c4...](http://e9.email.excite.com/msg_read.php?m=0&s=1&d=1&mid=6700&sl=0&ArdSI=6c4...) 12/20/2006



Elk River - Before & After (Less than  $\frac{1}{2}$  of the 100 turbines are shown)

February 14, 2007

**Statement in Support of H.B. 2492**  
**Kansas House of Representatives, Energy & Utilities Committee**  
**By Ron Klataske, Executive Director, Audubon of Kansas**

Mr. Chairman and members of the committee, I thank you for the opportunity to testify in support of H.B. 2492 on behalf of Audubon of Kansas.

**Transparency Serves Public Interests.**

One of the many things that makes this country great is the fact that government at both the state and national levels require transparency. Everyone seldom agrees with all decisions, but there is inherent fairness in the fact that the Freedom of Information Act, sunshine laws, C-Span and freedom of the press to provide openness and insight on decisions. Many industries, including for example those that deal in securities, are also now required to provide transparency to protect investors and/or the public.

Although transparency requirements have translocated some forms of deal making from a venue of closed doors and smoky rooms to fresh air and public view, governmental efficiency and relevant business practices have not suffered. In fact, greater public confidence in government and business has generally resulted.

A major benefit of House Bill 2492 is the fact that, if enacted, it will provide local residents, communities, elected officials, landowners with leases and neighboring landowners with information about potential massive projects that may transform rural agricultural land use patterns to areas that are dominated by industrial facilities. This transformation may in term affect property values and personal land uses, community amenities, and ecological resources.

**Public Forums Serve Public Interests.**

Another major benefit of House Bill 2492 is the fact that, if enacted, it will provide local residents, communities, elected officials, landowners with leases and neighboring landowners with a formal procedure to have a voice in the decision making processes that may transform the area. With the information provided, and public forums for discussion, public officials are then in a better position to consider the concerns of their constituents on both sides of the fence. It also allows the community and public officials to consider the aspirations of developers, their observance of siting standards, and their pledges to fulfill responsibilities relating to impacts on roads and bridges, decommissioning, minimum setbacks, and resources of special concern.

At present, there is little or no transparency in counties without zoning; developers do not have to disclose any information (accurate or otherwise); there are no requirements for consideration of other values of public or private interest; and, there are no formal avenues for residents or public officials to request answers to their questions.

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If state and county officials abrogate all authority to guide industrial windpower developments, they leave land use decisions in the exclusive hands of developers, domestic or foreign. That leads to a process that is different for every developer. Counties without zoning will be selected by some "Limited Liability Corporations" with that as a primary motive. Counties with zoning will be equally considered and selected by utilities with high standards of credibility.

As an analogy, hunting and fishing regulations are not really needed to protect resources from ethical sportsmen and women. Enforcement is only needed to keep poachers, trespassers and those that would take fish with dynamite from damaging resources and spoiling recreational opportunities for everyone.

Many local residents and rural communities are not presently equipped to deal with highly financed firms that come to an area with promises of prosperity. In some instances as few as one or two landowners may reap rewards, while property values and interests of everyone else is totally disregarded. Without some type of county zoning or state provisions as provided by this bill there is no opportunity for balance.

When local residents raise concerns in the media, these good Kansas citizens may be brushed aside and accused of only being concerned because the development is "in their back yard," even if that is not the reality or the issue. I recently received a quote on the merits of folks standing up for what they believe--even if it is in their own community (back yard). Please let me share it with you:

### **"Nimbyism has its virtues, too**

A research team at the University of Barcelona found that local protesters often address real issues of bad planning that are ignored or discounted by authorities and developers. The study showed that nimbys could prevent the destruction of rural amenities, and often work against public policy which favours private interests. The director of the project, Dr Valeria Carril, commented: "Nimbys are in fact protecting the whole community from decisions that might not be in the best interests of the locality. The interest of the developers is obviously to make a profit but will they do anything for the quality of life of the rest of the community? The answer is often No, and so the protesters are an essential part of getting the proper arguments and merits of any plan discussed."

--**William Starkey**, Innerdownie, Crook of Devon, Kinross.

Planning and siting standards will bring people together, and improve the environment for better developments--possibly even more developments, especially on the millions of acres of cultivate land where even more landowners will benefit. I know of three county commissioners who were interested in being here today to share similar views, but were unable to schedule an appearance. They are in counties with zoning regulations. Part of their message would be that counties without zoning are presently at an incredible disadvantage when dealing with large and even multinational companies, and the issues involved with these major developments.

**2/14/07**  
**House Energy and Utilities Committee**

**Testimony on HB2492**

**Virgil Huseman, Ellsworth County Rancher**  
**Proponent**

I am Virgil Huseman, a farmer and rancher in Ellsworth County.

The Smoky Hills wind project in Ellsworth and Lincoln counties is a perfect example of the need for HB2492. Both counties are un-zoned. The county commissioners feel they have no power of any kind with regard to this project.

This industrial wind complex will be sixteen miles long and four miles wide. It will impact the community and alter the landscape forever. No one in our community has been given an opportunity to review its impact, have any input into its siting, or even ask questions publicly about its affect on nearby residents. Trade Wind Energy, the developer on this project, has never held a meeting where the public was invited to discuss this project.

Even though the developer has started to drill core samples at the tower sites, the Ellsworth county commissioners still have not received an accurate map of the wind farm that includes tower sitings. In fact, the map that Trade Wind Energy presented to this committee included land within its boundaries that is not leased to them. We accidentally discovered this by talking with the landowners. To say that they are a little upset by this would be an understatement. But, I guess this is not a violation of any rule because there are no rules.

The Smoky Hill project has been put together on the quiet... almost in secret. There have been no public meetings. Landowners have signed confidentiality agreements. No agency of state, federal, or county government has any oversight whatsoever. Neighboring landowners and residents are not even notified that there will be an industrial wind complex built next to them. There is no way to appeal, no where to ask questions, no where to even get facts and information about the project. This is ludicrous. It's just not right.

There must be some rules. HB2492 is a step in the right direction. We respectfully ask for your support of HB2492.

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*PUBLIC POLICY STATEMENT*

HOUSE COMMITTEE ON ENERGY AND UTILITIES

RE: HB 2492, Concerning counties; relating to approval of wind power generation facilities.

**February 14, 2007**  
**Topeka, Kansas**

**Testimony provided by:**  
**Terry D. Holdren**  
**National Director**  
**KFB Governmental Relations**

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Chairman Holmes, and members of the House Committee on Energy and Utilities, thank you for the opportunity to appear before you today. I am Terry Holdren, National Director—Governmental Relations for Kansas Farm Bureau. KFB is the state's largest general farm organization representing more than 40,000 farm and ranch families through our 105 county Farm Bureau Associations.

Farm Bureau strongly opposes the siting guidelines and zoning requirements presented in HB 2492. While our membership supports the concept that siting guidelines should be consistent across the state and therefore are best developed at this level, it is our belief that the bill as presented today would have the effect of preventing the development of wind energy in Kansas. Not only does the bill place significant requirements on the developing companies, it also requires that upon a petition by only 10% of the affected landowners the County Commission must approve a proposed project by a supermajority vote. The bill defines supermajority as 75% or more, which in most counties in the state, where the County Commission is a three-member body, would equal a unanimous vote.

As you know Kansas has tremendous potential for the development of wind energy resources. That potential creates opportunities for our members and other landowners

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to profit from their decision to participate in a wind energy project through lease agreements. That additional revenue stabilizes farm incomes and can provide a much needed boost to rural economies. In this regard, we support the development of wind energy—be it large scale commercial wind farms or small community projects—across the state.

Ultimately, we believe the development of this resource is a property rights issue. Those who own and operate land in Kansas are the proper individuals to make decisions about the use and development of their land. KFB will oppose actions that would diminish that right.

In this instance, we believe there is a better way. We would respectfully request that you consider HB 2406 which provides tax credits for wind energy development and requires that developers consider and comply with the same guidelines contained in the legislation before you today. KFB supports tax credits for renewable energy, and the siting conditions in that proposal as a reasonable alternative to those before you today.

Thank you for the opportunity to share the views of our membership. We stand ready to assist as you seek to create opportunities to expand our renewable resource opportunities across Kansas.

**Testimony before the House Energy and Utility Committee  
February 14, 2007  
Opposing H.B. 2492**

Chairman Holmes and members of the committee.

My name is Tom Thompson and I represent the Kansas Chapter of the Sierra Club. I have come today to speak in opposition to H.B. 2492.

H. B. 2492 provides for guidelines for siting wind farms and for county involvement in siting decision-making. This bill allows a protest petition from only 10% of affected landowners, as defined as anyone within 2000 feet from land leased by the wind farm developer which would then require a 75% supermajority of county commissioners to approve a wind farm.

Potentially, a wind farm lease can be much greater than just the footprint of the facility. Furthermore, since many counties have only 3 commissioners approval of a wind farm would require all 3 votes. This would allow only a handful of neighbors with a petition and one commissioner to stop a project. This applies to any county without zoning and planning rules. Counties are currently able to develop zoning that would help them to appropriately site wind farms.

In contrast, a bill passed in 1994 gave citizens the right to overturn a commission's vote to approve a corporate hog farm. However, in this bill, citizens had to get 5% of all registered voters in the county to sign a protest petition and then they had to win a majority in a countywide referendum. Thus, HB 2492 would make it much easier to stop a wind farm than a large hog factory.

The Sierra Club supports the concept of siting guidelines for all power plants and industrial facilities. It also believes that citizens should be able to challenge decisions made by county commissions in such matters in a fair and democratic manner. It believes that many of the issues presented in H.B. 2492 should be addressed in siting guidelines but that they should be based on carefully thought out scientific considerations.

The Sierra Club opposes H.B 2492. However, it supports many of its concepts and recommends that further investigation is needed using a more deliberative process perhaps as part of an interim committee to develop these guidelines and challenges to their implementation.

Tom Thompson, lobbyist  
Sierra Club

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I am Gordon Homeier. I am a landowner in Ellsworth and Lincoln counties who has leased land to a wind developer under the assumption that the state of Kansas had siting guidelines which were followed by the developer of The Smoky Hill Wind Farm Project.

Before you today we have a bill which would take my property rights to lease my land for energy production out of my hands and place them in the hands of a county commission who was not elected to be a zoning board but a governing body to govern the county. We ask that you take a close look at what this bill asks you to do. It is just a narrow agenda of a small minority that wants to halt green technology in Central Kansas for their personal agenda.

Please consider the greater good of our concern with global warming that will destroy our ecology much more rapidly than any wind farm. We have been asked by our Governor and President to develop our alternative energy resources. If we allow bills like this to become law it will take Kansas back to the Stone Age instead of moving forward. We may have differences of opinion on the siting but we should not miss developing some of the most productive areas of the state.

The land that I have leased to Smoky Hills for wind development is not the "pristine prairie" that some want you to believe. It is approximately 80% cultivated land and balance being grazed grassland which are by no means untampered with. My late wife's great grandfather opened stone quarries in this pastureland to provide building materials for the home I live in and the church I attend and the fences to hold the cattle in.

We ask you not to be tempted to give in to special interest groups to limit our ability to utilize our lands with the newest and best technology be it farming, be it ranching or BE IT ENERGY!.

Gordon Homeier  
1585 Avenue B  
Ellsworth, KS 67439

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Response From A Private Landowner AGAINST House Bill No. 2492

Private landowner rights would be compromised and violated with the passage of this bill. Regulating private industry and transferring the decision making process from private landowners to a board of county commissioners is just not right.

In Southern Lincoln County, KS, where I reside, and operate a diversified farm and ranch, being a good steward of the land is very important to me. Construction of grass waterways, terraces, diversion dams, windbreaks, and a water distribution system, are improvements I have made to better my land. Rangeland on my property includes fragmented or altered landscapes from stone quarries and previously cultivated land. Deciding to plant a specific crop on a specific field or determining what breed of cattle to raise are my personal rights. This bill is an attempt to deny my rights as a private land owner to develop wind energy.

Wind turbines are an investment for the future of energy. Private industry and willing landowners are trying to promote wind energy. Fabricating a bill that takes the decision process away from the private land owner would be like dictating how to dress, what to drive, and where to eat.

Richard Plinsky  
365 North Highway 14  
Lincoln, KS 67455  
785 524 4232

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New Section 5. The following are guidelines with which siting of a qualifying electric generation facility shall comply:

(a) *Land use guidelines.* The proposed electric generation facility owner shall:

(1) Contract with one or more federal, state, or not-for-profit organizations with recognized expertise in identifying habitat for threatened and endangered species, threatened and endangered flora, and environmentally or culturally unique land to perform surveys of potential construction sites. Such agency's or organization's report shall become part of the public record when a site is preliminarily selected by the proposed facility's owner.

(2) Such electric generation facilities shall be sited on lands altered from their original appearance, such as cultivated lands, areas containing non-native grass species used for pasturing livestock, or on fragmented areas of less than five acres containing native grasses.

(b) *Noise management guidelines.* The proposed electric generation facility owner shall:

(1) Set generation facility back from residential dwellings not located on grounds leased for turbine placement by at least 1,000 feet and from residential dwellings on leased grounds by at least the height of the tallest structure plus 50 feet.

(2) Set generation facility back from property line of non-leased land by at least the height of the tallest structure plus 50 feet.

(c) *Natural and biological resource guidelines:* The proposed electric generation facility owner shall:

(1) Design and install generation units and appurtenances to minimize wildlife nesting, roosting, and intrusion in flight or migratory pathways.

(2) Construct, maintain, and at least annually update material in one or more educational kiosks that describe environmental protection steps taken during construction and operation of the generating facility and describes the generation units and their operation. Such kiosk to be placed at locations most likely to be visited by local and non-local residents traveling in the area and in proximity to the generating facility.

(3) Develop a habitat enhancement area in cooperation with the Kansas Department of Wildlife and Parks that is at least as large as the total ground covered by the generating units and appurtenances. Such habitat enhancement area may be leased or owned by the generation units owner and maintained with guidance from the Department at least until the generation units are decommissioned and dismantled. Habitat enhancement area may include, but is not limited to, wildlife food plots, habitat, and water supply.

(d) *Visual impact guidelines:* The proposed electric generation facility owner shall:

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(1) Prepare accurate visual representations of the proposed facility from the perspective of all residential dwellings within one half mile of the proposed facility.

(2) Prepare accurate visual representations of existing man-made structures from the perspective of all residential dwellings within one half mile of the proposed facility.

(3) Damage to existing roads and any land used for newly constructed roads to serve the facility shall be restored to original condition for existing roads or the condition most appropriate for the on-going operation of the facility for newly constructed roads.

(e) *Community Relations*: The proposed electric generation facility owner shall:

(1) Hold at least two public information workshops to inform area residents of the proposed facility. Notices shall be mailed to all residences within one half mile of the proposed facility and at least one week before such workshop a notice shall be printed in the newspaper that serves that area.

(2) Such public information workshops may be after contacts are made with landowners who may or have received contracts to lease their lands for the proposed facility. Such workshops shall be at least one week apart and shall not occur on the same day of the week.

(3) Such public information workshops shall provide information of general interest to the residents of that area, including, but not limited to, the accurate visual representations; environmental protection actions proposed; partnerships with federal, state, and not-for-profit agencies and organizations; decommissioning and site restoration plans; and anticipated noise levels at the project's outer site limit.

(4) Such public information workshops shall provide information regarding background resources that interested parties may investigate regarding the type of generation facility proposed.

(5) Local governments shall be apprised of anticipated payments-in-lieu-of-taxes that will be made, road repair proposals, decommissioning and site restoration plans and guarantees, and such other issues as are mutually agreed upon.

(6) Provide preferences within the competitive bidding process for local contractors and providers for services, supplies, and equipment during the construction and operation phases of the facility.