

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 A.M. on January 29, 2007 in Room 313-S of the Capitol.

All members were present.

Committee staff present:

Mary Galligan, Kansas Legislative Research
Dennis Hodgins, Kansas Legislative Research
Jason Long, Revisor's Office
Renaë Hansen, Committee Assistant

Conferees appearing before the committee:

Representative Vaughn Flora
Laurance Price, MD
Donn Teske, Kansas Farmers Union
Tom Thompson, Sierra Club
Tom Giessel, pawnee County Farmers Union
Craig Volland, Sierra Club
Harry Bennett, Merriden Kansas
Ray Dean, University of Kansas
Wes Jackson, Salina Kansas
Roger Ringer, Quinter Kansas
Mark Lawler, Kansas City Kansas
Joe Spease, Overland Park Kansas
Margaret Thomas, Kansas Natural Resource Council
Earl Watkins, Sunflower Electric Power Corporation
Wayne Penrod, Sunflower Electric Power Corporation
Earnie Lehman, Midwest Energy
Mark Schreiber, Westar
Joe Dick, Board of Public Utilities, Kansas City Kansas

Others attending:

Fifty guests including those on the attached list.

Hearing On:

HB 2219: Moratorium on construction of coal fired electric generation.

Proponents:

Representative Vaughn Flora introduced the bill to the committee.

Laurance Price, MD, (Attachment 1), spoke in support of **HB 2219** noting that the mercury emitted into the air from coal fired energy plants is toxic to our way of life.

Donn Teske, Kansas Farmers Union, (Attachment 2), supports **HB 2219** because as an organization they are in favor of renewable energy sources.

Tom Thompson, Sierra Club, (Attachment 3), spoke in favor of **HB 2219** because of the issue of global warming affecting the entire world.

Tom Giessel, President, Pawnee County Farmers Union, (Attachment 4), spoke in favor of **HB 2219** and noted the most important issue to him was the change of water rights for this power plant from Kansas farmers, to others who will use the energy created that are not in Kansas.

Craig Volland, Sierra Club, Air quality committee chair, (Attachment 5), spoke in favor of **HB 2219** because the current technology for coal fired plants does not have the ability to contain and capture the emissions.

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Additionally, he noted the cost of building these plants, and the increased costs of Wyoming coal.

Harry Bennett, Merriden, KS, for his daughter, Dr. Eliza Apple Bennett, Wisconsin, (Attachment 6), spoke from an obstetricians point of view and how the mercury emitted in the environment, from coal fired plant emissions, affects the unborn fetus. She is in support of protecting the most vulnerable of Kansas citizens and supports **HB 2219**.

Ray Dean, EECS Professor Emeritus, University of Kansas, (Attachment 7), spoke in favor of **HB 2219** as the pollution from the coal fired plant kills people, dries the soil, destabilizes the biosphere, and disrupts the economy.

Wes Jackson, (Attachment 8), Salina Kansas, spoke in support of **HB 2219**, because of the current climate change that is occurring, noting that we should use energy efficiency to change our consumption of energy and not continue to produce more energy and thus more coal generated pollution.

Roger Ringer, Quinter, (Attachment 9), spoke in support of **HB 2219**, noting what the twenty-first century electric grid will look like and how Kansas should move towards that model.

Mark Lawler, KC KS, (Attachment 10), spoke in favor of **HB 2219**, noting some of the positive economic benefits of wind projects for Kansas.

Joe Spease, Overland Park Kansas, (Attachment 11) spoke in favor of **HB 2219**, noting we need the moratorium so we can fully understand what building coal plants will do to our farmers.

Margaret Thomas, KS Natural Resource Council, Sustainable Sanctuary Coalition of KC, Prairie Village Environmental Community, Prairie Village Kansas, (Attachment 12), spoke in support of **HB 2219**, with specific points on economic issues and environmental issues affected by further production of coal fired plants.

Questions were asked and comments made by Representative Peggy Mast.

Opponents:

Earl Watkins, President and CEO, and Wayne Penrod, Executive Manager of Environment, both with Sunflower Electric Power Corporation, (Attachment 13), spoke in opposition to **HB 2219**, noting the long term planning that has been in the works for the plants to be built in Holcomb Kansas, additionally noting the probable loss of the entire proposed bio-energy plant if the moratorium takes place. He then addressed the issues that Kansans might have with the building of coal plants. Wayne Penrod, spoke on the environmental issues surrounding the project. Mr. Watkins spoke on transmission issues, and economic development of this area of Kansas. He noted if you pass this legislation you will be terminating this project.

Earnie Lehman, President, Midwest Energy, (Attachment 14), spoke in opposition to **HB 2219** as this legislation would stop the plant from developing and require Midwest energy to go outside of the state for energy to meet its' need for energy.

Mark Schreiber, Director of Government Affairs, Westar, and for KEPCo, (Attachment 15), opposes **HB 2219**, noting the planning process they go through to determine future energy needs and how to acquire that energy and keep "the lights on" as required of them by law.

Joe Dick, Government Affairs Director, Board of Public Utilities Kansas City, Kansas, (Attachment 16), spoke in opposition to **HB 2219**.

Questions were asked and comments made by Representatives: Cindy Neighbor, Vaughn Flora, Annie Kuether, Tom Sloan, Tom Hawk, Carl Holmes, Tom Moxley, and Oletha Faust-Goudeau.

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Written Proponents:

Kim Hanson, Mission KS, (Attachment 17), offered written testimony in favor of **HB 2219**.

Daniel Bentley, Lawrence KS, (Attachment 18), offered written testimony in favor of **HB 2219**.

Ken Lassman, (Attachment 19), offered written testimony in favor of **HB 2219**.

Michael Almon, Kaw Council, Lawrence KS, (Attachment 20), offered written testimony in favor of **HB 2219**.

Phil Morse, Topeka KS, (Attachment 21), offered written testimony in favor of **HB 2219**.

Greg Stevens, Salina Catholic Rural Life Commission and others, (Attachment 22), offered written testimony in favor of **HB 2219**.

Hearing on **HB 2219** was closed.

The next meeting is scheduled for January 30, 2007.

Meeting adjourned.

Mercury Poisoning from Coal-Fired Power Plant Emissions

Laurance W. Price, MD*

January 27, 2007

For many years mercury was not generally recognized as a toxic substance but now it is known to be dangerously toxic and methyl mercury, the form of mercury found in fish, is recognized as a potent neurotoxin. We are protected from the mercury trapped in the ground and in coal until we burn the coal, releasing mercury into the atmosphere. After release from coal mercury gradually enters our food chain and slowly accumulates in plants, fish, and other wildlife. Eventually it reaches and accumulates in humans. The single largest man made source of mercury pollution in the United States is power plant emissions.

The critical human organ for mercury toxicity is the brain. Sadly, the developing brains of fetuses, infants and small children are particularly vulnerable to mercury's toxic effects, so are the brains of individuals compromised by genetic inheritance or environmental exposures. Experimentally, mercury has been shown to be directly toxic to neurons. In high concentrations in humans it is known to produce severe neurodevelopmental defects and fatalities. In lesser amounts its effects can be subtle and difficult to identify but have been linked to impairment of cognition and muscular coordination, diminished IQ and impairment of memory and of language development and attention span. These links have led many to believe the toxin contributes to the incidence of autism, attention deficit hyperactivity disorder (ADHD), Alzheimer's disease and other poorly explained neurologic afflictions. Unfortunately the question of causation in these conditions is highly controversial. For example, many parents of autistic children and some medical investigators point to mercury as the most likely cause for the increasing incidence of autism while many established medical authorities insist definite proof of this is lacking and dismiss the possibility. (One way to resolve the issue of suspected causation for any or all of these conditions would be to continue our rush to provide power by burning coal, allowing continued accumulation of environmental mercury.)

Several states are taking early steps to try to slow the sudden rush of planned coal plant construction and the accompanying expected pollution problems. In April of 2006 Idaho adopted a two-year moratorium on coal-fired power plants establishing a "zero new mercury emissions" limit. In May Minnesota signed into law a mercury emission standard stricter than that proposed by the federal government. Illinois, New York, Michigan, Georgia and Montana are considering similar rules. Particularly impressive is action in Pennsylvania where it was announced in November that their Governor has proposed deep cuts in the power plant mercury emissions in the state, despite opposition from power plants and mining companies. And, in a November 2006 policy statement the American Medical Association publicly concluded that federal mercury emission standards for coal fired power plants are inadequate for the protection of health of American citizens. They recommend that state governments assume a protective stance and set their own standards.

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To diminish further compounding of the serious health risks produced by burning coal Kansas needs to follow the AMA's lead. We must avoid the path of allowing political or economic interests to endanger the health of our citizens. As mercury is an indestructible element, that released by coal burning will be with us forever; unfortunately, many of the injuries it causes are irreversible. A temporary moratorium on new coal-fired power plant construction is appealing as a positive step which would allow time for further discussion and understanding of the grave threats such plants could bring.

Resources:

US Government Environmental Protection Agency web site:
<http://www.epa.gov/mercury/index.htm>

Kluger, Jeffry, "Mercury Rising". Time Magazine, Sept 11, 2006.

Minamata Disaster, On the Internet Google "Minamata Disaster"

Iraq Disaster, on the Internet: Google "Iraq Mercury Poisoning" or "Iraq's Secret Environmental Disasters"

A Silent Pandemic. Harvard School of Public Health Press Release, 7 Nov. 2006.
Internet: <http://www.hsph.harvard.edu/press/releases/press11072006.html>

Technical Report: Mercury in the Environment: Implications for Pediatricians (RE109907). American Academy of Pediatrics. Pediatrics, Vol. 108 No.1, July 2001, pp 197-205.

Kansas Sierra Club Calls for Coal Plant Moratorium, Kansas Chapter, Sierra Club, 26 Sept. 2006. Internet: <http://www.kansas.sierraclub.org>

AMA adopts new policies on mercury pollution...
On the Internet Google "AMA Mercury Pollution Policy"

IRRC APPROVES STATE-SPECIFIC PLAN TO CONTROL TOXIC MERCURY EMISSIONS. On the Internet Google "Pennsylvania Governor's mercury emissions" (don't include quotation marks)

*Dr. Price is a retired pathologist who spent his career involved in the investigation of the causes of death and disease. MD from KU in 1959; subsequent training in pathology: Universities of Texas and Oregon and in the U.S. Army; Pathology practice: Walter Reed Hospital in Washington D.C. and 406th Army Medical Laboratory in Japan during the Viet Nam War, then 30 years as a pathologist in Lawrence and Topeka, Kansas. Six years ago he developed a particular interest in the toxicity of mercury and has since spent much time researching the subject. The primary motivation for this pursuit comes from concern about the future of three children, nine grandchildren and any future descendents.

Poisoning Wildlife with Mercury

Laurance W. Price, MD*

According to a report (September 2006) from the National Wildlife Federation "wildlife is at the front lines of the mercury contamination in the United States. From marine fish and aquatic birds to mammals and amphibians, these species are sending an alarming message." The Federation has catalogued disturbing evidence of endangerment of wildlife due to contamination of the environment with mercury. It is not just fish. Researchers have found increased mercury levels in 178 species of birds and in mammals, reptiles, amphibians, invertebrates and marine life. A variety of adverse health effects is associated with this contamination and the most serious consequences are increased vulnerability of reproductive and neurological systems as well as weakened immune systems. Birds suffer from weight loss and weak wings and legs, leading to difficulty flying, walking and perching. Their egg shells are thinner; they tend to lay their eggs outside their nests and the lay fewer eggs. Small mammals suffer from involuntary muscle action, movement problems, impaired vision and hearing, reduced reproductive success and impaired growth and health. Sadly, because the brain of the unborn is more susceptible to injury than the adult brain, mercury endangers infants in the animal womb and chicks in their eggs. How can we not listen to these warnings?

Representatives of Sunflower Electric have told us of advances in pollution control that dramatically reduce pollution from coal burning plants. There is no reason to doubt this but we must be very careful in evaluating the claim when it seems to be applied to pollution with mercury emissions. Have advances, other than those provided by conventional required scrubbers, for the removal of mercury been applied to the existing plant? In other words have any improvements designed only for the removal of mercury been added to the existing plant? It is said that an up to 90% reduction of mercury emissions is now possible in new plants or in dedicated mercury removal modifications of existing plants. Has Sunflower committed to that? Will they? Reducing the mercury output of the entire Holcomb facility, the old and the three new plants combined, would require elimination of the existing plant or application of means to markedly reduce its current mercury output. Are they going to do that? Even with a 90% reduction of mercury emissions in the 3 planned facilities there would still be a substantial volume of new mercury when these emissions are added to those of the existing plant. It is my understanding that Sunflower has committed to nothing except to abide by any emission standards that are required of them. The single largest man made source of mercury pollution in the United Sates is power plant emissions.

We must realize mercury is an indestructible and toxic heavy metal that increases in our environment overtime; the more coal we mine and burn the more mercury accumulates on the earth's surface. The only way to protect our wildlife and ourselves from this increasing exposure is to virtually eliminate mercury pollution; we must find a way to produce energy that does not lead to further contamination. State action is critical to address this issue; a temporary moratorium on new plant construction would serve us well, allowing time for consideration of this problem and avoiding our headlong rush into decisions we will later regret.

Resources:

“Poisoning Wildlife: The Results of Mercury Pollution” September 2006, National Wildlife Federation. On line at: <http://www.nationalwildlifefederation.org>. (Click on “About” heading, then on “Newsroom” and then “Poisoning Wildlife: The Results of Mercury Pollution” in the “Reports” column.)

“Mercury Rising” by Jeffry Kluger: Time Magazine, Sept 11, 2006.

“Revolt over new federal mercury law” by Mark Clayton, staff writer, Christian Science Monitor, 12/07/06.

*Dr. Price is a retired pathologist who spent his career involved in the investigation of the causes of death and disease. MD from KU in 1959; subsequent training in pathology: Universities of Texas and Oregon and in the U.S. Army; Pathology practice: Walter Reed Hospital in Washington D.C. and 406th Army Medical Laboratory in Japan during the Viet Nam War, then 30 years as a pathologist in Lawrence and Topeka, Kansas. Address: 2404 Orchard Lane, Lawrence, Kansas 66049. Phone: 785-843-1069. Date: January 27, 2007.



Donn Teske
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Testimony in Support of HB2219
Energy and Utilities Committee
Donn Teske
President, Kansas Farmers Union
1-29, 2007

Good morning,

I would like to speak today in support of HB 2219.

Kansas Farmers Union is very concerned about the economics of rural Kansas, including the High Plains of western Ks.

KFU is also very concerned about the environmental health of rural Kansas and of our planet Earth.

As president of KFU I had been receiving calls from members both supporting the planned expansion of the Sunflower plant at Holcomb and in opposition to it.

Kansas Farmers Union's policy under energy states; "We support the development of non-polluting renewable energy resources such as solar, geothermal, wind, hydrogen, ethanol, and biodiesel"

As I analyzed the pros and cons this is what I came up with.

Benefits;

- Great economic boom for Finney County and the immediate surrounding area, especially through the construction phase.
- Cheap, reliable energy (for other parts of the country) whose generation income will probably contribute to Sunflower Electric's ability to keep rates down for their members across the 35 counties in western Kansas

Concerns;

- The expansion will do nothing to economically benefit the rest of western Kansas and the depopulation will continue.
- The Ogallala Aquifer is a very limited, very precious natural resource that I believe will not last for the lifetime of the power plants. Yes, I acknowledge that they are just buying

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up existing water rights that would have been used anyhow. (This is a VERY controversial topic, however the way I look at it is that long after it becomes uneconomical to pump water for agriculture {in many parts of western Ks. we are there now} the Holcomb station will be pumping at whatever the depth).

- Pollution estimates of 14 million tons of additional Co2 gas emissions into the atmosphere will contribute mightily to global warming.
- By Sunflowers own testimony Mercury emissions will significantly increase, (and with the prevailing SW winds here will carry across the entire state of Kansas).
- Most importantly of all though is that the construction of these units along with another two proposed units by Westar will so saturate the electric generation market into the foreseeable future that there will be NO market for new renewables such as wind energy at all within Kansas for decades to come.

On the issue of global warming;

- If the side that says that global warming is not real and that the current trends are just part of the natural events happening in nature then, worse case scenario, the proposed plants reflect capitalizing old technology through coal generation for the profits of a few.
- If global warming is real, then this decision made on HB2219 could seriously affect the future of mankind as we know it today.

WOW!!!!!!!!!!!!!!!!!!!!


And the Holcomb plant expansion is for energy EXPORT???????

Technology in wind, which could economically benefit a vast area of western Kansas, has progressed to the point that it makes sense, economically as well as environmentally.

In these regards HB 2219 which imposes a two year moratorium on coal plants in Kansas makes a lot of sense right now, economically, and environmentally!

Thank you for your time.

Donn Teske



**Testimony before the House Energy and Utility Committee
January 29, 2007
Supporting H.B. 2219**

Chairperson Holmes and Honorable 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 support of H.B. 2219.

H.B. 2219 calls for a moratorium on the construction of Coal Fired Power Plants in the state of Kansas for the next two years. Furthermore, it provides for a study to be made of the potential effects of the coal fired power plants being planned near Holcomb on water resources and the health of Kansas's citizens.

It is widely recognized that the climate of the Earth is changing. Global warming is affecting economies, people, flora and fauna in many ways. The issues surrounding this dilemma involve the entire world. It is not a "not in my back yard" issue, it is a "not on my planet" issue.

The CO2 and other pollutants involved with coal-fired power plants effect people not only near the areas they are built but also those down wind and around the world. Facilities like the one proposed near Holcomb, Kansas add to this dilemma despite the fact that they may use the latest technology. New coal-fired power plants contribute additional pollutants to our atmosphere that increase the amount already there. Health problems and rate of global warming will be increased if they go on line.

Renewable sources of energy abound in Kansas. Kansas has tremendous potential for both wind and solar energy. Energy conservation and efficiency can help Kansas meet many of their energy needs without building additional generation capacity. The use of energy efficient doors and windows, compact fluorescent bulbs, programmable thermostats, photovoltaic, Energy Star appliances, insulation, community wind power, and incentives for these can help us more cheaply and cleanly meet energy needs.

With all the clean alternatives that Kansas has it is time that they be used. It is time for Kansas to be part of the solution instead of part of the problem.

The Sierra Club believes it is time to formulate public policy that supports a clean and healthy environment. Because of this it supports H.B. 2219.

Thank you for this opportunity and your time.

Sincerely

Tom Thompson
Sierra Club

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Testimony of
Tom Giessel
President
Pawnee County Farmers Union
before the
Energy and Utilities Committee
Kansas House of Representatives

January 29, 2007
Topeka, Kansas

Good morning. My name is Tom Giessel and I live near Larned, in Pawnee County Kansas. I farm in partnership with my brother raising wheat, corn, milo and alfalfa. About 600 acres of our cropland is irrigated.

I want to rise in support of House Bill 2219. The decision to build additional coal fired power plants needs more time and public debate. With the advent of new technologies, farmers and landowners of our state have the opportunity for a renewable source of income. This would offer true, grassroots economic development to a region that sorely needs it.

I am opposed to additional development of electric production from the burning of coal for a number of reasons. First, coal is dirty. We are doing nothing short of burning dirt. I will agree that new technologies have reduced pollutants. But it has a long way to go before we can claim success in achieving tolerable emission standards. Second, electricity from coal is low-priced, but not cheap. In my opinion, when we add in the health and environmental costs, it may be some of our most expensive energy. The time has come for consumers to pay the cost of energy up front and not mortgage our future. Third, the excess production capability of proposed plants will virtually choke off the development of renewable energy in a region with vast potential for wind power. Fourth, we need a diversified energy portfolio. Consumers need to purchase energy wisely. They need to be willing to pay a few cents more for technologies that are more environmentally sound, especially long term. Fifth, recreational interests such as fishing and hunting must be protected. Cedar Bluff, Wilson Lake, Scott Lake and Cheyenne Bottoms [to name a few] all need to be preserved for future generations.

The last point I want to make today is my concern over the water issue. Water in the West is worth fighting over. I am ready to fight. As many of you are aware, all water is property of the state of Kansas. The state issues water rights. If the Holcomb power plant becomes reality, this will be the first, large scale sale, change of use and transfer of water rights in history. We will have just entered the age of water rights going to the highest bidder. Neither farmers nor consumers will have deep enough pockets to compete for this precious resource. We need to understand the water is still "free." It is the water right that has value and it will be severed from the land, much

like the process of hostile takeovers in the corporate world. Someone's going to profit from our water and it's not going to be us. Not so much that it is going to be turned into energy as it's going to be turned into cash. If we proceed down this path, our farms and rural communities will only lose. For over a century, our water resources have been utilized in the production of crops and livestock contributing to rural economies and communities. The farmers and ranchers have combined the gifts of land, water and their labor to produce food and fiber for a hungry world. I deplore the thought that we may allow this fresh, clean water to instead be sucked into a power plant, transformed into electricity and exported through power lines in order to quench the thirst of electric power for million dollar "second homes" and condos on the front range of Colorado. Remember, all of this water is "free" for the taking. I believe the state of Colorado should come up with their own water, or guarantee at a minimum, an eight billion gallon a year stream flow into Kansas on the Arkansas River. It is the duty of the Kansas Legislature to not allow the colonization of our great State. The act of extracting wealth and resources from the area without just compensation must not be tolerated.

The issue of water as I see it is that they [proponents for the coal plants] see no difference between using this water for electricity or irrigation. I do not agree. The forty percent reduction in the water right [from irrigation to industrial] is an adjustment for consumption, since it is estimated that amount returns to the soil. The increased usage will be that the power plant use is continuous, rain or shine. Irrigators rarely use the full allotment, and in wet years, use even less.

Do we use this water, this precious, god-given, finite resource, to produce food so the hungry people can eat; or do we just give it away so a polluting coal fired generator can fuel the excesses of demanding, luxury-laden consumers seeking instant gratification of their energy wants?

Thank you for the opportunity to present my views today. I will be glad to answer any questions you might have.

Dear Editor,

Are residents of the High Plains willing to forfeit yet another large slice of the gifts of land, water, clean air and quality of life? If we are content to believe a vocal minority, the proposed coal fired electric generation plant near Holcomb, KS. will be the next best thing to sliced bread. Don't believe it for one minute. These promoters are not required to "tell the whole truth, and nothing but the truth." As inhabitants of the High Plains, all we need to do is remain silent, forfeit our precious water in perpetuity, provide a small tract of land as a hiding place from society and look in the other direction. This will allow corporate pirates to reap billions of dollars in profits. Remember, corporations don't die, they continue on forever. They don't answer to society, they assume limited accountability for their actions, and pay very little in taxes.

As a western Kansas farmer, I am sick and tired of the colonization of rural America. We must take a stand. We cannot allow the continued exploitation of our natural resources, and the deterioration of our health and environment in the name of "economic development." If you are looking for the truth, follow the money. You will have to look hard, because the money isn't even passing through our neighborhood. The imported coal will be transported by an out of state railroad. The vast majority of the energy produced will be exported. Over a fifty year period, Sunflower's cost of obtaining water rights will only amount to a sprinkling of dollars for every million gallons of depletion of a very precious resource. The major deposits in our state will be mercury and CO2, not cash. I do not see a coal fired power plant as a pillar upon which to build a future. Let's make sure this is not part of the legacy left to our children and grand children.

I recently saw a bumper sticker with a quote by Maggie Kuhn: "Speak your mind, even if your voice shakes." Contact your state representative, state senator and Governor Sebelius. Demand a moratorium on construction of new coal fired electric plants in the state.

Regards,
Tom Giessel
President, Pawnee County Farmers Union
RR1 Box 102
Larned, KS. 67550
620.285.5254

Testimony on HB 2219 Before the House Energy and Utilities Committee on Jan.29, 2007 by Craig Volland, Chair of the Air Quality Committee of the Kansas Chapter, Sierra Club

The Sierra Club's greatest concern about the 3000 MW of coal fired power plants currently proposed for construction in Kansas is the emission of carbon dioxide which is a heat trapping greenhouse gas. The proposed three new boilers at Holcomb, for example, use conventional pulverized coal technology and will emit 14 million tons of carbon dioxide per year for some 50 years.

But this morning I want to address the economic risks if Kansas continues down the path of conventional coal burning technology at a time when scientists and national political leaders agree that swift action is required to head off the serious consequences of global warming. In Kansas global warming is projected to increase drought in western Kansas, accelerate aquifer depletion, cause stronger storms in eastern Kansas and create ecological disturbances in plant and animal life throughout the state.

The financial risks associated with burning coal are increasing rapidly for three reasons. The first is soaring construction costs. Westar announced in December that they were placing their proposed new coal plant on hold because the estimated cost of their proposed new plant had risen from \$1 to 1.4 billion since May of 2005. Likewise KCP&L announced that their latan 2 plant had increased from \$1.33 billion to between \$1.52 and \$1.66 billion, and it is still years away from completion. These announcements closely follow a nationwide trend in the utility industry.

The second reason is the rising cost of Wyoming coal. Both the mining and the transport of Wyoming coal over long distances is dependent on diesel fuel the cost of which has increased significantly over the past two years.

Third, these cost trends have developed just ahead of the expected regulation of carbon dioxide. Many public officials and experts expect Congress to pass such legislation in the next 2 years. In a recent editorial (see over) in the Dallas Morning News Sen. Jeff Bingaman, Chair of the US Senate Committee on Energy and Natural Resources, and Sen. Barbara Boxer, Chair of the Senate Committee on Environment and Public Works warned that the utility industry is mistaken if they believe that their new coal plants based on old technology will somehow be grandfathered in under the new legislation regulating carbon dioxide.

I just makes good sense for the legislature to call a time out while these concerns are investigated. It would be a tragic if Kansas hitched its star to obsolete coal burning technology. One technical point.... I think Section 1 of the bill should read that "Construction of a coal-fired electric generating facility shall not be commenced...which seems clearer timing wise than the way it now reads. Thank you.

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Jeff Bingaman and Barbara Boxer: Utilities that rush new coal plants now won't get bigger emission breaks later

07:46 AM CST on Friday, January 19, 2007

Many leaders of American industry are coming around to the view that global warming is occurring and that Congress will address the problem. In contrast, a few companies are considering major investments in old technologies for burning coal that would both endanger the climate and jeopardize the financial position of their investors and shareholders. As members of the U.S. Senate, we have both worked on legislation designed to combat global warming and to reduce greenhouse gases, such as carbon dioxide emitted from fossil fuels. Although our approaches have differed slightly, we both agree that global warming is real, that we need to act rapidly to pass legislation, and that we are committed to working together to achieve that result as soon as possible. Global warming is an enormous threat to mankind, and the United States can, and must, be a leader in reducing greenhouse gas emissions.

One of the largest sources of greenhouse gas emissions comes from burning coal to produce electricity. While ultimately our goal should be to move toward efficient use of renewable energy sources, we recognize that currently coal is America's most abundant domestic energy source and will be a critical resource for many years to come.

Fortunately, several technologies are available and under development to facilitate our ability to continue using coal in ways that are both financially sustainable and address its climate impact. Power plants that rely on technologies such as coal gasification, for example, will ultimately allow carbon dioxide emissions to be captured and stored at a much lower cost than coal plants using old-fashioned technology.

The bills that we and our colleagues have worked on anticipate that coal-fired power plants will need to substantially reduce greenhouse gas emissions. Perhaps most important, companies building new coal-fired power plants today should acknowledge that over the 50-year lifespan of such plants, reduction of global warming emissions will become mandatory – probably sooner rather than later. Building a new coal plant without taking into account global warming is neither good for the environment nor smart financially.

We have been dismayed to watch some companies unveil plans to spend billions of dollars to build new coal-fired power plants using old technology that cannot capture global warming emissions. Apparently part of the motivation for building these plants is that the companies mistakenly believe that these new plants will garner "grandfathered" emission allowances under some future law.

Such plans assume that future legislation will freely award the majority of such allowances to the biggest emitters, and, therefore, increasing pollution through new plants will reap large sums of emission allowances. This flawed thinking will be a tragedy for the climate because of the additional carbon dioxide emissions this old technology creates.

It also is a dangerous business strategy for the utilities' investors and shareholders, who are putting money into technology that will be obsolete the very day it goes into service.

As the new Senate committee chairs engaged in the fight against global warming, we think it is important for investors to understand that there is little chance that the majority of such allowances will be allocated without cost and exclusively to large emitters of greenhouse gases.

In fact, companies that appear to be inflating their emissions right before legislation is passed are likely to find themselves in a position of having to make even larger emissions reductions than companies that do not attempt this strategy.

We do not envision that any successful legislative proposal will contain a provision that would allow those building traditional coal-fired power plants to economically benefit from coming in "under the wire" and being considered part of the emissions baseline – in fact, the opposite is likely to occur.

Any company planning to spend billions of dollars on new coal-fired power plants, and any investor in such a company, should think carefully about how to spend their funds so as to be part of the solution to climate change, not a part of the problem.

Jeff Bingaman chairs the Senate Committee on Energy and Natural Resources, and Barbara Boxer chairs the Senate Committee on Environment and Public Works. Their e-mail addresses are Senator_Bingaman@bingaman.senate.gov and feedback@boxer.senate.gov.

**Testimony before the House Energy and Utility Committee
January 29, 2007 Supporting H.B. 2219**

Chairman Holmes and Honorable Members of the Committee:

My name is Eliza Bennett. I am a first year resident in obstetrics and gynecology at the University of Wisconsin Hospital and Clinics in Madison, Wisconsin. This is the start of what I hope to be a long and rewarding career caring for women in the reproductive phase of their lives. A large part of my work is to provide information to pregnant and nursing women about possible hazards to their health and the health of their babies. I have been aware for some time of the growing concern over the toxicity of mercury to human beings. The soluble nature of airborne mercury emissions from coal fired power plants returning to earth via rainfall causes the pollution of lakes, rivers and streams where it can enter the food chain via fish. Distinct environmental conditions can amplify local concentrations of mercury, leading to "hot spots" where the danger of mercury poisoning would be much higher. As an obstetrician, I am particularly concerned about pregnant women eating Kansas fish tainted with this heavy metal. Pregnant women will likely be unaffected; however, the growing fetus may not go unharmed. As you know, a fetus relies on the mother as a shield from the world to help protect the developing and growing organs. Mercury poses a particular risk at this very vulnerable time in the life of a developing fetus. Mercury is a neurotoxin that can penetrate the barrier of the placenta and cause a number of untoward consequences during development, resulting in deficits such as cerebral palsy, blindness, deafness and even at low levels can cause a reduction in IQ.

The proposed coal-fired power plants at Holcomb, Kansas could very well have a 50 year life of operation if they are allowed to be built. The result will be ever increasing dangers to the health of mothers and their children as the years go by, particularly in the higher rainfall areas of Eastern Kansas and Western Missouri that lie in the emission path of west to east. The moratorium proposed in HB 2219 will allow some time to study the problem of mercury emissions and develop regulations and standards. The moratorium would open the door to rethinking the use of coal-fired generation and switch the generation method to cleaner technologies such as wind power or coal gasification. At the same time the moratorium will allow for the development of energy conservation strategies to better use current electrical generation capacity and perhaps eliminate the need for more coal-fired plants.

I believe that it is our job as a responsible society to protect pregnant women from increased exposure to toxins and thereby protect future generations of Kansans. As you consider building any new coal fired plants consider what effect it might have on the most valuable resources of this great state: its land and its people. In order to protect the health of Kansans now and in the future I support the passage of HB 2219.

Sincerely,
Dr. Eliza Apple Bennett
632 Glenway St.
Madison, Wisconsin 53711

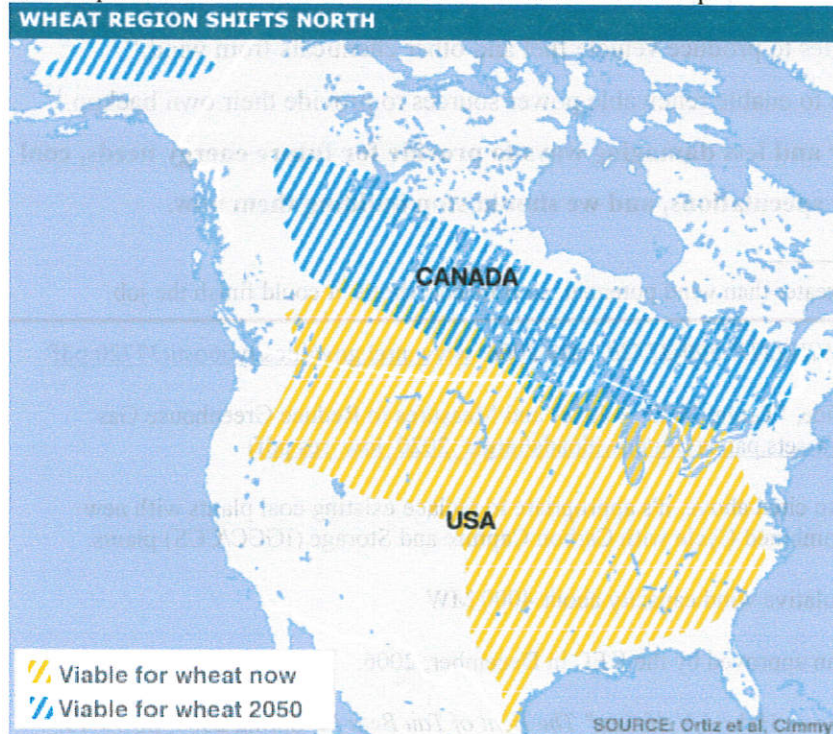
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Testimony for HB 2219
29 January, 2007

Raymond H. Dean, EECS Professor Emeritus, Univ. of Kansas

The recognized cost of electricity from pulverized coal plants is low. But air pollution from coal combustion kills people, dries the soil, destabilizes the biosphere, and disrupts the economy.¹ Coal advocates don't care about these effects, because they can transfer their costs to the public. But including the costs of these effects makes electricity from coal far more expensive than electricity from wind - including wind that provides its own backup and is fully dispatchable. We do not need any more coal plants.² Western Kansas has a massive non-depleting wind resource which could eventually provide more than 25% of U. S. electricity, and all U. S. wind could provide three times the U. S. electric power consumption.³ Thus, in addition to conventional electrical power, wind could eventually also provide most of the energy needed for transportation and many chemical processes that currently use petroleum.

¹ For example, the agriculture in Western Kansas could be affected dramatically, as shown in this picture from <http://news.bbc.co.uk/2/hi/science/nature/6200114.stm#map>:



² In the *Annual Energy Outlook 2006* (http://www.eia.doe.gov/oiaf/aeo/supplement/pdf/suptab_69.pdf), the Southwest Power Pool's projected coal-steam generating capacity remains constant until after 2020.

³ http://www.awea.org/pubs/factsheets/Wind_Energy_An_Untapped_Resource.pdf has wind potentials.

The best way to develop this huge renewable potential is to start with widely distributed "community wind" sites. Two thirds of the 62 western-most counties in Kansas already have internal-combustion or small gas-turbine electric generators, and all counties that do not are adjacent to counties that do. This approach utilizes existing infrastructure and enlists many Kansas citizens in the common endeavor. As wind capacity grows, we'll be able to store excess energy and use it later instead of fossil energy for electrical backup and vehicle fuel. Eventually wind alone could replace almost all U. S. fossil and nuclear fuel consumption.⁴ This kind of renewable energy development creates 2.5 times more local jobs than comparable expansion of coal plants,⁵ and it stimulates economic development throughout the state, not just in a few places.

In September 2005, the European Union agreed to reduce carbon emissions from all sources by 25% by 2020.⁶ With our superior wind potential, it should be relatively easy for us in Kansas to reduce our carbon emissions by 25% by 2020. Here's what we need to do:

- Impose a permanent moratorium on new coal plant construction.⁷
- Add new wind installations at 200 MW / year initially, increasing at about 4% / year.⁸
- Use Conservation and Efficiency to stop growth of in-state electric power consumption.⁹
- Use active demand control and charging of electric vehicles to shift demand to night.¹⁰
- Develop technologies to produce vehicle fuel and other chemicals from wind.¹¹
- Use energy storage to enable renewable power sources to provide their own backup.¹²

Because there are smaller and less damaging ways to provide for future energy needs, coal plants are relatively risky speculations, and we should stop building them now.

⁴ Solar PV potential is even greater than wind potential, so if its cost drops, it could finish the job.

⁵ S. Tegen, *Technical Report NREL/TP-500-37720, May 2006.* www.nrel.gov/docs/fy06osti/37720.pdf

⁶ WWW European Policy Office, "Target 2020: Policies and Measures to Reduce Greenhouse Gas Emissions in the EU," (http://assets.panda.org/downloads/target_2020_low_res.pdf)

⁷ In accordance with SPP's plan cited above, it's appropriate to replace existing coal plants with new Integrated Gasification and Combined Cycle with Carbon Capture and Storage (IGCC/CCS) plants.

⁸ In 2020, this makes the cumulative wind capacity about 4000 MW.

⁹ See Energy Conservation plan approved by the KEC in December, 2006.

¹⁰ Robert E. Uhrig, "Using Plug-in Hybrid Vehicles," *The Bent of Tau Beta Pi*, Spring 2005, pp 13-19.

¹¹ EUCAR/JRC/CONCAWE, "Well-to-Wheels analysis of future automotive fuels and powertrains in the European context," (<http://ies.jrc.ec.europa.eu/wtw.html>)

¹² Energy storage alternatives include compressed air, flow batteries, hydrogen, and other chemicals.

Comments from Wes Jackson, 2400 E. Water Well Road, Salina, Kansas 67401
Email: Jackson@landinstitute.org.

Prepared to support H.B. 2219, Moratorium on New Coal-Fired Plants for Two Years
Monday, January 29, 2007, 9:00 am

I come before you today to support H.B. 2219, which calls for a two-year moratorium on new coal-fired plants. I do not limit my opposition to such plants in Kansas, but rather to coal-fired plants generally.

What can I say to a committee that knows more about the global energy picture and the emerging rapid climate change story than I do? I am not here to instruct you, but to tell you that I accept the consensus of the National Academy of Sciences, the Intergovernmental Panel on Climate Change and the consensus of nearly 100 percent of climatologists regarding human-induced climate change. I am not a climatologist. My field, genetics, is not even close, but as a scientist, I hold the highest respect for papers published in the top tier of peer-reviewed scientific journals. Our family will have been here 153 years this May, and what worries me is that unless we reduce the burning of fossil carbon, my descendants may not be able to live in most of Kansas 153 years from now.

There is too little appreciation of the momentum of our time. Let me illustrate with the example from oil consumption: I was born in 1936, and of all the oil ever burned since Drake's first well in 1859, over 97 percent was burned in my lifetime. The 50-year-old has lived through 89 percent, the 35-year-old 76 percent and the 20-year-old, not yet a college senior perhaps, 54 percent.

Since much of this momentum of our consumption includes coal, it must be slowed and stopped. Of course it will be very hard, yet that is what we must do if we are to avoid the consequences of rapid climate change described by learned scientists. Conservation will be the most cost effective.

With this bill we can begin that journey. I have read that if we do not build those units at Holcomb, it will happen in Oklahoma. Well, it seems to me that we should take the high moral ground so that we have the standing of example, what Thoreau talked about—that we should not wait for everyone to get on board before we do the right thing right now. And the most right thing right now is, of course, conservation. There, I used the C word again.

We know there is a big push to build some 150 power plants nationwide, some of them so they can be grandfathered in when we do finally get a rational National Energy Policy more arresting of consumption. I don't think we should bet on grandfathering. A few beltway people I have talked with believe there is a good chance that will be over-ridden as public opposition to carbon emissions builds.

Beyond conservation, here we are in the great mid-continent wind corridor, the "Saudi Arabia of wind," as it has been called, but doing little about it. Yes, there are the challenges: getting the electricity to where the larger populations reside, voltage drop, eminent domain and so on. But,

my fellow Kansans, if we worked in an emergency mode even less than during World War II, when I understand we turned out a Liberty Ship every eight hours or so, could we not solve these problems? I hope our imagination and our understanding of physics and engineering is not so limited that the transmission problems can not be solved. Cost? Given the reality of the inevitable costs due to rapid climate change, when we could well be forced to abandon vast areas, it may be a bargain at triple the current cost or more. With people able to use the land, at least we have a tax base.

An increasing number of us are trying to head off what has exploded into a wildfire of consumption. I shudder when I think of the implications of the facts that the college student has lived through around half of all the oil ever burned and the 10-year-old through a quarter. If we are to persuade other countries, particularly China, to not contribute to this wildfire, the United States will have to stand on high moral ground. This requires that we get our house in order. The longer we wait and the longer we try to accommodate the mania for economic growth dependent on fossil fuels, the greater the fire.

On a recent morning, my wife, Joan, interrupted me when we were reading and having our first cup of coffee. "Listen to this," she said, and then read the following from Nicole Krauss' best-selling novel, *The History of Love*. Hitler's troops have entered Poland.

After she left, everything fell apart. No Jew was safe. There were rumors of unfathomable things, and because we couldn't fathom them we failed to believe them, until we had no choice and it was too late.

Joan stopped there. We both knew what the other was thinking. We hear "unfathomable things" coming from climate scientists: the southern Great Plains will become hotter and drier, the wheat belt will shift into Canada and Alaska, melting ice caps and glaciers, more severe storms and more. Is our inability to fathom the problem what keeps us from acting in the face of emergency? Are we condemned to failing to believe the scientists until we have no choice and it is too late?

The utilities have no mechanism for practicing restraint. Their eye is on the shareholders as it must be. It seems to me that the only mechanism available is in the hands of the legislators beginning right here in this room. Building the firewall begins here.

Testimony before the House Energy and Utility Committee

January 29, 2007

Supporting H.B. 2219

Chairperson Holmes and Honorable Members of the Committee:

My name is Roger Ringer and I live in rural Gove County, about three miles from Quinter, Kansas. In order to get to town I have to cross the Union Pacific Railroad tracks, so several times a week I find myself waiting for one of their mile-long coal trains. We have at least seven or eight of these trains a day traversing Gove County, each hauling 10,000 tons of Wyoming coal to power plants in eastern Kansas. Watching one of these giant trains lumber along provides a person with time to ponder both our current energy system and our options for the future.

The first thing that comes to mind is that there is a huge amount of petroleum involved in coal-fired electricity. Mining, and then transporting, these massive volumes of material a thousand miles or more requires a lot of diesel fuel. As a result, it is obvious that coal-generated electricity will become more expensive as we move into a period of rising oil prices.

A second insight is the realization that each ton of coal will ultimately be released into the atmosphere as three tons of CO₂. This release currently costs the generator nothing and thus is not included in the price of the electricity. This is very unlikely to remain the case. Whether through international treaty, or local jurisdictional requirements, carbon emissions will be capped, and either taxed or otherwise penalized. The extent and economic impact of this process is impossible to predict, but there is no mistaking the trend, and no doubt that it will force further increases in the price of electricity generated from burning coal.

Burning coal and other fossil fuels to generate electricity is mid-twentieth century technology. It represents an economic model based on capital-intensive, centralized, large-scale production enabled by low-cost petroleum for construction and transportation.

The electric grid of the twenty-first century will be based on a diverse, decentralized mix of wind energy (already competitive with coal), distributed photovoltaics, efficient localized co-generation, and regionally appropriate biomass, geothermal and hydropower. It will be interconnected by using computer-controlled interfaces for balancing demand with output fluctuations and will result in a more nimble, resilient system overall. Kansas can become energy self-reliant by developing such a system, and even become a net energy exporter, all while strengthening local communities and helping to diversify local economies. But we can't do it if we invest billions of dollars in antiquated production models from two generations ago.

High oil prices and carbon emission caps could very well be the death knell for coal-fired electricity. But the utility executives who are driving this market

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don't even see these two "dangerous curves" in the road ahead. They are essentially driving while looking in the rear-view mirror, and stubbornly insisting on doing what used to work in spite of all evidence pointing to a changed future. Perhaps a two-year moratorium could serve as a gentle nudge to these drivers to encourage them to concentrate on the road ahead rather than continuing to focus on where they have been.

Imagine, if in 1973, the Michigan State Legislature had given such a gentle nudge (perhaps in the form of fuel-efficiency standards) to the Big Three Detroit automakers... we might never have needed the federal bailout for Chrysler, GM's bonds might not be junk, and Ford might not be on the brink of bankruptcy today.

As we move into the coming era of dwindling supplies of cheap petroleum, an important task of government will be to help ensure access to secure supplies of energy for its citizens. To be truly secure, these supplies should come from sources which are safe, clean and renewable. Coal is none of the above. The best alternatives to coal are safe, clean, renewable and have the additional benefit of stimulating the emergence of a long-term sustainable economy for Kansas.

Making the wrong investment choice at this time will lead to potential disaster. A two-year breathing space will allow market forces to clarify some of the issues and allow policy makers more time to integrate the new information.

I respectfully urge you to pass House Bill 2219.

Kansas Landowners Association
Promoting Economic Opportunities for Kansas Landowners

January 29, 2007

The Kansas Landowners Association is a non-profit grassroots organization comprised of farmers, ranchers and other landowners dedicated to educating the public on the economic benefits which the renewable energy industry can bring to Kansas landowners.

Kansas Landowners Association (KLA) favors HB2219. Landowners from rural Kansas do not stand to benefit from the proposed coal projects, but they will be asked to absorb the environmental and economic impact of these plants. The 2100 MW Holcomb project located in one of the windiest regions in the country will displace wind potential that would provide a much greater economic benefit to a larger number of rural Kansans.

Wind projects for example provide \$3,000 to \$5,000 per MW to landowners. For a farmer with four turbines on his property this can mean up to \$400,000 over 20 years! A 150MW project could bring \$10,000,000 to it's landowners over the first 20 years. These projects also provide hundreds of thousands of dollars to local schools, fire departments and other local services through a payment in lieu of tax arrangement.

The economic stimulus potential of these projects far exceeds the benefits of coal plants. A 2,100MW coal project will bring some jobs to the area, and there will be some secondary benefits. But wind power can bring much more. In addition to high paying jobs, 2100MW of wind would bring \$140,000,000 to landowners alone, and many million more to local communities.

While Holcomb is being sold as firm base power, it has been proven that wind can provide over 20% of our electricity needs. There are no plans to combine this plant with wind – which would translate into 420MW of wind.

The Kansas Landowners Association looks forward to the leadership of this legislature in taking bold and aggressive steps in making wind happen for our rural citizens. Our future as farmers and rural communities may depend on it. Thank you.

Delivered by Mark Lawlor on behalf of the Kansas Landowners Association (913)226-9717

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TO: Chairman Carl Holmes and members of the House Utilities Committee

Chairman Holmes and members of the committee, thank you for allowing me to speak to you about the moratorium on coal plants in Kansas.

With the recent release of the Stern Report, the movie AN INCONVENIENT TRUTH, and the news features that appear almost daily reporting the damages done by global warming, everyone is now aware of the economic, health, and environmental threats posed by coal plants. Those threats, by themselves merit a moratorium on coal plants in Kansas so that we can have time to weigh the merits of building any more of them. But there is one more critical factor that makes it even more important for you to impose the moratorium: the wind power potential in central and western Kansas. The extraordinary wind potential here, and its ability to stop global warming, is unique in our country and the world for that matter. Given our blessed natural wind assets it would be morally irresponsible NOT to develop them. So we must consider that every time a coal plant is built, the pollution-and-poison-filled megawatts it produces are displacing the cheaper and cleaner megawatts that could have come from wind.

And what about our farmers? If Kansas is known for anything it is our agriculture. Well, every time a coal plant is built, it is taking millions of dollars in wind turbine lease money from our farmers. Then, as if that weren't bad enough, the global warming caused by coal plants will increasingly hurt the farmers' ability to profit from their land. We need a moratorium to consider the needs of our farmers.

The proposed Holcomb coal plant would spit out huge quantities of deadly mercury. Mercury has been established as a causal link to alzheimers and autism, and is a special danger to the fetus of pregnant women. This year the State Department of Health issued warnings to pregnant women in the northeast part of Kansas not to eat any fish from fresh water lakes and streams because of high levels of mercury. It wouldn't be long until the fish from our fresh waters would be unsafe for all people. Other states are finding that it costs billions of dollars to remove mercury from their waters. Are we prepared to spend billions of dollars to do that in Kansas? Who should pay that bill? What about the millions of dollars in increased healthcare costs due to mercury? Who should pay that? We need a moratorium on coal to find these answers.

We have bought the lie about the electricity from coal being cheaper than the electricity from any other source, including wind power. We need a moratorium to have the time needed to calculate the real cost of coal in Kansas. We will find that it is by far the most expensive source for electricity we have.

When the U.S. Congress passes the carbon tax on polluters the cost of coal plant electricity will increase dramatically. The coal plant people are in a mad rush to get their plants built before the carbon tax is passed or before people start insisting that they be held accountable for the environmental damage and increased healthcare costs they create. We need a moratorium on coal to study the effects of the carbon tax.

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Kansas also has the unique potential to be one of the largest producers of hydrogen in the country. That hydrogen could be used to firm the wind, or power vehicles. Given this solution to our energy problems it would be wise to study the potential during a moratorium.

If the Holcomb plant is built it would use 8 BILLION gallons of water from the aquifer that is already declining in capacity. We need the moratorium to more fully weigh the merits of this use of our precious water.

I hope you agree that there are several reasons that make the case for a moratorium. The moratorium is certainly in the best interests of Kansans.

Thank you for hearing me.

Joe Spease
9934 Goddard
Overland Park, KS 66214
913-492-2862
Spease4kc@everestkc.net

January 29, 2007

Testimony from Margaret Thomas, 8401 Roe, Prairie Village, KS 66207, 913-341-5805

Good morning. My name is Margaret Thomas. I have lived in Kansas 35 years and I serve on the board of the Kansas Natural Resource Council and also the Sustainable Sanctuary Coalition of Greater Kansas City. I am chair of the Prairie Village Environmental Committee. I am here to speak on behalf of these 3 groups in support of a moratorium on the construction of coal-fired electric generation facilities, as proposed by HB 2219. Others could not attend due to the short notice.

Kansas, like this nation, is at a crossroads with our energy plan. This is the time in our state's history to step back, declare a *time out*, and look squarely at the best ways to achieve a sustainable energy future. There are looming economic, environmental, health and quality of life issues that have not been addressed and this committee holds the key to examining them before Kansas irretrievably loses the opportunity to choose our energy future. Many issues need to be more clearly understood.

Economic Issues Needing Answers

1) What are the economic benefits to rural communities from coal facilities relative to other power generation strategies? Proponents of coal plants claim they are needed for economic growth. But Kansans deserve to understand how sustainable rural economic development works. The economic benefits from highly centralized power generating stations are limited to a small proportion of the population, and much of the income goes out of state, especially to pay for the import of huge quantities of coal. This is in contrast to other generation strategies that are technically just as viable, such as community scale systems for wind and solar power.

2) What are the financial risks for coal-fired energy plants? With federal climate-change legislation looming on the horizon, coal plants could be faced with costly new levies and pollution controls. Bank of America already has committed to cut back all its funding of energy projects that produce large quantities of greenhouse gases. As evidenced by letters from attorney generals in eight states, coal as a solution to energy production is losing favor. Kansas must give careful consideration to the full implications of our public investments before we rush ahead. The cost of coal will continue to climb, while wind and solar power will likely remain flat. Also, cap and trade of emissions will change the financial picture dramatically. The Economic Union and California are already working to link California's cap and trade plan with the EU's 27-nation plan.

Environmental Issues Needing Answers

1) Why are environmental impact assessments not being required for coal-fired electric generation facilities? Kansas has multiple incentives to encourage electric generation plants. When companies take advantage of these incentives they are effectively using taxpayer money and should be required to disclose the impacts of their projects. Just one example of a site specific impact that should be rigorously addressed is ground and surface water depletion. Coal-fired power plants use large quantities of water for cooling 24 hours per day virtually year around. Almost all of this water is lost to the atmosphere. In western Kansas the Ogallala aquifer is already rapidly receding; new coal-fired plants will accelerate its depletion. At eastern

Kansas sites cooling towers will either directly reduce stream flow or reduce the quantity of water in the alluvial aquifer that supports surface flow. Ground and surface water depletion have enormous implications not only for our fish and wildlife resources, but also for agricultural productivity and community water supplies.

2) What is Kansas' position going to be on combatting global climate change? The challenge of our era is to provide sufficient power without creating a climate catastrophe. Power stations contribute over 21% of our planet's greenhouse gases. Global warming is already projected to bring irreversible adverse impacts to the state including drought, accelerated aquifer depletion, depleted stream flows in western and central Kansas, more periods of intense rainfall in eastern Kansas, increased insect pressures and disease, greater soil erosion and ecological disturbances in flora and fauna. Scientists now agree that we have to make huge reductions in greenhouse gas emissions for the next 25 years and beyond if we want to limit, then reverse, global warming. This means burning fewer fossil fuels (oil, natural gas and coal). What is Kansas' response to the challenge?

Quality of Life Issues Needing Answers


1) What are the health risks from coal plant emissions, especially mercury? Smog and soot from the burning of fossil fuels, especially coal, has both immediate and long term health effects. It has been linked to reduced lung function, chronic bronchitis, more frequent and severe asthma attacks, heart disease and strokes, and higher mortality. Coal plants are the largest source of mercury emissions in the US. The USEPA estimates that 1 of 6 women of child-bearing age has enough mercury in her blood to put her baby at risk. In Missouri, there are now health advisories for women who are or who might ever be pregnant and also for children 12 and under to avoid eating largemouth bass over 12 in long from all the state's streams and rivers. There are 41 other states with fish consumption advisories because of mercury contamination.

2) What recreational values of land and waters are we in danger of losing? Fish-eating mammals and birds have also shown nervous system and reproductive problems because of mercury contamination. What is the quality of life value that is lost if you can no longer take your kids fishing, and how much fun is fishing anyway if you must carefully weigh the health risks from eating them?

By supporting this moratorium we are not saying never build another coal plant. We are saying don't make mistakes that could be avoided once all objective and comprehensive options have been considered. We believe that well-informed citizens, public administrators, and elected officials make better decisions. This is the time to collectively and aggressively gather this information. We therefore ask you to support the moratorium as stated in HB 2219. Thank you very much.



SUNFLOWER ELECTRIC POWER CORPORATION

A Touchstone Energy® Cooperative 

TESTIMONY SUBMITTED TO HOUSE ENERGY & UTILITIES COMMITTEE IN OPPOSITION TO HB2219

Presented by
Earl Watkins, President and Chief Executive Officer and
Wayne Penrod, Executive Manager, Environment

January 29, 2007

Mr. Chairman, and members of the Committee, my name is Earl Watkins. I am the President and CEO of Sunflower Electric Power Corporation. Today, I will present the Committee an overview of our Holcomb Expansion project. Wayne Penrod will provide you with a similar overview of the environmental issues and of the technologies which will be used in our new power plants.

Before we get started, I want to strongly urge you to oppose this proposed legislation. If you pass this bill, you won't simply delay this \$5 billion project, you will kill it. We will lose our partners who would be unable and, understandably unwilling, to wait on Sunflower and the State of Kansas to decide if this or any other generation project can move forward.

Utilities have a duty to serve; service is not an option. And we must have resources available to meet our consumers' needs. It takes years to develop generating resources. As I am sure you know, public utilities need certainty in the law and regulatory processes in order to build and operate electric systems reliably. Our statutory duty to serve in our service areas requires long-term planning, especially for generation and transmission resources. The history of this project, with which many of you are familiar, is evidence that planning and development activities take more than five years.

If you pass this bill, we will also lose our opportunity to complete certain elements of the Sunflower Integrated Bioenergy Center. The loss of the Expansion project would result in the loss of the power plant development funds needed to finance emerging technologies like the algae reactor. As you may recall, the algae reactor will be used to capture the carbon dioxide emissions from the plant and provide an oil-rich resource to the biodiesel plant, starch for the ethanol plant, and protein for cattle feeding.

It would not be prudent for us, nor do I believe the Kansas Corporation Commission would allow us, to use ratepayer funds to develop these emerging technology resources. It would, however, be prudent for us to use a portion of the development fees we are earning from the Expansion project to collaborate with NISTAC and the Kansas Bioscience Authority to develop this "first-of-a-kind" bioenergy complex.

So, in effect, a vote for this bill will not delay, but will terminate the Holcomb Expansion project and the Sunflower Integrated Bioenergy Center.

PROJECT OVERVIEW AND RELATED ISSUES

Let me begin by telling you how this project was developed. In early 2000, it became apparent Sunflower had the potential for generation expansion at our existing site near Holcomb, Kansas. Ultimately, we entered into agreements with three other cooperatives to build this project.

Project Structure

The units will be owned by three generation and transmission cooperatives: Sunflower Electric Power Corporation, Tri-State Generation & Transmission Association, Inc., and Golden Spread Electric Cooperative, Inc. Additionally, Midwest Energy signed a Letter of Intent to purchase 75 megawatts of the output from the first new unit. Together, these not-for-profit utilities serve more than 1.5 million member-owners of 67 electric cooperatives in seven states.

As cooperatives, these companies were created by their member-owners and are obligated to be responsive to those who organized them. The generation enterprises are directly connected to the distribution co-ops who are owned and obligated to the retail consumers in their communities. Business decisions are made on the basis of need and our responsibility to provide reliable, low-cost service in accordance with best business practices. Cooperative projects do not seek profit, and have no stockholders or investors.

Tri-State will manage the construction process alongside the Bechtel Corporation. Bechtel's responsibility is to complete the engineering, procurement and construction processes and deliver the new plants in accordance with agreements that assure the owners of plant performance, completion date, and price. There is a substantial demand for construction of new power plants around the world. If you vote to delay this project, we are convinced Bechtel will lose interest in this project as they would be forced to move on to other projects providing more certainty of completion.

Once the plants are built, Sunflower will operate all the facilities for the benefit of the owners. The obvious benefits to Sunflower are a reduction in the average cost of production through an allocation of costs across all the units. Every time someone seeks to threaten this project, I think of the thousands of farmers, and thousands of seniors and thousands we serve who live below the federal poverty line. I urge you to not make our job, and their lives, more difficult by killing these projects.

Water

Before we turn to other matters, I want to address the issue of water supply for these plants. Much has been made about the threat these plants would pose to the Ogallala Aquifer as a result of their water consumption. The plants will require approximately 24,000 acre feet (AF) each year to operate. Most irrigation wells are appropriated 272 AF per quarter, so this is the equivalent of about 23 sections of land. However, the change of beneficial use from agricultural to industrial or municipal purposes requires a reduction in that appropriation of about 40%, so in the end, the plants will require the output from nearly 38 sections of land.

The important point to understand, if you are not acquainted with the Division of Water Resources rules and regulations, is they are required to ensure that the consumptive use of water from the aquifer is never increased. As the water rights are converted from agricultural to other uses, you can be completely confident that our operations will have no additional impact on the region's water

supplies. In other words, we will not be sticking new straws into the aquifer and we will be pumping 40% less water than is being pumped today.

In fact, the 24,000 AF pumped for these three power plants represents only 1.4% of the groundwater pumped from Groundwater Management District #3 in southwest Kansas. As Mark Rude, GMD#3's Executive Director, said in a recent radio interview, the water pumped for Sunflower's plants won't even be a drop in the bucket when compared to the total pumping of water in southwest Kansas.

Furthermore, since we will be converting irrigation pumping to industrial pumping, we will not be stressing the aquifer by pumping 100% of the water over just 4 or 5 months, but will spread the reduced pumping out over 12 months.

Having dealt with the question of the impact these facilities would have on the usage and depletion of water resources, I would like Wayne Penrod to come forward to discuss the design of the new plants and address the environmental issues related to the project.

Current Unit Performance

Sunflower has a 23-year history of successfully operating the existing Holcomb unit and an excellent reputation in the industry based on our compliance with environmental regulations and the performance of the existing unit. Many Sunflower employees have worked at Holcomb Station since it went into commercial operation in August 1983. Our staff has earned the respect and admiration of not only their industry peers, but also the surrounding communities where they live.

You may not know that Sunflower pioneered dry scrubbing with fabric filter particulate control¹ when the Holcomb unit was built. Our scrubber was literally the largest in the world at that time and it was the first scrubber on any power plant in the Environmental Protection Agency (EPA), Region VII. When we say we will comply with any new environmental laws affecting our resources, we have history on our side. Holcomb Station was originally to cost \$250 million, but changes in the environmental laws required us to add many new pollution controls at a cost of more than \$115 million. So, as we have done in the past, if the laws change and require additional pollution controls, Sunflower and its partners will make the investments needed to comply with new laws.

Frankly stated, Sunflower's member cooperatives have blazed a number of trails in pioneering environmental technologies to meet stringent environmental standards, and they are continuing that tradition with the development of the bioenergy center.

Given Sunflower's exemplary environmental track record and significant financial commitments to environmental progress, I suggest your support of this project is warranted. The 23-year old Holcomb Station, the only coal plant Sunflower has ever owned and operated, is still ranked in the

¹ Dry scrubbing in 1983 was a promising technology that proponents said could be "scaled-up" with little financial risk or technical problems, much like the integrated gasification combined cycle (IGCC) technologies today. In practice, there were a number of complex challenges in scaling up this technology that drove costs upward. As a relative comparison, the cost of the scrubber and fabric filter on the existing Holcomb unit cost far more than the projected cost for similar technology for the proposed units. It is also true that the deep financial strain of incorporating cutting edge environmental control technologies into the existing unit significantly contributed to pushing Sunflower's rates up during the 1980s—a cost borne by its rural ratepayers that ultimately benefited people all over the world.

top 5% of all coal-based plants in the United States with regard to low emissions, and the proposed Holcomb units will be among the cleanest in the nation.

Generation Technology Design

We completed thorough technology selection reviews prior to selecting a supercritical, pulverized coal design. We took into consideration such variables as environmental regulations, fuel price and availability, design reliability, capital costs, financing considerations, operating and maintenance costs, site considerations, and the commercial availability of various technologies.

Supercritical pulverized coal technology was selected because, at the scale required for the generation needs of the participants, it was found to be the only commercially available technology that met all of the requirements of the project. Various renewable energy sources, such as wind and solar were considered, but these technologies were not capable of meeting the baseload requirements of the cooperatives. Natural gas-based generation, in either simple or combined cycle configurations, was not proposed because of the significantly higher cost of natural gas, and other factors. IGCC technology was not proposed, as there are no commercial examples of this technology at the scale or reliability required to satisfy the needs of the cooperatives.

It has been suggested that there is no such thing as a “clean coal” plant design. We respectfully disagree. Coal, as a modern boiler fuel, is abundant, clean, and can be burned efficiently. Plant criteria pollutant emissions² are controlled well below levels which the EPA has found could have a material adverse impact on the human health and environment. These criteria pollutants, and mercury, will be strictly controlled. Supercritical pulverized coal technology with state-of-the-art environmental controls does represent a commercially viable and affordable “clean-coal” configuration.

The existing Holcomb unit is a very efficient power plant, yet the supercritical units being proposed in this permit will have unit heat rates more than 10% better than the existing unit. Based on the design output of the three new units, the cycle efficiency improvement will represent a fuel savings of nearly 1,000,000 tons of coal per year when compared with the existing unit’s design.

I am sure you have read and heard that if Kansas would only develop the almost inexhaustible wind energy available in the state there would be no need to build the Holcomb units. The fact is wind energy represents an interruptible, rather than a continuous source of energy. We support the development of wind generation when it is economical to do so. In fact, we recently entered into a 20-year agreement to purchase 50.4 megawatts of wind energy from the new project being developed by TradeWind Energy. We believe all forms of generation have merit. Our job as utilities is to utilize those resources for the benefit of our customers.³

² Sulfur dioxide (SO₂), nitrogen oxides (NO_x), and particulate matter (PM₁₀)

³ Power pools have recognized limitations of wind energy in supporting the electric system. Sunflower, like all power pool members, must maintain capacity to meet the load plus a capacity margin that prevents against the loss of consumers when a generating unit fails. Coal-based Holcomb 1 has a capacity of 360 MW, and we accredit that same amount in the power pool. If that same Holcomb 1 facility were instead comprised of 240 wind machines of 1.5 MW each, the same Southwest Power Pool rules would allow us to accredit only 7.5 MW, the amount produced by 5 of the 240 machines. This means we would still have to build an additional 352.5 MW of capacity from among the coal, natural gas, or nuclear resources. Clearly buying 2 for 1 to meet our capacity obligations would be an expensive proposition, and

Emissions – Air

The air pollution control technology specified in the proposed air permit is consistent with two important standards; first, the Best Available Control Technology (BACT) equipment was determined to be consistent with the guidance of Kansas Department of Health and Environment (KDHE) and the EPA. Secondly, it has been the Sunflower Board's policy that the assets be operated and maintained in a manner that exemplifies their directive that we maintain a high level of environmental stewardship.

The design requirements and the performance of the air pollution control systems will be second to none.⁴ In fact, the nitrogen oxide controls will allow the plants to have the lowest emission rate (0.07 lb/mm/Btu) in Kansas, and they will be among the very cleanest generating units in the country. Similarly, the units will include the latest improvements in the dry scrubbing control technology for sulfur dioxide (SO₂) and acid-gas control. This system will remove about 92% of the SO₂ produced in the combustion process.

The modeled impact of the proposed emission limit (0.095 lb/mm/Btu) for these units will not result in any exceedence of either the short-term National Ambient Air Quality Standards⁵ (NAAQS) (3-hour and 24-hour) or the annual standard for SO₂. Under normal operating conditions, the impact of these three units will result in an increase of less than 1% of the annual NAAQS standard for SO₂, which will still be well below the EPA air quality standard.

While the environmental limits established by the regulatory agencies are very strict, Sunflower and the other participants, and the constructor's design team, have determined that they can be achieved on a continuing and consistent basis.

Particulate Matter

Working together, utilities and regulators have made great improvements in air quality in the last 30 years.⁶ Modern high-efficiency fabric filters remove more than 99.8% of filterable particulate. For example, when we perform stack tests at Holcomb, test personnel repeatedly remark that the laboratory filters on which the particulate matter is collected is almost undistinguishable from

the cost of such a strategy is not justifiable or affordable.

⁴ These units will include new nitrogen oxides (NO_x) control technology that has only recently been demonstrated for our fuel type. There are three systems to be deployed; the first two will be modern combustion controls referenced as low-NO_x burners and a separated over-fire air system to be installed on each unit. The third system is a post-combustion "tailpipe" selective catalytic reactor (SCR) system that will further reduce NO_x emissions.

⁵ These standards are established by the U. S. EPA to protect human health.

⁶ EPA and KDHE first regulated total suspended particulate (TSP), moved onward to coarse particulate matter (PM₁₀), and now concentrate on PM_{2.5}. This migration of these regulations is part of a dynamic review policy by the agency in response to recommendations made by EPA's own Science and Advisory Board, the policy body charged with assuring the EPA works to achieve the requirements of the Clean Air Act. Better scientific information about technology and new information about the health impacts of pollution drive the regular review and revisions to the National Ambient Air Quality Standards (NAAQS) and other air regulations. In 2006, EPA responded to the increased knowledge about PM_{2.5}, by revising downward the 24-hour ambient air standard to 35 micrograms per cubic meter (ug/M3), a reduction of nearly 50% from the previous standard. In their most recent review, EPA indicates they expect all areas in Kansas will conform to this standard, a matter which we think is very good news.

unused filters. These are experienced stack test personnel, testifying of their own accord to the very low emission of particulate matter from the Holcomb unit. There are still very small concentrations of particulate matter that are emitted, a much smaller amount than has been identified as unhealthy by EPA.

You have heard that the prevailing winds will blow whatever fine particulates (and mercury) are emitted into northeast Kansas. That's not the way a chimney plume behaves. In addition to the particulate matter, there are small amounts of SO₂ and NO_x gases emitted from the plant that react in the atmosphere and form condensable PM_{2.5}.

These particulate and gases are emitted from the tip of the 625-foot chimney. While these gases cannot be seen in the visible spectrum, their chemical reaction in the atmosphere can be predicted using advanced atmospheric chemistry models. We can determine, in a general way, how these emissions might impact air quality. National Weather Service meteorological data clearly show that the prevailing winds in southwestern Kansas, at chimney level, are north-to-south, not west-to-east.

To verify the impact of these new sources in northeast Kansas, Sunflower voluntarily commissioned a modeling analysis to be performed for the more populated areas of Lawrence, Topeka, and Kansas City. We found the PM_{2.5} impact to be minimal.

Those words may pretty vague, so let's use an automobile analogy to help describe the plant's impact in Topeka more clearly. Let's assume a street in Topeka has 1,000 vehicles which are known to travel on it each day. Now imagine among those vehicles, you can verify that just one has a Finney County license plate. That traffic impact of that one vehicle is exactly the corresponding PM_{2.5} impact which this expansion will have on Topeka, or Lawrence, or Kansas City. I doubt that a governmental body, charged with maintaining city streets with acceptable levels of traffic, would focus much attention on the single Finney County vehicle. Obviously, that body would not recommend that a completely new road be constructed because of the one Finney County vehicle, nor would it seek to block that vehicle at the city limits.

Carbon Dioxide (CO₂)

Much comment is regularly made about carbon dioxide and its impact on the earth. Many people who are genuinely concerned about this issue believe we must stop or severely limit carbon dioxide emissions. Our view is that this decision must be made by the Congress. Until that happens, businesses are necessarily determined to operate under our existing laws and regulations. At this point in time, carbon dioxide is not a pollutant under the CAA and therefore without a decision by Congress, cannot be a regulated emission. The current policy, established by the Congress and stated clearly by EPA in a recent Supreme Court brief, is that EPA is not empowered to regulate carbon dioxide.

While no one is certain when a change in policy might occur, there are several bills recently introduced which propose some changes. If Congress acts, these proposed facilities will be required to conform to any new regulations. There are those who say we should wait until this policy change is further debated to build these plants, but we could not disagree more. The cooperatives in this project need reliable, low-cost energy now.

We are not turning a blind eye to the possibility that the policies may change regarding carbon dioxide emissions. In cooperation with Kansas State University's NISTAC and the Kansas

Bioscience Authority, Sunflower is developing an Integrated Bioenergy Center at Holcomb. Aside from the obvious environmental advantages which will accrue from this project, our collaborators expect one portion of the project, the algae reactor, to substantially reduce carbon dioxide emissions from the power plant. While much work remains to be done, we believe a 40 to 45% reduction in carbon dioxide emissions will be achieved by the production of substantial quantities of biodiesel and other bioenergy products.

We believe the Integrated Bioenergy Center is viable and that the potential for carbon dioxide reductions from it is high. We are confident current research into this technology will continue, not only for environmental reasons, but equally important is the opportunity for these bioproducts to be produced by Kansas companies while decreasing our dependence on foreign oil from unstable regions of the world.

It has been reported that 14 million tons of “new” carbon dioxide will be emitted annually from these three units. That is about right for the total carbon dioxide emissions, but it is not a true characterization to refer to these combustion products as “new” emissions. It is clear that these generating units will be fully utilized when they begin operation. This means they will not satisfy sudden new energy requirements; rather they will be replacing (displacing) energy now being generated by older, more costly, and less-efficient sources. Some of those displaced energy sources will be natural gas, some will be coal; but there is carbon dioxide emissions associated with all of them.⁷

On balance we believe it is clear that all of these displaced sources emit various levels of carbon dioxide. Our calculations indicate it would not be unreasonable to presume that only about 30% to 40% of these 14 million tons (about 4 to 5.5 million tons) would be “new” emissions. In other words, there are 8.5 to 10 million tons of carbon dioxide currently being emitted by other resources. It is therefore factually incorrect to refer to all of these carbon dioxide emissions as “new.”⁸

Emissions – Mercury

It has been widely reported that these plants will increase the amount of mercury released by coal-burning plants in Kansas by up to 80%. That is not an accurate assessment of the information presented in the application, nor does it reflect the conditions described in the proposed permit.

⁷ Every megawatt-hour (MWh) of energy produced by every other regional coal resource will emit higher levels of CO₂ than the new Holcomb units. Based upon our research on regional coal-based generating units, the average displaced coal resource now emits about 2,400 lbs/MWh—the lowest is Holcomb 1 which emits about approximately 2,100 lb/MWh, or about 12% less than the average. The new Holcomb units will generate CO₂ at a rate of about 1,950 lb/MWh, or about 19% less than the average coal resource.

It's true that every megawatt-hour (MWh) of energy produced by every regional natural gas resource will emit lower levels of CO₂ than the new Holcomb units. Based upon our research, the highest displaced gas resource now emits about 1,500 lbs/MWh, while the lowest is about 950 lb/MWh. The lowest CO₂ emitting source in the region, which likely will not be displaced because of its efficiency, is the existing Mustang natural gas combined-cycle plant owned by Golden Spread Electric Cooperative, a major participant in the Holcomb 2 unit.

⁸ This is commonly understood as displaced energy, and the displaced CO₂ occurring with it is an inconvenient fact with which environmental organizations are well acquainted. Continued reference to 14 million tons of “new CO₂” is really a deliberate misrepresentation of the facts.

Based upon the ground-breaking mercury control research demonstrated at Holcomb in 2004, we can predict that the total mercury emissions from the entire Holcomb facility, when completed, will be no greater than the current emissions from the existing unit.

We will utilize the technology which injects powdered activated carbon (PAC) for the control of mercury on the new units and on the existing Holcomb 1 unit. It is appropriate to note that the federal mercury rules do not require this commitment for either the new units or the existing unit. Nonetheless, KDHE has impressed upon us the overall impact these emissions will have on the total Kansas mercury budget. Plus, we know we can achieve these levels.

The resultant emissions will vary over time, but the draft permit establishes the mercury limit at 0.020 lb/GWh. This limit is 79% lower than the limit set forth in the federal regulations. Certainly no one, anywhere in the country, should alter their lifestyle, or their diet, because any new mercury emissions resulting from the operation of these facilities. Put simply, there are no increased emissions.

I believe I have touched on the most relevant operational and environmental issues, so I want to return the presentation to Earl Watkins who will offer our concluding remarks.

Transmission

It is important to understand that large baseload generating plant projects continue to drive the construction of the bulk electric transmission system in North America. The new Holcomb units will require a significant amount of new transmission capacity because these plants will serve co-op consumers in seven states.

Just like in the past, there will be excess transmission capacity created during this construction to allow for the future growth in the region. This additional capacity will be available to other users of the transmission system including renewable generators. Obviously, the availability of transmission capacity will support the development of all forms of generation projects in the region.

Some have said the Holcomb Expansion project will stop the development of wind energy in Kansas for 50 or 60 years. Our view is this project will bring about a big boost to the development of renewable energy projects in Kansas and the southern High Plains region as a result of the transmission infrastructure which will be built. Hopefully, Kansas developers will be able to take advantage of this opportunity created by the coal plants while it lasts.

If the Holcomb project is delayed and thus killed, renewable generation project development will indeed suffer because, standing alone, none of the wind projects can economically support the construction of large-scale bulk transmission lines that are necessary to efficiently move power throughout the region. If these plants, and others currently under consideration by Kansas utilities, are not built, the development of large-scale renewable generation projects will indeed be hampered for many years.

Economic Development

One area we have not discussed today is the economic impact this project will have on Kansas. Dr. Ralph Gamble, a noted economist from Fort Hays State University conducted an economic impact study regarding this project two years ago.

The average number of jobs available in western Kansas will grow by more than 2,000 during the six-year construction period. According to the study, these workers will earn more than \$63 million per year and the taxes collected will increase by more than \$1.7 million. Over the construction period, the project is expected to create a peak construction workforce of about 1,850 people. The jobs skills required for these positions will range from basic labor through the highly technical skills common to large construction projects. The total spending of construction crews is expected to be more than eight million dollars per year during the construction period. Much of that spending will flow to the housing, food and hospitality sectors of the economy.

At full operation, the project will add more than 400 direct and indirect full-time equivalent positions, earning over \$22 million per year, in western Kansas. There will be a need for an additional 140 full-time workers to operate the Holcomb Station after all three units go into commercial operation. This will increase the total workforce at Holcomb Station to 270. The new positions required for these additions will range from entry-level workers through management staff.

Gamble also estimated that more than 3,600 jobs (direct and induced) will be created in the entire state with an annual payroll of \$116 million during the six-year construction period. Finally, the report indicates this project will add eight billion dollars to the economy in its first 35 years of operation.

A report recently released by the USDA Economic Research Service titled “Rural America at a Glance” studied rural population trends from 2000 to 2005. Their report shows that nationwide rural areas grew by 2.2 percent. Unfortunately, this rural growth trend did not extend to Kansas. The report states Kansas led the nation in non-metro population decline—we lost more than 28,000 people in just five years.

Why is this happening? The emptying of the Great Plains began in the early 1900’s for some parts of western Kansas. Although southwest Kansas enjoyed a significant growth period in the 70s and 80s, Finney County is still suffering from the impact of the loss of over 2,000 jobs as a result of a 2002 fire which closed a beef processing facility. This project will go a long way toward healing the wounds left in western Kansas by that plant closing.

Conclusion

This project is without question the largest capital investment ever made in western Kansas—perhaps even in the entire state. When consideration is given to the transmission line construction, the total project cost will exceed five billion dollars. Let me leave you this morning with these important points for your consideration:

- Have confidence that nearly 700 individual trustees from rural areas in seven states voted on this project as the elected representatives from the 67 distribution cooperatives represented here. Anyone who has ever attended a co-op board meeting knows these decisions are not made lightly.
- The project features the best available emission control technologies which, by order of the Kansas Department of Health and Environment, will keep the emissions at or below federal requirements.

- The project will not increase the consumptive use of water from the Ogallala Aquifer, and the pumping will represent just 1.4% of the annual pumping from Groundwater Management District #3.
- The development of the Sunflower Integrated Bioenergy Center will feature emerging technologies that will benefit not only this project, but will set an example for other integrated renewable projects around the world.
- This project will facilitate wind development.

Thank you for the opportunity to share this information today. Again, we urge you to vote no on passage of this legislation because a yes vote is a vote to kill the Holcomb Expansion project and every good ancillary project associated with it.



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**Testimony Submitted by Earnie Lehman to the House Energy &
Utilities Committee in Opposition to HB 2219**

January 29, 2007

Mr. Chairman and members of the Committee, I am Earnie Lehman, President and General Manager of Midwest Energy, Inc., a customer-owned gas and electric utility serving 90,000 customers in 41 counties of central and western Kansas. I oppose this legislation which, if enacted, will substantially raise the cost of electricity to Midwest Energy customers and would, in all likelihood, require Midwest Energy to withdraw from the Holcomb East project and import energy from outside Kansas.

Midwest Energy has executed a Letter of Intent to purchase 75 MW of Holcomb East under a long-term Participation Power Agreement. This capacity will replace capacity we currently purchase from Westar's older coal-fired power plants. The contracts under which we purchase such capacity expire over the next three and a half years. Given Holcomb's state-of-the-art design, emissions associated with energy used to serve Midwest Energy customers will decline significantly.

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Of perhaps equal significance, Holcomb East represents the only new source of coal-fired energy available to Midwest Energy over the next several years. Even with the higher costs of newer coal plants, they remain far less costly to run than gas-fired power plants. Gas prices are also far more volatile than coal-prices. The longer Holcomb East remains unpermitted and unbuilt, the higher the bills my customer-owners will pay. A two-year delay as required by this proposed legislation would require Midwest Energy to contract for alternate sources of coal-fired energy that are under development in other states. While the state of development of most such sources currently lags behind Holcomb, they are not stuck in the quagmire this legislation would create.

Midwest Energy is adding renewable energy to its power supply as well. I have personally expressed my commitment to the Governor to secure at least enough wind generating capacity to equal 10% of Midwest Energy's peak demand by 2010 and 20% of such demand by 2020. Of course, statistics prove wind energy is least reliable during the times of greatest need on hot summer days. I cannot imagine a scenario under which Midwest Energy could replace its coal-fired energy needs exclusively with wind energy. And wind energy costs per kilowatt-hour remain more expensive than coal-fired energy, as well.

I urge you to oppose HB 2219. It will raise costs to my customers and require my Company to import energy from other states.

Mr. Chairman, I will stand for questions at the appropriate time.

Thank you.

**Testimony of
Mark Schreiber
Director Government Affairs
Westar Energy
On House Bill 2219
January 29, 2007**

Good morning Chairman Holmes and members of the committee, my name is Mark Schreiber. I am the Director Government Affairs for Westar Energy. Our position on this bill is also supported by Kansas Electric Power Cooperative Inc. (KEPCo).

House Bill 2219 proposes a moratorium on the construction of new coal-fired electric generation in Kansas until July 1, 2009. We oppose House Bill 2219 because it could seriously affect the long-term power supply plans of utilities in the state. If utilities are forced to uneconomical fuel choices, the Kansas economy and consumer will be impacted.

The debate on the issues of climate change, long-term energy security and fuel choices continues to evolve as research and technology advance. We continue to monitor these discussions and attempt to anticipate evolving policy in order to make decisions for our customers ten to twenty years hence. However, Westar has a legal obligation as a certificated utility to provide safe, adequate and reliable electric service to all within its service territory. We don't have an option of issuing rain checks or running out of electricity.

Our 650,000 customers require a certain amount of electricity every day throughout the year. That amount is referred to as base load. Our base load generation plants use coal and uranium as fuels. The only other fuel that can be used to meet base load requirements is natural gas. However, due to its cost, natural gas is not extensively used in such a manner in Kansas. Westar uses it primarily as a fuel for our peaking plants during the summer. Although wind can generate electricity, it cannot serve as a source of base load generation.

Planning for new base load capacity includes site selection, permitting, engineering and construction. The planning horizon can stretch 7 to 10 years. We are anticipating needing new base load generation in the next 10 years. The two-year moratorium proposed in House Bill 2219 represents 20% of that time period. We don't have an option to tell our customers that because our base load plans have been delayed due to the moratorium, we can no longer ensure they receive the basic amount of electricity throughout the year. If the bill passes and forces us to delay plans for new base load generation, we are required to find other sources for our customers' base load requirements. The most likely sources would be to buy power on the open market or use our natural gas-fired peaking plants more frequently. In KEPCo's case, they may need to run their diesel-fired peaking plant

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at Sharpe frequently. These alternatives would come at higher costs and require use of more scarce fuels.

I would like to briefly address the environmental concerns that are the focus of the Post Audit study required in House Bill 2219. Generating plants in this state must comply with the emission limits developed by the Environmental Protection Agency (EPA) and the Kansas Department of Health and Environment (KDHE). Westar's plants comply with these standards and with the new equipment being installed at our Jeffrey Energy Center, the NOx emissions will be reduced 35% and SO2 emissions will be reduced 85%. We place high value on our commitment to the environment. If new standards are developed, Westar will continue to honor that commitment while meeting our legal obligation to provide safe, adequate and reliable power for our customers.

Thank you for the opportunity to present this testimony to you today. I will be glad to stand for questions at the appropriate time.



Kansas City

Board of Public Utilities

540 MINNESOTA AVENUE

KANSAS CITY, KANSAS 66101

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January 29, 2007

Chairman Holmes and Members of the House Utility Committee

My name is Joe Dick, and I am the Government Affairs officer for the Kansas City Board of Public Utilities.

The Board of Public Utilities is the largest municipally owned utility in the state of Kansas. The Board of Public Utilities serves 65,000 power customers and 57,000 water customers.

The Board of Public Utilities stands in opposition to House Bill # 2219.

Presently we have three coal fired plants. In our twenty year master plan, the Board of Public Utilities is being told that there is a need for an additional coal fired plant. There is a need for new generation to cover the growth of the community in the near future.

The Board of Public Utilities has hired a consultant and is studying the future generation needs and this bill would seriously damage the need for growth in the Board of Public Utilities service area.

The power generated by this new plant would be used only for future growth as well as helping to maintain generation by our aging power plants.

Thank you Mr. Chairman and Committee Members for allowing me to appear before you. And I will stand for questions at the appropriate time.

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January 28, 2007

Kansas House of Representatives
Energy and Utilities Committee
Capitol Building
Topeka, KS 66612

Kansas House Energy and Utilities Committee Members:

Thank you for holding a hearing on HB 2219. Although I am not slated to speak at the hearing, I ask you to please review my written testimony in consideration of this bill.

Kansas needs to take action to be a leader in clean renewable energy security and move away from building more coal-fired power plants.

In the last midterm elections, more than half the voters said global warming made a difference in their choice of congressional candidates, according to a Zogby International poll. More than 75 percent said they agreed with the following statement: "Congress should pass legislation promoting renewables and alternative energy sources as an effective way to reduce global warming pollution." Majorities in all demographics said lawmakers should support to the two solutions, including 53 percent of self-described conservatives and nearly 37 percent of self-described "very conservative" voters.

The new leaders in the U.S. Congress are pushing for change and Kansas needs to be ready. This month, in a joint op-ed published in the Dallas Morning News, U.S. Senators Jeff Bingaman and Barbara Boxer predicted new climate change laws would bring little to no incentive for the new electric utilities. "We do not envision that any successful legislative proposal will contain a provision that would allow those building traditional coal-fired power plants to economically benefit from coming in 'under the wire' and being considered part of the emissions baseline -- in fact, the opposite is likely to occur," wrote Bingaman and Boxer. The senators are the chairs of the Energy and Natural Resources Committee and Environment and Public Works Committee. They went on: "Any company planning to spend billions of dollars on new coal-fired power plants, and any investor in such a company, should think carefully about how to spend their funds so as to be part of the solution to climate change, not a part of the problem."

U.S. Presidential candidates Senator McCain and Senator Obama are also calling for mandatory caps on greenhouse emissions for power plants, industry and oil refineries. Their plan would require releases of heat-trapping gases to return to 2004 levels by 2012 and to 1990 levels by 2020.

Last week, ten of the largest and most powerful American businesses with operations across the economy -- utilities, manufacturing, petroleum, chemicals and financial services -- banded together with leading environmental groups to call for a firm nationwide limit on carbon dioxide emissions that would lead to reductions of 10 to 30 percent over the next 15 years. "It must be mandatory, so there is no doubt about our actions," said Jim Rogers, chairman of Duke Energy. "The science of global warming is clear. We know enough to act now. We must act now."

In his recent State of the Union address, President Bush even spoke about his recommendations for policies to "help us be better stewards of the environment, and...to confront the serious challenge of global climate change." A week before the State of the Union address, a dozen evangelicals called action against global warming a "moral imperative" in a joint statement with scientists from the Centers for Disease Control, NASA, Harvard and other institutions.

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Other states are taking steps to move to renewable sources of energy to create jobs and economic benefits to rural areas. Colorado Senate President Joan Fitz-Gerald and House Majority Leader Alice Madden joined leaders of labor, agriculture, and the energy industry along with Governor Bill Ritter and legislative leadership to layout energy priorities for the 2007 legislative session. They announced plans to double the amount of clean energy, to move wind power from farms to homes, and eliminate barriers for individuals to use renewable energy on their property. "This energy agenda creates thousands of good, high-paying, high-skilled jobs for Coloradans," said Neal Hall, Business Manager for the Colorado Building and Construction Trade Council. "We look forward to putting in the hard work to make Colorado the nation's leader in clean energy solutions." The energy package not only creates building and construction jobs, but will also help open up Colorado's vast wind power potential on Colorado's Eastern Plains. "We have only just begun to tap the enormous wind energy potential from Colorado's Eastern Plains," said Leland Swenson, Executive Director for the Rocky Mountain Farmers Union. "This energy plan will create enormous economic benefits for rural Colorado." The legislation includes the following: Renewable Energy Development Act of 2007: Sets a renewable energy standard where electric utilities get 20% of their electricity from renewable energy such as wind and solar power by 2020. Homegrown Energy: Eliminates barriers to installing clean energy and ensure customers receive a fair value for the electricity they produce by setting state standards for interconnection and net-metering. Wind on the Wires: Creates incentives for energy companies to build or upgrade transmission lines for wind power by allowing companies to recoup costs during construction. Renewable Energy Mapping: Creates a 15-member task force to identify Colorado's best renewable energy resources for electricity generation. Wind for Schools: Creates funding for K-12 schools and community colleges to install wind turbines and reduce energy costs.

We rely on electricity to keep us cool, cook our food, clean our homes, and power our computers, televisions and cell phones. In the past, most people would scarcely stop to think where the electricity is generated—they just work hard to pay the bills. But Americans are waking up to the fact that more than half of electricity in the US comes from dirty coal-fired power plants. Within the electric power industry, these plants make: 97% of deadly fine particle soot and sulfur dioxide emissions; 92% of emissions of smog-forming nitrogen oxide emissions; 86% of carbon dioxide emissions, the main global warming pollutant; almost 100% of toxic mercury emissions.

The EPA itself estimates that more than half of all Americans – almost 160 million of us – live and breathe in areas with unhealthy air. Children are the most susceptible to the detrimental effects of power plant air pollution. In Kansas alone, 316,011 children live within 30 miles of a power plant, the area in which the greatest health impacts are felt. Mercury is a toxic heavy metal, when ingested can cause serious neurological damage, particularly to developing fetuses, infants and children. The American Academy of Pediatrics, The American Public Health Association, The American Nurses Association and the Southern Environmental Law Center are suing the EPA over their 2005 "cap and trade" mercury emissions rule because it fails to protect the public health of children, a requirement of the federal Clean Air Act.

The true human and environmental cost of coal-fired power plants is not included in any stockholders' annual report or market price. It should be. Coal-fired power plant pollution regulations must be tightened. Old plants must be cleaned up or closed. New plants must not be built. Greater incentives must be given for cleaner energy alternatives like wind power. And, we must educate Kansans on how to conserve energy in our homes and businesses by replacing old light bulbs with high-efficiency light bulbs, installing programmable thermostats and unplugging phone chargers and computers when not in use. What we do today will help or hurt our children tomorrow.

Sunflower Cooperative is seeking a permit to build three more coal-fired power plants near Holcomb, KS. In spite of public outcry, Governor Kathleen Sebelius said she will not act to stop the plants from receiving permits from the Kansas Department of Health and Environment. If approved, these new coal plants will rapidly deplete one the area's most important and limited natural resources: The Ogallala Aquifer. These coal-fired power plants are expected to use 8,000,000,000 gallons of water every year, the equivalent of 123

irrigation circles per year -- water that will not return to the aquifer. This staggering amount would drench 24,510 acres under one foot of water. The coal-plants' water depletion is counter to the irrigation needs of area farmers who depend on this same water for their crops.

Groundwater aquifers are already in danger of being depleted due to global warming. The Holcomb plant additions will accelerate this crisis by pumping an additional 14,000,000 tons of CO2 each year into the atmosphere. If completed, this power plant complex is expected to be the largest new single source of CO2 in the United States. The most unfathomable fact is that Kansas gets all this pollution and loss of natural resources – but is expected to use only 8% of the power generated. The rest will be sent out-of-state. If these Holcomb coal plants are built, they will squelch a tremendous opportunity for Kansas to be a leader in the clean, renewable-resource of wind-generated power. Kansas, rated near the top in wind potential nationwide, is already trailing nearby states Texas and Iowa who are leading the way in harnessing wind power successfully.

It is time to do the right thing for the future of Kansas and for living things around the globe. I urge you to vote to enact HB2219 and place a moratorium on new coal-fired power plants in Kansas. In this way, we can begin to take steps to make Kansas a leader in clean renewable energy security.

Sincerely,

Kim Hanson
Another Voter For Clean Renewable Energy Security
2652 W. 118th Terrace
Leawood, KS 66211

Jan. 28, 2007

To members of the Energy and Utilities Committee

I am writing in support of HB 2219 introduced by Representative Vaughn Flora. There are a number of reasons I feel that this Bill needs to be considered and accepted by the House of Representatives.

#1 At a time when there is a consensus in the scientific community that we drastically need to cut climate warming pollution, the moment has long past that we should be building coal burning power plants. Coal is the dirtiest of all the fossil fuels and contributes massive emissions that contribute to global warming.

#2 The coal industry, at this time, is going full bore in promoting the building of such plants. Texas alone is trying to shoehorn in eleven new coal fired plants before the federal government implements a much advertised crack down on emissions and the environmental destruction caused by these plants. The Sunflower facilities proposed in southwest Kansas certainly must be planned with this same deadline in mind....build them before the new federal regulations are drafted. If they are using such effective technologies to clean up their effluvia why not wait five years until the new federal guidelines come into effect?

#3 If at some time coal fired plants are to be built out of necessity, laws requiring gasification technologies as they are built need to be implemented.

#4 Adequate education of the populace whose land is going to be affected by the building of such huge plants needs to be undertaken. Huge "buffer zones" will need to surround such plants. Do the local land owners know that their land will be gobbled up, their farms divided by eminent domain if necessary?

#5 After a long fight with Colorado over the rights to water in the Arkansas River which Kansas won at great expense, does it make sense to just give all this water to Colorado? I grew up in western Kansas and I know what a precious commodity water is there. 29,000 acre feet is not a drop in the bucket. As towns out there eventually come to depend on that water for their very life, and the day is not that far off, it is

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absurd to give this water to such a project.

#6 A related issue is that two thirds of this generated power will be given for the use of Colorado. Undoubtedly they will use it to further develop the front range. Hence the prevailing winds will give Kansas, not only the plumes from the power plants but also the additional pollution from the industry, business and residential development that will result along the front range in Colorado. The plumes from these plants will pass over Kansas' most populated areas and across Cheyenne Bottoms and several game preserves. Is this really what we want to promote?

#7 At this moment coal is only profitable because the hidden costs of environmental destruction, increases in asthma and heart attacks, neurological damage from toxic mercury and the environmental chaos caused by global warming are all off loaded onto the public. That is called passing the buck.

#8 The so called boon to the economy in western Kansas is not only a flash in the pan, it's a mere blip. Surely the good people of this committee can put their heads together and come up with better, more environmentally sound ideas of economic development that these polluting behemoths. A moratorium for two years to study these issues is nothing considering the import of these decisions.

It is with these points in mind that I hope you will pass HB2219 from committee. Thank you for your consideration.

Daniel Bentley
517 Lake Street Lawrence KS 66044 785-842-4418

To the Committee members,

Thank you for taking the time to have these hearings, and know that my thoughts are shared by many others who have not heard about these hearings, and not just in the city of Lawrence. I have lived south of Lawrence most of my life and have talked to many of my neighbors and they also share a similar sentiment: we need to change our course if we are to thrive in the future. Specifically, there is a clear concern that even though we are facing increased energy needs for the future, we need to be making a commitment to a different path than the traditional solutions have been placed before us.

I congratulate the Sunflower folks at the Holcomb plant for using the expertise at KState to help develop the concept of utilizing biological materials to generate energy and feedstock in the largest integrated energy/food design that the world has seen. This is the visionary foresight that our state can be proud of and will go far in projecting our citizens as being globally responsible citizens.

That is why the Coal Fired plants are such a disturbing throw-back to the old way of solving our problems. They hark back to solutions that throw out the window any care for their global consequences, even though they are being projected as planning for the future. I think the IPCC report to be released by the UN next month will make the consequences of more coal-fired plants of this scale much more clearly irresponsible for the future, and this is why I am strongly supporting the call for Gov. Sebelius to set a moratorium as outlined in this bill.

You may think that I just concerned about this because I am downwind, in terms of the mercury, the CO₂ levels, and other air and water concerns. Well, Elliot Spitzer of New York drafted similar concerns for the northeast states, too, so it seems that concern "downwind" is on a much larger scale. If we decide to proceed without further thoughts on this, will be taken as flagrantly unconcerned not only with northeast Kansas, but the northeast US, and ultimately Europe and other places who are ahead of us in their commitment to reduce carbon emissions, increase our energy efficiency, and retool the way we think.

I just heard the new president of Shell Oil Company, a KState graduate, and while he spoke about coal being a part of the equation for meeting our energy needs for the future, he talked about essential new technologies such as coal gasification, carbon storage, cogeneration which are on our energy generating horizon. I highly recommend that you listen to his speech and the questions and answers, available on the KANU/KPR website. The central point of the talk was about how energy conservation needs to transform the way we live, and how we need to re-think every facet of our lives with this in mind. What all of this translates into for me is that we need to take the time to do this if we are to REALLY plan for our future. I cannot think of a better way to begin this than by our Governor--and legislature--sending out a clear signal with a moratorium, which will give us all time to come up with a different vision of our future. Our succeeding generations will thank us for our foresight.

.....
Ken Lassman

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Carl D. Holmes – Chair
House Energy and Utilities Committee
Kansas House of Representatives
Kansas State Capitol
Topeka, KS 66612

re: HB 2219 – Electric Generation Facilities Construction Moratorium

Dear Rep. Holmes & Committee:

I am writing in support of HB 2219 imposing a moratorium on the construction of coal fired electric generation facilities until 1 July 2009. Before fully investigating our wind energy potential, rated number three in the nation, Kansas should not permit additional coal fired stations to be built by Sunflower Electric Power Corporation in southwest Kansas.

The principle driver for Sunflower is that they are a vertical monopoly, not only owning coal generation facilities, but also committed to long term contracts with coal mines and rail transport. They unwisely locked themselves into this situation back in the 20th century when the US was still in denial about climate destabilization. However, Sunflower's public stance has focused on how their coal plants will provide much needed employment for western Kansas and an uninterrupted source of electricity.

But we can have good jobs and stable energy supplies without climate destabilization and global warming from coal. There is now a broad consensus recognizing the human cause of climate change – President Bush, Governor Sebelius, Governor Schwarzenegger, Governor Spitzer, the European Union, the Intergovernmental Panel on Climate Change, etc.

In July of 2005, Pres. Bush acknowledged that "... an increase in greenhouse gases caused by humans is contributing to the problem (of global warming)". Gov. Sebelius said in her 2007 State of the State address "... there also can be no doubt that our current energy sources are causing dramatic, even dangerous changes to our climate." And the Fourth Annual Report of the IPCC said "It is very likely that [human-made] greenhouse gas increases caused most of the average temperature increases since the mid-20th century." The report reflects climate scientists' growing fears that Earth is nearing the stage when carbon dioxide rises will bring irreversible change to the planet.

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Governor Sebelius also said that we "... need to diversify our energy sources and to promote alternatives to coal. That's why I've included money in my budget to plan for transmission lines to move electricity from wind farms to customers." So before we commit blindly to last century's coal technology, we would be wise to declare a moratorium on coal generating facilities, while developing a workable wind infrastructure. We would find that Kansas wind energy is more than ample, as well as providing more than twice the permanent jobs than would coal plants (Prof. Raymond Dean, 12 November, 2006).

I want to emphasize that wind opponents' principle claim of wind being too intermittent is a red herring. Redundancy is the answer to that. Multiple locations of wind towers gives "depth to your bench". And anyone who understands the "wheeling of electricity" knows that the electric grid is used precisely to move power from surplus areas to deficit areas. Even coal plants are down periodically.

As to the sparseness of electric grid trunklines in western Kansas, Governor Sebelius has already committed to addressing that for wind. And electric transmission need not be our only means of transporting the energy. There are innovative proposals, grounded in reality, for converting wind electricity to hydrogen by electrolysis, and piping is through our huge network of existing natural gas pipelines, soon to go into disuse. Keep in mind that in September of 2005, the European Parliament pledged to make the EU the first renewable energy hydrogen economy in the world, using wind and solar energy to generate hydrogen.

Wind power is the fastest growing sector of global energy technologies. Kansas is now in the spotlight, wherein we have the choice to cling to a dangerous, discredited and economically destructive coal technology from the past, or embrace a future of healthy, proven and economically sustainable wind power.

Please impose a moratorium on the construction of any new coal fired electric generation facilities until 1 July 2009. Then use the opportunity you have created to pursue a renewable energy future in step with other forward looking societies.

Sincerely,

Michael Almon

To the members of the House Energy/Utilities Committee:
RE: H.B. 2219

Increasingly, we are aware that global warming and pollution of our present and future environment are realities with enormous impacts on our lives and the lives of our children and grandchildren. The Sunflower Electric Power Corporation's three new coal-fired power plants at their Holcomb, Kansas facility will add significantly to these problems.

- The 2,100 megawatt additions to the Holcomb facility will add **14,000,000 tons of carbon dioxide each year** to our global warming predicament.
- To just offset this new source of CO2 we would have to **remove 2 million gasoline powered cars, light trucks, and SUV's from the state's roads and highways.**
- CO2 (Carbon Dioxide) is a major contributor to global warming.
- Global warming is expected to raise temperatures and reduce soil moisture across the state and produce more droughts in western Kansas. This will accelerate the decline of our groundwater aquifers.
- The Holcomb expansion could increase the mercury emitted from coal burning power plants in Kansas by up to 80%.
- Mercury causes learning disabilities in children of mothers carrying mercury in their blood.
- There are 24,000 premature deaths each year from coal fired power plant pollution.
- **Only 8% of the electricity generated by the new plants at Holcomb will benefit Kansans, while prevailing winds will send the pollution across our state.**

There are options that not only remove the hazards of old, dirty, coal fired power plant technology, but also **offer opportunities for new jobs and economic development that grow from new technologies and innovation.**

- The combination of strong energy efficiency programs and wind power generation could eliminate the need for new coal plants;
- The technology exists to tap Kansas's vast free, clean and constantly renewable wind resources;
- We have barely begun to explore the savings offered by energy efficient technologies that already exist to reduce energy usage in all parts of our lives.

Kansas wind resources will energize many hundreds if not thousands of megawatts of electricity. **Kansas wind is free, is non-polluting, doesn't contribute a single pound to global warming, and comes back day after day.** As we replace old technology power plants or expand our electric energy generating capacity shouldn't we take advantage of 21st century technology and innovation and reap the opportunities offered by the wind, a major Kansas resource? Furthermore, the economic benefits and increased tax base reaped from the construction and operation of clean, renewable wind energy production will be shared across wide areas of Kansas and not concentrated in one or two counties.

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Remember, if we allow dirty technology, coal fired power plants to go forward, Kansans and the world will be forced to live with the pollution plus the 14,000,000 tons of CO2 added each year for 50 to 75 years from the Holcomb plant alone. **Policies we make today will affect the lives of our children and grandchildren.** Won't we all sleep better if we choose to seize the opportunity to reap the economic benefits of 21st century energy technology by capitalizing on our clean, renewable wind resources?

The moratorium provided by H.B. 2219 will give us time to carefully evaluate the dangers of further coal-fired energy, and allow us to explore the opportunities offered by Kansas wind resources and energy efficiency technologies. I hope you will support H.B. 2219.

Phil Morse
1944 SW Crest Dr.
Topeka, KS 66604
p.morse@sbcglobal.net

January 29, 2007

Salina Diocese Catholic Rural Life Commission
118 North Ninth Street
Salina Kansas 67401
785-823-7221

Statement of Support for HB 2219---Committee on Energy and Utilities

The Salina Diocese Catholic Rural Life Commission supports a two-year moratorium on coal plant construction so the related issues can be further studied to determine their long term impact on water, health, and the environment.

Salina Diocese Rural Life Commission Members

Bishop Paul S. Coakley	Salina, Kansas- Saline County
Fr. Allen Scheer	Salina, Kansas- Saline County
Peter Lorenz	Beloit, Kansas- Mitchell County
Janice Kruse	Selden, Kansas- Decatur County
Donna Farrell	Hill City, Kansas- Graham County
Msgr. John George Weber	Salina, Kansas- Saline County
Tom Haffner	Hoxie, Kansas- Sheridan County
Sr. Judy Stephens	Salina, Kansas- Saline County
Gene Lorson	Hope, Kansas- Dickinson County
George Gassman	Clayton, Kansas- Norton County
Greg Stephens	Salina, Kansas- Saline County
Rosann Felder	Wakeeney, Kansas- Trego County
Mary Williamson	Glasco, Kansas- Ottawa County
Tony Geiger	Abilene, Kansas- Dickinson County

The Salina Diocese geographically represents the counties of Cheyenne, Sherman, Wallace, Logan, Thomas, Rawlins, Decatur, Sheridan, Gove, Trego, Graham, Norton, Phillips, Rooks, Ellis, Russell, Osborne, Smith, Jewel, Mitchell, Lincoln, Ellsworth, Saline, Ottawa, Cloud, Republic, Washington, Clay, Dickinson, Geary, and Riley. It covers 26,685 square miles and has a Catholic population of 50, 113.

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