Approved: February 27. 2009
Date

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 22, 2009, in Room 783 of the Docking State Office Building.

All members were present except:
Josh Svaty-Excused

Committee staff present:
Mary Galligan, Kansas Legislative Research Department
Cindy Lash, Kansas Legislative Research Department
Melissa Doeblin, Office of the Revisor of Statutes
Renae Hansen, Administrative Assistant

Conferees appearing before the committee:
Tom Thompson, Sierra Club
Marilyn Jacobson, Secretary of Administration
John Easter, American Chemical Council
Nancy Jackson, Climate Energy Project
Wayne Penrod, Sunflower Energy
Tom Gross, Kansas Department of Health and Environment

Others attending:
35 including the attached list.

Hearing on:

HB 2015 - Establishing energy efficiency standards for certain owned and leased property, equipment and vehicles.

Melissa Doeblin presented an explanation of **HB 2015** to the committee.

Proponents:

Tom Thompson, Sierra Club (Attachment 1), offered testimony in support of **HB 2015.**

John Easter, American Chemistry Council, (Attachment 2), presented testimony in support of **HB 2015.**

Marilyn Jacobson, Director, Division of Finance and Facilities Management, (Attachment 3), offered written testimony in support of **HB 2015.** They requested one change: that the word calendar be replaced by the word fiscal.

Written Proponents:

Trudy Aron, American Institute of Architects, (Attachment 4), presented written testimony in support of **HB 2015.**

Neutral:

Nancy Jackson, Climate and Energy Project, (Attachment 5), presented testimony in support of **HB 2015.** She commented that energy efficiency is by far the cheapest energy resource available to us as a society. She noted that the better we make the envelope of a building the less amount of energy we need to heat and cool the building.

Questions were asked and comments made by Representatives: Tom Sloan, Joe Seiwert, Forrest Knox, Carl Holmes, and Annie Kuether.

Minutes of the House Energy And Utilities Committee at 9:00 a.m. on January 22, 2009, in Room 783 of the Docking State Office Building.

The chairman noted that the cost savings to the state as well as the expense for qualified personnel is included in the fiscal note.

The hearing on **HB 2015** was closed.

Hearing on:

HB 2016 - Establishing limits for mercury, nitrogen oxide and sulfur dioxide from certain emissions units.

Melissa Doeblin gave a briefing to the committee on **HB 2016.**

Proponent:

Wayne Penrod, Executive Manager, Environmental Policy, Sunflower Electric Power Corporation, (Attachment 6), presented testimony in support of **HB 2016.** He noted that the requirements in this bill for NO_2 and SO_2 emissions are the same requirements that were in the permit they submitted to KDHE for the Holcolm power plant that was subsequently denied.

Opponent:

Tom Thompson, Sierra Club, (Attachment 7), offered testimony in opposition to **HB 2016** and believes that in order to not have any NO_2 and SO_2 emitted in the air, that no coal plants should be built. They believe that regulating toxins should not be turned over to the legislature.

Neutral:

Tom Gross, KDHE, (Attachment 8), offered neutral testimony to **HB 2016.** He spent some time explaining some of the processes of KDHE and the construction permitting process.

Questions were asked and comments made by Representatives: Forrest Knox, Carl Holmes, Tom Sloan, Vern Swanson, Rocky Fund, Milack Talia, Vince Wetta, Joe Seiwert, Don Myers, and Tom Moxley.

The hearing on **HB 2016** was closed.

Representative Milack Talia offered a community wind farm brief, (Attachment 9) to the committee for the members' perusal.

The next meeting is scheduled for January 26, 2009.

The meeting was adjourned at 10:20 a.m.

HOUSE ENERGY AND UTILITIES COMMITTEE
GUEST LIST

DATE: January 22, 2009

NAME	REPRESENTING
[illegible]	CEP
Derek Hein	Hein Law Firm
Terry Heidner	KDOT
Artur Bagyants	KDOT
Wayne Penrod	Sunflower
[illegible]	DOA
Nelson Krueger	PAR
David Springe	Curb
Phil Wages	KCPCo
Matt Casey	GBA
Joe Dick	KCBPU
Sarah Bowser	KSFG + KAKA
Nancy Jackson	CEP
Whitney Damron	Empire
[illegible] Martin	Empire
Scott Jones	KCPL
John Easter	American Chemistry Council
Stephen Young	Rep Jim Ward
Mari Tucker	Dept of Commerce

HOUSE ENERGY AND UTILITIES COMMITTEE
GUEST LIST

DATE: January 22, 2009

NAME	REPRESENTING
Catherine McLeod	Paul Davis
LARRY BERG	MIDWEST ENERGY
Corey Mohn	Commerce.
TOM DAY	KCC
Monica Cameron	Diamond Solar Solutions
Carol McDowell	Tallgrass Ranchers
Nathan Eberline	LKM
[illegible]	KMU
Mark Schreiber	Westar Energy
[illegible]	KAHA
Gail Doran	Delia Garcia
Tom Thompson	Sierra Club
D Hoffman	KEC

Testimony before the House Energy and Utilities Committee
January 22, 2009
Supporting H.B. 2015

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. 2015.

It is important that the state decreases its use of energy at all levels. This bill moves the state of Kansas in that direction showing leadership for the citizens of Kansas.

Decreasing energy use for vehicles, appliances and buildings not only decreases the use of electricity so that there is less reliance on fossil fuel generated electricity decreasing the emission of greenhouse gasses but it saves taxpayers money.

The Sierra Club encourages the committee to support 2015.

Thank you for this opportunity and your time.

Sincerely

Tom Thompson
Sierra Club

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 1

American® Chemistry Council

DATE: January 22, 2009
TO: Kansas House Committee on Energy and Utilities
FROM: John Easter, Midwest Director of State Government Affairs
SUBJECT: Public Hearing on HB 2015-Energy Efficiency Standards

The American Chemistry Council (ACC) endorses the practice of conserving energy resources and minimizing the environmental and health impacts of buildings. Nearly 35 percent of energy is used by commercial/public buildings. Accordingly, we strongly encourage that the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) standard of 30 percent over the state energy code (ASHRAE 90.1.2004) be used as the energy conservation standard for green buildings in Kansas.

Environmental considerations and energy efficiency should become a part of building design and purchasing criteria, consistent with such traditional criteria as product safety, price, performance, and availability. Energy efficiency and environmental performance should be evaluated using a "systems" approach during the entire use-phase of a building. The process for establishing "sustainable" building/product criteria should include consensus-based decision-making, best available science, transparency, and openness to all relevant stakeholders.

Setting the goal for public buildings at 30 percent over the state energy code (ASHRAE 90.1.2004) will demonstrate that energy conservation is a priority in Kansas. Further, it will save considerable resources on the life of the building at little or no additional building costs.

Finally, the U.S. Department of Energy (DOE) announced on December 21, 2007 that it has established regulations that require new Federal Buildings to achieve at least 30 percent greater energy efficiency over prevailing building codes. That is the ASHRAE standard that we recommend for Kansas and other states.

Thank you for your interest in this issue. If you have any questions or concerns, please do not hesitate to contact me.

John Easter
Midwest Director, State Government Affairs & Grassroots
American Chemistry Council
107 E Fifth St.
Suite 210
Des Moines, IA 50309

O (515) 471-1957 john_easter@americanchemistry.com
F (515) 243-0342
C (515) 508-9180

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 3-1

Kansas HB 2015 Proposed Amendment

Amend printed bill, page 2, strike lines 27 – 29 and insert: -

"owned buildings, be designed and constructed, and certified to exceed ASHRAE 90.1-2004 by 30 percent, or IECC 2006 by 30 percent, as appropriate, if such levels of"

Kansas Department of Administration
Duane A. Goossen, Secretary
Carol L. Foreman, Deputy Secretary
1000 S.W. Jackson, Suite 500
(785) 296-3011

House Committee on Energy and Utilities
HB 2015

Marilyn L. Jacobson, Director
Division of Finance and Facilities Management
January 22, 2009

Thank you for allowing me to discuss the role of the Department of Administration (DOA) in HB 2015. I would like to start out by providing background on the scope of buildings overseen by the DOA. DOA manages 64 buildings/land assets in Shawnee County including 3.2m gross square feet of space on 437.63 acres. The most significant building assets managed, their respective gross square footage and construction dates include:

Docking State Office Building	564,138 sq. ft.	1956
Landon State Office Building	362,627 sq. ft.	1912
Curtis State Office Building	320,721 sq. ft.	2001
Capitol Building	317,146 sq. ft.	1866-1903
Eisenhower State Office Building	300,809 sq. ft.	1965
Capitol Parking Garage	216,000 sq. ft.	2004
Curtis Parking Garage	200,000 sq. ft.	2001
Judicial Center	168,096 sq. ft.	1978
Memorial Hall	94,136 sq. ft.	1914
Forbes Building 740	72,399 sq. ft.	1955
Dillon House	12,362 sq. ft.	1914
Cedar Crest	9,359 sq. ft.	1928

Additionally, DOA manages one building in Sedgwick County, the Finney State Office Building:

Finney State Office Building	313,544 sq. ft.	1926

Examples of energy conservation measures that DOA has implemented during the past four years in our managed buildings are:

- Doing night setback (55°F) and setup (85°F) in our buildings (essentially turning off the heating and air conditioning at night).

- Installing occupancy sensors in Docking State Office Building to shut lights off at night.
- High efficiency lighting retrofit in the Judicial Center.
- Installing control valves on the Memorial Building air handling units to reduce over air conditioning.
- Steam pressure reset based upon the outside weather.
- Shutting steam off during periods of mild/warm weather in winter.
- Retrofitting the Judicial Center air systems from constant volume to variable air volume
- Waiting until mid-October to start the heat plant and shutting the heat plant down in April.

These measures have resulted in utility savings of $1,933,522 over the past five years. Energy consumption has been reduced from our base year as follows:

Utility Type	Base Year	Actual 2006	Actual 2007	Actual 2008
Electricity	58,155,313 kwh	51,790,756 kwh	48,900,283 kwh	48,711,614 kwh

HB 2015 is a combination of tasks and responsibilities contained in Executive Directive 07-373 (copy attached) and new responsibilities (Sec. 6). Specifically, the additional tasks require the Department of Administration to set criteria prescribing energy efficiency standards in newly constructed and renovated state buildings. The Department is also to recommend that new and renovated school and municipal buildings meet the same requirements.

The dollar effect on DOA's budget would be the salary of a qualified engineer to review project design and construction and a public service administrator for data collection analysis and reporting. The total direct operating expenses would be $152,000 in state general funds.

The Department would request that the word "calendar" on page 1, lines 15 and 17 be changed to "fiscal" in order that the data would capture a single vehicle model year for comparison rather than using two model years.

Thank you for this opportunity and I will be glad to stand for questions.

KANSAS

OFFICE OF THE GOVERNOR

KATHLEEN SEBELIUS, GOVERNOR

EXECUTIVE DIRECTIVE NO. 07-373

Energy Conservation And Management

By virtue of the authority vested in the Governor as the head of the Executive Branch of the State of Kansas, the following actions are hereby directed:

There is no more effective or environmentally appropriate way to address energy shortages, increasing costs, air pollution and climate change than using less energy. Therefore, energy efficiency and conservation will be priorities of this administration for the next four years. While some Kansas energy conservation efforts are nationally recognized as best practices, there is much more that must be done. Good leadership requires good stewardship. The following initiatives will provide the foundation of a vigorous efficiency and conservation effort that will place Kansas State Government at the forefront of appropriate and effective energy and environmental practices.

1. First, I am directing the Department of Administration, in cooperation with the Kansas Energy Office and the Energy Steering Committee, to conduct a survey of all state employees requesting energy saving suggestions specific to their agency, or to the whole of state government. I fully expect to expand the issues outlined in this document based on suggestions from the workforce. My goal is to complete the survey by July 1,2007.

2. I am directing the Department of Administration to adopt a policy to require an energy audit on any facility being considered as leased space and require the landlord to either make the necessary improvements on the property or make them a condition of the lease before it is executed. Further, I am directing the Department of Administration to collect energy data associated with state-owned and leased space and identify locations appearing to use excessive energy.

3. I am directing the Department of Administration and the Kansas Corporation Commission to immediately initiate an evaluation of the advantages for the State to become a member of the Chicago Climate Exchange (CCX). The CCX membership would require a commitment on the part of the state to reduce carbon dioxide emissions to an agreed upon goal through energy conservation practices and/or the increased use of

Capitol, 300 SW 10th Ave., Ste. 212S, Topeka, KS 66612-1590

Voice 785-296-3232 Fax 785-296-7973 www.ksgovernor.org governor@state.ks.us

clean and renewable sources of energy. Failure to meet agreed upon goals would result in financial penalties.

4. I am directing the Department of Administration to take necessary measures to assure that the average EPA mileage rating for automobiles purchased in 2010 is at least 10% higher than the 2007 average.

5. I am directing the Department of Administration negotiate the next contract with an auto leasing company to assure that the average EPA mileage rating for cars provided under the 2010 lease is at least 10% higher than the average for cars provided under the current lease.

6. I am directing the Department of Administration to review its purchasing practices to assure 100% compliance with existing requirements related to energy conservation and to develop or increase standards for such products as appliances, light bulbs, and computers using Energy Star® as a minimum standard.

7. I am directing that all computers not having a technical or operational need, be turned off at work stations when not in use for a period of four or more hours.

8. I am directing the Department of Administration to establish an Energy Auditor position charged with oversight of the initiatives set out in this order. The Auditor shall submit an annual status report to the Governor and present the report to the Governor's Cabinet at a special meeting focused on energy conservation at least once a year.

9. The Auditor shall be a professional architect or engineer with experience in energy/utility management.

10. I am pleased that the Department of Health and Environment has initiated a recycling program in state government. Currently only a few buildings are participating and I am directing the KDHE and the Department of Administration to expand that program to every state office by December 2007.

11. I am directing the Department of Revenue to include information on fuel efficiency in the operation of vehicles and include questions on this topic in the examination for all classes of operator licenses.

12. Kansas is recognized by other states as having one of the best energy savings performance contracting programs in the country, known as the Facilities Conservation Improvement Program (FCIP). The Kansas Corporation Commission's Energy Office has facilitated the implementation of energy efficiency improvements in nearly half of the 40 million square feet of state-owned buildings. These improvements not only pay for themselves with reduced energy bills, but significantly reduce the emission of greenhouse gases. I expect to implement improvements in the remaining state-owned buildings by December of 2010.

13. The FCIP is also available to local governments and school districts and some have utilized the program. I am directing the Kansas Energy Office to accelerate efforts to market the FCIP to school districts and local governments. Kansas taxpayers should not be paying the bill for wasted energy in any of our public institutions.

I will request the legislature to require the Kansas Energy Office review all state construction projects, both new and remodeling, that exceed $100,000 for possible inclusion in the FCIP. This will include Regent's facilities. I will oppose any funding for deferred maintenance that is not subject to this requirement.

THE GOVERNOR'S OFFICE

By the Governor Kathleen Sebelius

01/10/07
Date

Ron Thornburgh
Secretary of State

Brad Bryant
Assistant Secretary of State

FILED
JAN 10 2007
RON THORNBURGH
SECRETARY OF STATE

AIA Kansas
A Chapter of the American Institute of Architects

January 22, 2009

TO: House Energy and Utilities Committee

FROM: Trudy Aron, Executive Director

RE: Support for HB 2015

Good Morning Chair Holmes and Members of the Committee. I am unable to be with you today but would like to provide this written testimony in support of HB 2015.

AIA Kansas is a statewide association of architects and intern architects. Most of our 700 members work in over 120 private practice architectural firms designing a variety of project types for both public and private clients. Our members are designing tomorrow's building today. These buildings are meeting the triple bottom line: environment, people and economy.

HB 2015 requires the State to adopt energy efficiency performance standards for new and, to the extent possible, renovated buildings. It requires buildings to be designed and constructed to achieve energy consumption levels that are at least 10% below those established under ASHRAE standard 90.1-2004 or the IECC, 2006. While this bill does increase the energy efficiency standards modestly, we can do so much better. AIA Kansas strongly supports the adoption of a LEED® Standard for our buildings.

LEED® stands for Leadership in Energy and Environmental Design. This standard, developed by the US Green Building Council, incorporates much more than the ASHRAE or IECC standards. LEED® looks at the entire process of design and construction – how far materials must be transported, how much construction waste goes into the landfill, can the building be reached by public transportation, water consumption, etc. It is a comprehensive approach to sustainability.

We can do better; let AIA Kansas work with your subcommittee on Energy Efficiency to adopt meaningful standards for new and renovated buildings. When we provided information to the committee two years ago, we discussed the "triple bottom line: environment, people and economy" – let's make this a reality for Kansas buildings.

Please let me know when we may provide more information for the Committee or Sub-committee. Thank you.

Executive Director
Trudy Aron, Hon. AIA, CAE
info@aiaks.org

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 4

Mr. Chairman, members of the committee, good morning and thank you for the opportunity to address you regarding HB 2015, which we support.

Energy efficiency – at an average cost of 3 cents per kilowatt hour versus a minimum of 6 cents/kwh for any form of new generation – is the most cost-effective, immediate solution for utilities facing rising fuel and construction costs, aging infrastructure, and looming carbon regulation.

Energy "saved" through efficiency is available to meet new demand – what some call a "virtual power plant." And it is abundantly available in Kansas according to a Summit Blue study commissioned by the Kansas Energy Council.

Building operations – heating, cooling, lighting, hot water and the plug load – account for over 75% of total US electricity consumption. Improvements to the building envelope can notably reduce the need for expensive space heating and cooling, while lighting, appliance and operational controls provide additional savings.

Investments in the building envelope and operations provide "permanent" savings, available long after the improvements have paid for themselves.

FCIP provides a tremendous and proven service to the state of Kansas; full application of the program would be a boon to taxpayers, who appreciate your commitment to managing their money wisely.

Of note: ASHRAE will soon issue new standards, which have been dramatically improved with respect to energy efficiency. The committee might consider amending from 10% below existing standards to simply meeting 2009 ASHRAE standards.

Finally, CEP requests that the committee consider providing this benefit to the state as a whole, either through minimum standards for all buildings or by allowing/encouraging utilities to provide services similar to those currently offered by FCIP.

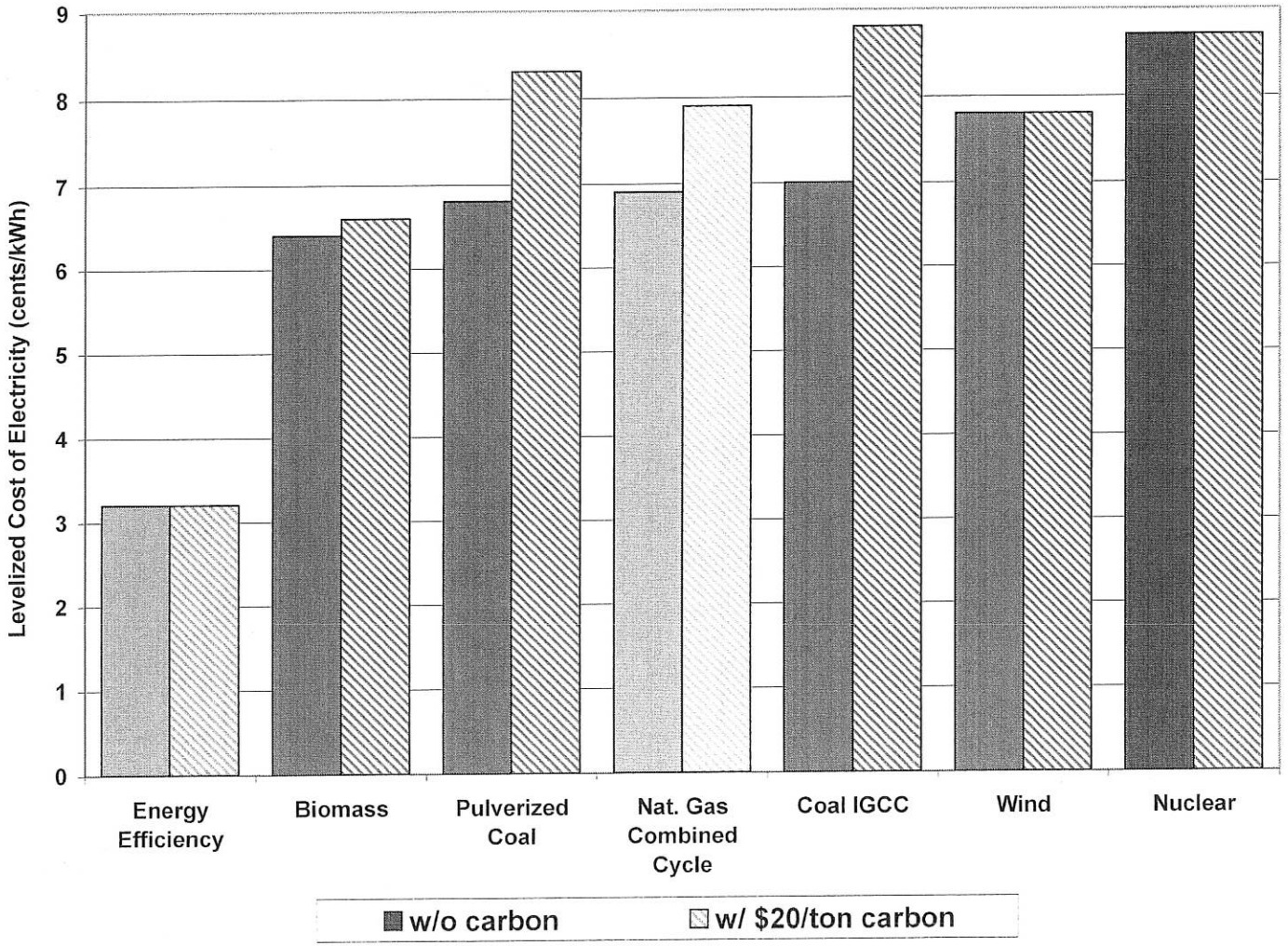
Sources:

http://kec.kansas.gov/reports/KEC_DSM_Final_081108.pdf
http://www.energystar.gov/index.cfm?c=government.bus_government_state
http://www.aceee.org/energy/facts.htm

| Nancy Jackson | Executive Director, CEP | jackson@climateandenergy.org | 785.331.8743 |
www.climateandenergy.org

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 5-1

Cost of New Electricity Resources



Source: ACEEE 2008, EPRI 2006 & UCS 2008

SUNFLOWER ELECTRIC POWER CORPORATION

A Touchstone Energy® Cooperative

January 22, 2009

Before the House Energy and Utilities Committee

House Bill 2016 – Establishing Emission Limits for Mercury, Nitrogen Oxides (NO_x), and Sulfur Dioxide (SO_2)

Conferee: Wayne Penrod, Executive Manager – Environmental Polilcy

- **POSITION:** Sunflower supports this legislation, but suggests one change.
- **SUGGESTED CHANGES:**
  - Page 1, strike lines 26 through 28 and substitute with the following:
    - Page 1, Line 38: Add a new Section 2 (a)(3) as follows: mercury and mercury compounds, an annual rate of 0.020 lb/GWh.
- **ISSUE:** Change to the mercury standard calculation
  - The suggested revision we offer here is intended to make the legislation consistent for all emissions. The bill specifies annual rates of emissions for sulfur dioxide and nitrogen oxides. It seems sensible to use the same basis for mercury. This change clearly shows that the Legislature's intent is to specify the precise annual rate of emissions in the statute.
- **SUMMARY:** The emission limitations for mercury, sulfur dioxide and nitrogen oxides are very similar to the rates recommended by the professional staff at the Kansas Department of Health and Environment for the Holcomb Expansion project.

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 6

301 West 13th Street ~ P.O. Box 1020 ~ Hays, Kansas 67601-1020 ~ Tel. 785.628.2845 ~ Fax 785.623.3395 ~ www.sunflower.net

Testimony before the House Energy and Utilities Committee
January 22, 2009
Oppose H.B. 2016

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 opposition to H.B.2016.

The Sierra Club believes that the best way to control the toxic emissions that come from new coal fired power plants would be not to build them. This would also prevent the emission of Carbon Dioxide a well known greenhouse gas.

What one would be doing by voting for HB 2016 is voting for the construction of coal fired power plants if they meet stated requirements. There is no mention of restricting the emission of carbon dioxide.

Furthermore, you are voting to take away the authority of KDHE to regulate sulfur dioxide, oxides of nitrogen and mercury by allowing the legislature to do this job. This will contravene KDHE's authority and obligation under the federal Clean Air Act to require, for all new air pollution sources larger than a certain size, a timely MACT (Maximum Available Control Technology) analysis for Mercury and a BACT (Best Available Control Technology) analysis for oxides of nitrogen and sulfur dioxide. As presently written this bill is likely to allow levels of emissions for one or more of the listed pollutants greater than would result from a MACT or BACT analysis.

Last year the legislature directed KDHE to establish a mercury monitoring program. It has been reported that this program has not yet been established. This program is aimed at pinpointing concentrations of mercury. It has been reported that Tom Gross, section chief of the Kansas Department of Health and Environment Bureau of Air and Radiation, has stated that about half the mercury in the atmosphere comes from human activities and most of that from coal fired power plants. (see article attached)

The Sierra Club does not believe the regulating of these toxic emissions should be turned over to the legislature. Please vote against this bill and allow KDHE to continue to work to keep these toxins to the absolute minimum. This would be the best policy for protecting the health of the citizens of Kansas especially children.

Thank you for this opportunity and your time.

Sincerely

Tom Thompson
Sierra Club

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 7-1

LJWorld.com

More data needed in mercury monitoring, state officials say

January 16, 2009

Topeka — A system to monitor mercury pollution in Kansas has taken longer than expected to set up, and more data need to be collected before reaching any hard conclusions, a state environmental official said Friday.

"It has been a bit of a challenge," said Tom Gross, who is section chief of the Kansas Department of Health and Environment Bureau of Air and Radiation.

The Kansas Legislature in 2007 passed a law to monitor mercury levels as part of a system that would coincide with a growing national network aimed at pinpointing areas of high amounts of the toxic pollutant.

Gross told the Senate Natural Resources Committee that it has taken longer than expected to establish six monitoring stations in Kansas because officials were trying to do it as inexpensively as possible by soliciting free access to the land.

And, he said, setting up a site at the Cimarron National Grassland near Elkhart in far southwest Kansas took a lot of negotiating with the federal government because of liability concerns.

But now the sites are established, he said.

The monitoring station in Reserve in Brown County has been up and running the longest with 10 months worth of data recorded, he said. That data at that site show that mercury levels in precipitation are the same range as levels at sites in the region in other states.

He said it was too early to tell if mercury levels are alarmingly high in any areas of Kansas.

Gross said human activities produce about half of the mercury in the atmosphere, and most of that comes from coal-burning electric power plants.

State Sen. Marci Francisco, D-Lawrence, said the mercury monitoring will be helpful.

"This information needs to be combined with information about the sources of the pollutant and then we might get some idea how far is mercury traveling from the site," Francisco said.

The other monitoring stations are near West Mineral, Cawker City, near Scott City and near Burlington.

Originally published at: http://www2.ljworld.com/news/2009/jan/16/more-data-needed-mercury-monitoring-state-official/

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Kathleen Sebelius, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

Testimony on House Bill 2016

Presented to House Energy and Utilities Committee
By
Thomas Gross, Bureau of Air and Radiation

January 22, 2009

Chairman and members of the Committee, I am Tom Gross, with the Bureau of Air and Radiation in the Kansas Department of Health and Environment. I am pleased to appear before you today to present testimony on House Bill 2016.

The bill establishes standards for mercury, nitrogen oxides and sulfur dioxide for new coal fired power plants. I will address the mercury standard in Section 1 first. In February and March of 2008, two EPA rules regulating mercury emissions from electrical generating units were struck down. This decision is under appeal. As a result of this decision, EPA has determined that new coal-fired power plants that are major sources of hazardous air pollutants must go through a process known as case by case Maximum Achievable Control Technology (MACT). The process is intended to develop a standard for the proposed plant based on an intensive review of the effectiveness of available control technologies. The 80% mercury limit contained in House Bill 2016 could create a conflict with the case by case MACT process. Before the federal mercury regulations were struck down, KDHE adopted regulations to implement EPA mercury regulations. The KDHE regulations are currently on hold awaiting the outcome of the legal challenge.

The requirements under section 2 establish fixed standards for nitrogen oxides and sulfur dioxides that apply to new pulverized coal electrical generating facilities. The New Source Review permitting program established by the Clean Air Act is intended to ensure that the addition of new and modified major emissions sources does not slow progress toward cleaner air in areas with unhealthy air and that air quality is not significantly degraded in areas with healthy air. Electrical utility steam generating units that have the potential to emit criteria pollutants in amounts greater than 100 tons/year must go through a detailed permit review process, including the Best Achievable Control Technology (BACT) review process. The BACT process results in continual improvement in emission rates from major sources by a review of existing, new and proposed facilities to see what emission rates are technically and economically feasible. House Bill 2016 fixes emission rates in place, which may conflict with federal law and regulations regarding major source permitting. Reviewing recent nationwide power plant permits show these numerical limits would become out of date in a relatively short period of time. Minor generating units are not subject to the BACT requirements since they would emit less than 100 ton/yr of SO_2 and NOx. The limits proposed in the bill, if applied to minor sources, would be more stringent than federal requirements.

Both Sections of the Bill may have unintended consequences in regard to smaller electrical generating plants. For example, the proposed Goodland Energy Resources facility, a 22 MW coal plant, has not begun operating and would be subject to this section. This facility does not meet the federal Clean Air Act definition of major source, and would not be subject to the same limitations required of the larger power plants. Under Section 2, lines 31 and 32, it is not clear whether this section applies to facilities that have started construction or completed construction.

Thank you for the opportunity to present testimony on this bill. I will now stand for questions.

HOUSE ENERGY AND UTILITIES
DATE: 1/22/09
ATTACHMENT 8

STATE OF KANSAS

TOPEKA

HOUSE OF
REPRESENTATIVES

Milack Talia
State Representative, 23rd District

Community Wind Farm Brief

Community Wind Farms ("CWF") can generally be defined as locally-owned and operated small-scale wind projects (ranging from 100 kW to approximately 20 MW capacities, connected on either side of the meter) serving communities or consumers, within a certain geographical area, to either to offset the owners' on-site power or to generate wholesale wind energy sold to a third party.

Who Owns CWFs?

CWFs are owned by a variety of individuals including community members, small business owners, farmers, local organizations including schools and universities, as well as Native American Tribes, rural electric cooperatives, municipal utilities, and even religious institutions.

Other Characteristics of CWFs:

- Cooperation among a large contingent of community members,
- A significant and direct stake in this project (beyond land lease payments, royalty-based contracts, and tax revenue),
- Financial returns to owners, and
- Potential economic benefits for the local area involved.

What Types of CWFs are There?

These projects can be any size, ranging from a single turbine to a community-owned commercial-scale wind farm.

What are the Various Ownership Structures of CWFs?

There are several domestic examples of highly successful CWFs developed under a variety of business structures. **CWFs are continually being re-defined as new community groups and models for ownership emerge. The key element is local**

HOUSE ENERGY AND UTILITIES
DATE: 1/22/2009
ATTACHMENT 9-1

ownership and local benefits. Below are some common ownership structures which have been employed. The advantages and disadvantages of the structures depend on how well it utilizes various Federal and state incentives along with low-cost financing.

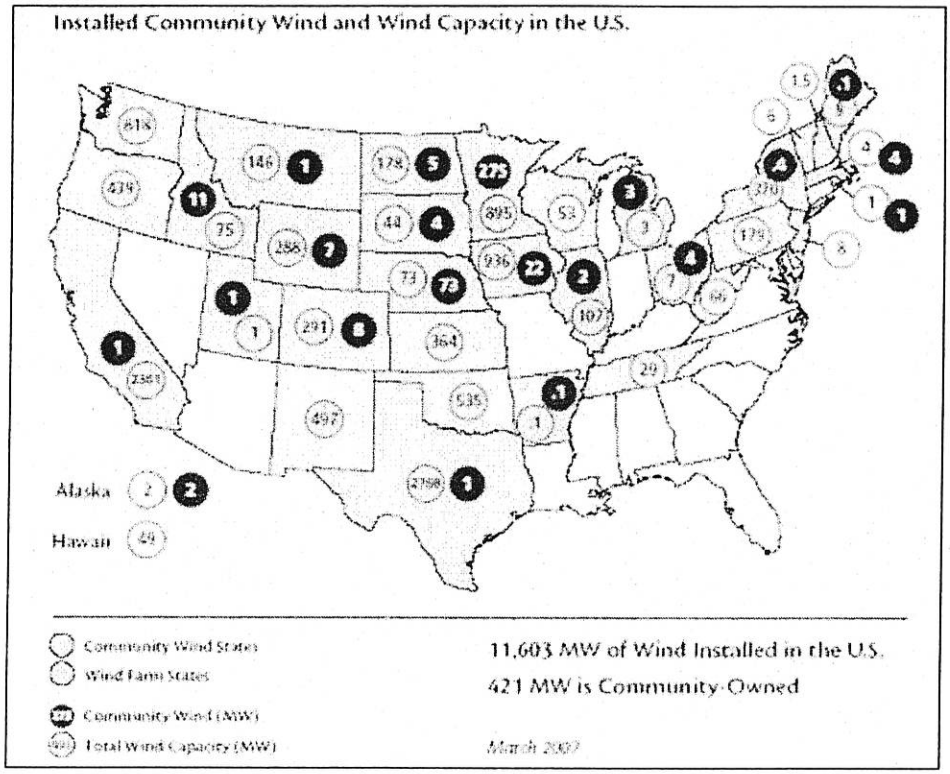
- Structure #1: **Municipal Wind**
  - A wind project is developed and installed on public property by a municipal entity, such as a municipal utility, school district, county, or other small jurisdiction.
  - These structures generally utilize low-cost public financing through the sale of tax-exempt municipal bonds.
  - Power may be sold to the local utility, or it may displace other generation or import in the case of a municipal utility.
  - A major drawback of this structure is that non-profit municipal entities are unable to harvest the federal Production Tax Credit ("PTC"), which is the major feature of the incentive landscape for wind power in the U.S. On the other hand, the minimum required internal rate of return for a municipal project is lower than most other private equity-driven ownership structures.
  - Like all models which depend upon sales to a third party, this one would benefit from tradability of PTCs, from a lucrative standard-offer utility power purchase agreement ("PPA"), and from clear, fair, and standard terms for interconnection.
  - One of the most formidable tasks to complete in developing a CWF is attaining the **power purchase agreement**. PPAs are lengthy legal documents which define the financial obligations between your wind project and the utility purchasing your energy. They contain language defining when your project can and can not produce energy, payment schedules, reporting obligations, and indemnity clauses in addition to the rate or rates at which the utility will purchase your energy.
- Structure #2: **On-Site, Behind-the-Meter**
  - A wind project is developed and installed on a large-end electricity consumer's side of the meter, in order to provide on-site power to offset energy purchased from a utility.
  - Power that is generated on-site offsets retail kWh purchases at a 1:1 ratio, which is almost always superior to the price received in a negotiated PPA.
  - This category includes both taxable and tax-exempt entities.
  - Historically, these projects have been largely the purview of tax-exempt entities, in part because the savings are effectively taxable.
  - In addition, the power consumed onsite behind the meter is not an arm's length transaction eligible for the federal PTC.
  - The great advantage of offsetting retail power purchases, rather than being paid a wholesale rate by the utility, may be diminished somewhat by utility fees for stand-by power and severance charges.
- Structure #3: **Cooperatives (Co-ops)**
  - Cooperative members invest their pooled resources into a wind project that produces energy for the purpose of personal consumption at cost,

via direct purchase or through Green Tags or Tradable Renewable Certificates ("TRC").
    - Co-ops take many forms, whether it is a consumer or producer entity, but they generally adhere to principles such as user ownership.
    - Energy is either delivered to members through the cooperative as the energy service provider or via an agreement with a local utility.
    - They usually follow democratic rule, such that each member has one vote, most are non-profit organizations, and most offer patronage dividends, members receive proportional annual dividends according to personal consumption during the year.
- Structure #4: **Multiple Local Investors**
    - In this model local farmers/landowners/investors register as a limited liability corporation ("LLC").
    - Typically, such a project raises a certain amount of equity capital through sale of shares, and augments it with debt from a local bank.
    - The power is sold on to the local utility via a long-term PPA, and partners receive proportional dividends according to their investment.
    - A multiple local owner LLC might capture the full PTC, but it would probably require a specific kind of investor. The larger the group, the more likely an investor will be considered "passive" for tax purposes, and the PTC will thus only be allocable against any passive tax liability that investors may have—for example from rental of property. Most non-farmer investors will not have passive income to offset.
- Structure #5: **Joint Limited Liability Company (LLC) "Flip" Structures**
    - At least two categories of "flip" structures have been proposed, both with the purpose of exploiting the PTC incentive in ways that might not otherwise be possible.
    - Both the "Minnesota flip" and the "Wisconsin flip" unite local investors who wouldn't on their own have tax appetite sufficient to consume the PTC, with a corporate partner that does.
    - The ownership "flips" from the latter to the former, once the 10-year PTC period expires.
    - Typically, under the "Minnesota Flip" structure, local investors form an LLC and conduct pre-development work (wind monitoring, negotiating wind rights, negotiating a PPA, and local zoning and permitting). Upon completion of the pre-development work, the local investors form a partnership with a corporation with a sufficiently large tax liability to absorb the entire PTC. The local investors may contribute anywhere from 1% to 25% of the investment into the project via equity or financing, and the corporate partner contributes the remaining portion of the needed investment required to develop the project. For the first ten years of the project (after which the PTC expires), the corporate partner retains most of the ownership of the project. At the pre-established moment the ownership ratio "flips," and local investor obtains majority or complete ownership for the remainder of the life of the project.

- Alternatively, as with the "Wisconsin Flip" structure, instead of local farmers/landowners/investors providing a portion of the equity, local investors pool their resources to provide a loan to the corporate investors to cover the costs and development of the project. Because of the tax treatment of debt, this loan lowers the corporate partner's minimum required internal rate of return on the capital it does invest. For the first ten years the corporate partner retains 100% of the ownership of the project and realizes 100% of the profits or losses as well as the tax benefits, and the local investors earn only the interest on the provided loan. At the end of the ten year period or after the corporate partner has exhausted all of the eligible tax-benefits, the entire structure is sold back to the local investors for a price equal to the original principal of the loan, which is in turn forgiven.
- A potential stumbling block for this structure lies in the unwieldiness of a large, multiple-equity-partner LLC.
- There are some non-trivial diseconomies of scale to contend with, relating to legal fees and securities registration, as well as to formal communication costs within a large, registered partnership.
- Typically the corporate partner plays a passive role, consuming the PTC (and in Minnesota, when applicable, the state cash production incentive as well) and as much of the revenue flow as necessary to meet its minimum required internal rate of return, but leaving the development, permitting, and operational costs to the local partner.
- The Wisconsin flip has not yet been implemented in practice, and may yet face some legal hurdles.

Where are CWFs?

The map below shows where and how much community wind is operating today.



What about Traditional Wind Farms ("TWF")

In the traditional model, the company that builds and manages a wind farm retains sole ownership of the development. Usually, the owners of the land on which the wind turbines were built usually have no stake in development and are instead are compensated through land lease payments or royalty-based contracts.