

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Vice-Chair Rob Olson at 9:15 A.M. on February 20, 2008 in Room 783 of the Docking State Office Building.

All members were present except:

Carl Holmes-excused
Vaughn Flora-excused
Annie Kuether- excused
Peggy Mast- excused
Judy Morrison-excused

Committee staff present:

Mary Galligan, Kansas Legislative Research
Melissa Doeblin, Revisor's Office
Renaе Hansen, Committee Administrative Assistant

Conferees appearing before the committee:

Representative Tom Sloan
Larry Holloway, KCC
Mark Schreiber, Westar Energy

Others attending:

Fifteen including the attached list.

Hearing on:

HB 2765- Clean coal technology, requests for proposal for future energy requirements of Kansas retail electric suppliers.

Proponents:

Representative Tom Sloan presented testimony, (Attachment 1), in support of **HB 2765**. He also presented the committee with an article (Attachment 2) from the Lawrence Journal World.

Comments were made by Representative Forrest Knox.

Opponents:

Larry Holloway, KCC, (Attachment 3) presented testimony in opposition to **HB 2765**.

Mark Schreiber, Westar, (Attachment 4), offered opposing testimony to **HB 2765** noting that the technology for the future generation is not completely developed.

Written Opponents:

Dave Springe, CURB, (Attachment 5) presented written testimony in opposition to **HB 2765**.

Written Neutral:

Thomas A. Conley, Chief, Radiation and Asbestos Control Section, KDHE, (Attachment 6), offered testimony in response to **HB 2765**.

Questions were asked and comments made by Representatives: Don Myers, and Tom Sloan.

The next meeting was scheduled for February 21, 2008.

The meeting was adjourned at 9:34 a.m.

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TOPEKA
HOUSE OF
REPRESENTATIVES

COMMITTEE ASSIGNMENTS
VICE CHAIRMAN: GOVERNMENT EFFICIENCY
AND TECHNOLOGY

MEMBER: ENERGY AND UTILITIES
TRANSPORTATION

Testimony on HB 2765 - Aggregation of Electric Generation Needs

Energy & Utilities Committee

February 20, 2008

Mr. Chairman, Members of the Committee: Some of the bills that I introduce are designed to stimulate thought and discussion. This is one of those bills.

HB 2765 calls on the KCC to survey all Kansas electric utilities - investor-owned, rural electric cooperatives, and municipal systems - regarding their base, intermediate, and peaking load demands between 2010 and 2030. That information would then form the basis for consultation with all retail electric suppliers and the issuance of requests for proposals to meet the aggregated load.

The bill specifies that for coal-fired generation, supercritical power plants or better must be constructed with carbon capture and sequestration technologies. The bill does not require all carbon be captured.

For natural gas-fired generation, the bill requires combined cycle combustion turbine units or better with carbon dioxide capture and sequestration to the extent technologically and cost-effectively feasible.

For nuclear plants, the bill requires on-site high and low-level radioactive waste disposal capacity. The bill on line 42 should say 50 years (not 5).

The bill requires 10 percent renewable energy by 2015 and 20 percent by 2025.

Responses to the RFP shall be evaluated jointly by the Commission and utilities and a consensus-based selection shall be made on factors including, but not limited to: efficiency of operation, technologies available to reduce emissions, monetary cost and cost in reduced energy output to achieve those reductions, and the resulting cost to customers.

All state electric utilities may share in ownership of the plants based on the percentage of energy that they will receive.

Objectives of the bill: Kansas' energy needs will be met collaboratively and cost-effectively, energy plants to serve Kansans will be built in Kansas with the necessary transmission infrastructure to deliver the power, energy security is increased, customers will benefit from generation projects properly scaled with the appropriate mix of fuels.

Mr. Chairman, I will respond to questions at the appropriate time.

HOUSE ENERGY AND UTILITIES
DATE: 2/20/2008
ATTACHMENT |

New crystals can absorb CO₂, study finds

Chemist says process could be applied to emissions from coal plants

By Alan Zarembo

Los Angeles Times

Scientists at the University of California, Los Angeles, have synthesized a class of spongelike crystals that can soak up carbon dioxide, the primary greenhouse gas in industrial emissions.

The crystals — zeolitic imidazolate frameworks, or ZIFs — are grids of metal atoms and organic molecules that loosely trap carbon dioxide as it drifts into microscopic pores. The

researchers believe that atomic charges hold the gas in place.

One variety, ZIF-69, is so absorbent that a single liter of the material can hold 83 liters of carbon dioxide, according to a study published Friday in the journal *Science*.

The crystals could be tailored to capture carbon dioxide emissions from coal-fired power plants, factories and other industrial sources, said Omar M. Yaghi, the chemist from UCLA who led the study.

The material also could be used to line vehicle exhaust systems. When drivers fill their gas tanks, they also could have the carbon dioxide removed.

The idea is to line the insides of smokestacks with a layer of ZIF. Carbon dioxide that enters the pores could be sucked out periodically and sequestered underground.

Yaghi said the material also could be used to line vehicle exhaust systems. When drivers fill their gas tanks, they also could have the carbon dioxide removed.

"That is a little bit more challenging than in the power plants," he said.

Capturing industrial carbon dioxide emissions is considered a key strategy for staving off global warming.

The leading method relies on a chemical reaction to trap car-

bon dioxide in a toxic liquid — a process deemed too expensive to implement on a commercial scale. The U.S. Department of Energy has estimated that retrofitting a power plant with such a system at least would double the cost of generating electricity.

More testing is needed to determine if ZIFs can reduce the cost, said Thomas Feeley, a DOE technology manager who was not involved in the research.



*Kathleen Sebelius, Governor
Thomas E. Wright, Chairman
Michael C. Moffet, Commissioner
Joseph F. Harkins, Commissioner*

Before the House Energy and Utilities Committee
Regarding HB 2765
February 20, 2008

Testimony of
Larry Holloway
Kansas Corporation Commission

Thank you, Chairman and members of the Committee. I am Larry Holloway, Chief of Energy Operations with the Kansas Corporation Commission, and I appreciate the opportunity to be here today to testify for the Commission on HB 2765.

This bill would require all retail electric suppliers in the state to provide the Commission with comprehensive information regarding their anticipated needs to serve their customers for the years 2010 through 2030. The Commission would then be required to compile the information and issue a request for certain baseload and intermediate load generation technologies to meet that requirement. The Commission is then required to review the responses and approve necessary generation and transmission siting. Next, the Commission would determine the allocation of ownership of the new generating facilities among retail electric suppliers based upon a formula specified in the bill. The generation owners, which are apparently the retail electric suppliers, must minimize financial impacts of carbon capture technologies on the retail electric suppliers. The Commission may not disallow cost recovery on technology performance issues it has recognized. Finally, each retail electric supplier must itemize on customers bills the investments the utility is making in clean air technology.

The Commission opposes this bill and has numerous concerns regarding this legislation;

a few of these concerns are as follows:

- Assuming this bill requires the Commission to perform a statewide electric supply plan, issue Requests for Proposals (RFPs) pursuant to the plan, and select winning proposals, the Commission does not have the expertise, nor the authority to accomplish these goals.
 - Doing so would take a massive consulting effort and hiring of many additional employees by the Commission to develop this expertise.
 - It is unclear who would contract with the winning proposals. If it is the Commission, the Commission would need to be granted authority and backing by the state to guarantee many billions of dollars of contracts. If it is the retail electric suppliers allocated the ownership in section 1(e) over 150 entities would need to have approval of their boards and city councils to sign the contracts.
- Section 1(a) of the bill requires nonjurisdictional retail electric suppliers to give the Commission information, but section 1(e) requires the Commission to determine ownership of the generation facilities. The Commission is not granted the extended authority necessary to require this ownership among nonjurisdictional utilities in the state. To implement this section of the bill the Commission's authority over rural electric cooperatives and municipal electric utility retail suppliers would need to be greatly expanded.
- Section 1(b) of the bill envisions a "consensus-based selection" of RFP responses among the Commission and the over 150 retail electric suppliers. This would require consensus among all rural electric cooperative boards, all 118 governing bodies of Kansas municipal electric providers, and the board of directors of all investor owned utilities, as well as the Commission. The bill is unclear on how this would be accomplished.
- It is not clear who the generation owners are meant to be. Section 1(e) implies that ownership will be allocated to all retail electric suppliers, but section 1(f) and 1(d) seem to imply that the generation owners could be other than the retail electric suppliers. Depending on what is meant, this bill could disallow any new independent power producers (such as the Gray County Wind Farm, The Elk River Wind Farm, etc.) from providing wholesale power to Kansas utilities, since the bill appears to require utility ownership.
- The language in section 1(g) is confusing. It appears to state that if the Commission recognizes that a technology will not perform, is it then prohibited from disallowing any cost recovery for investments in a technology it has already found doesn't work.
- The language in section 1(b) is unclear. It seems to emphasize baseload and intermediate generation facilities, and then discusses a renewable energy portfolio for intermittent generation. Is the Commission authorized to enforce this renewable energy portfolio?

Does the Commission issue an RFP for renewable energy? Since the Commission is required by section 1(e) of the bill to assign ownership, does this mean that responses to renewable RFPs for purchase power agreements must be rejected?

- Requirements for generation types in section 1(b) are unclear. Requirements for nuclear power plant proposals that would require on site permanent disposal of waste assures that this technology will not be proposed by anyone. Similar carbon dioxide capture restrictions on gas and coal units assure few responses for these requirements. Restricting requests for generation by ownership by retail electric suppliers will eliminate any participation by independent power producers.
 - It is unclear what occurs if no qualified responses to the Commission's RFP(s) are received.
- Section 1(e) of the bill implies retail electric suppliers will be the owners of the selected generation. However section 1(f) requires these same retail electric supplier owners to be cognizant of the financial impact it will have on retail electric suppliers. Nonetheless, the Commission, not the retail electric suppliers, selects the winning proposals.
- Electric utilities have spent many years developing the expertise and knowledge to plan, construct, and dispatch the necessary generation required to meet the needs of their customers. This expertise would have to be duplicated at the Commission. Determining the unique requirements of each utility's customers would be an extensive and massive undertaking. Developing the expertise, the necessary databases, the appropriate assumptions, the necessary inputs, and the underlying models would require years of extensive effort by consultants and Commission Staff.



MARK A. SCHREIBER
Director, Government Affairs

Testimony of Mark Schreiber
Director Government Affairs, Westar Energy
Before the House Energy and Utilities Committee
On HB 2765
February 20, 2008

Good morning Mr. Chairman and members of the committee. Thank you for the opportunity to present testimony in opposition to House Bill 2765.

House Bill 2765 seeks to have all future generation in Kansas provided for through a Request For Proposal (RFP) process administered by the Kansas Corporation Commission (KCC). Currently, each utility plans for its own generation needs based on their assumptions for load growth and type of generation required to meet that load. House Bill 2765 ignores the unique requirements of each utility.

Several flaws exist within this bill. I will only highlight three. First, although utilities have a large amount of experience planning for their generation needs, it is doubtful that they are able to predict needs thirty years in advance. As an example, our first Jeffrey units were placed into service thirty years ago. According to this bill, we would have had to anticipate the need for our Emporia Energy Center when we were placing into service our Jeffrey units. Second, the bill requires carbon dioxide capture and sequestration technologies for new coal-fired generation. According to responses provided during questioning at a Congressional hearing this year on the future of carbon capture technology, Department of Energy staff said the earliest that any commercial-scale carbon capture technology would be available is 2015, if it is found to be feasible at all. Third, ownership of the generation will be determined by an unknown formula based on three factors. As an investor-owned utility, Westar's shareholders want to know what they own when they invest in our company. This bill would negate that basic investment principle.

Thank you again for the opportunity to provide our testimony in opposition to HB 2765. I will stand for questions at the appropriate time.

Citizens' Utility Ratepayer Board

Board Members:

Gene Merry, Chair
Randy Brown, Vice-Chair
Carol I. Faucher, Member
Laura L. McClure, Member
A.W. Dirks, Member



State of Kansas

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HOUSE UTILITIES COMMITTEE H.B. 2765

Testimony on Behalf of the Citizens' Utility Ratepayer Board
By David Springe, Consumer Counsel
February 20, 2008

Chairman Holmes and members of the committee:

Thank you for this opportunity to offer testimony on H.B. 2765. The Citizens' Utility Ratepayer Board is opposed to this bill for the following reasons:

CURB supports the concept of investigating the generation and transmission needs of Kansas utilities as a group (perhaps including the unregulated cooperatives and municipal utilities) to gauge the interest and explore the possibility that by combining load requirements more efficient generation, pollution control technologies and transmission resources could be financed and built. Increasing the scope and scale of generation and transmission projects could decrease the risk for participants, increase the financing potential and potentially lower the cost for the utility's consumers. This result is not guaranteed, but exploring the potential is not an unreasonable idea. Many existing utility plants in Kansas have joint owners for this very reason.

However, HB 2765 goes much farther than exploring this possibility. HB 2765 mandates this result to the exclusion of any other result. HB 2765 requires the Kansas electric suppliers "shall" provide forecasts through 2030 and that the state corporation commission "shall" aggregate these anticipated energy needs and "shall" issue a request for proposals for the appropriate amounts of electricity. Types of appropriate generation resources are dictated in the bill, along with a set-aside for renewable generation resources. Responses to the request for proposal are evaluated by the commission and the retail electric suppliers as a group, and a consensus-based selection "shall" be made based on a certain factors listed in the bill. The bill also requires the commission "shall" review the responses and approve the electric generating plant siting and necessary transmission siting so that all Kansans will benefit from the available electricity generation and transmission. Ownership, and presumably costs, "shall" be based on a formula developed by the commission. In short, this bill mandates that the state corporation commission will be the generation, pollution control, renewable energy and transmission procurement agent for every Kansas electric supplier, deciding the resource mix and allocating the costs of the resources among those utilities as one aggregate entity.

While certain of the ideas within HB 2765 have merit and the pooling of needs should be investigated to see if there are possible consumer benefits, CURB cannot support the sweeping mandate set forth in HB 2765 as written.

HOUSE ENERGY AND UTILITIES

DATE: 2/20/2008

ATTACHMENT 5



Kathleen Sebelius, Governor
Roderick L. Bremby, Secretary

DEPARTMENT OF HEALTH
AND ENVIRONMENT

www.kdheks.gov

Written Testimony on House Bill 2765

Submitted to the
House Energy and Utilities Committee
By
Thomas A. Conley, CHP
Chief, Radiation and Asbestos Control Section

February 20, 2008

Thank you, Chairman Holmes and members of the Committee, for allowing the Kansas Department of Health and Environment to provide written testimony on HB 2765, regarding requests for proposal for future energy requirements of Kansas retail electric suppliers.

The bill will require the state corporation commission to issue requests for proposals to all Kansas retail electric suppliers regarding anticipated electricity needs to serve their customers from the year 2010 through the year 2030. This testimony will focus on the bill's effect on nuclear energy generators as specified in Section 1, subsection (b)(3).

For nuclear generators, Section 1, subsection (b)(3)(A) states: "Require adequate on-site high- and low-level radioactive waste disposal capacity for five years of plant operation." Section 1, subsection (b)(3)(B) states: "require plans for permanent on-site disposal in the event that federal repositories are not available." The apparent intent of the bill is to compile information to assess the future energy needs of Kansas, however, Section 1 of the bill presumes that Kansas has authority to require siting of high- and low-level waste repositories on the site of current and future nuclear power plants.

With the enactment of the Atomic Energy Act in 1954, Congress placed responsibility for a federal system of regulation and licensing of nuclear energy in the Atomic Energy Commission.¹ In 1959, Congress amended the Atomic Energy Act to allow qualified states to assume regulatory oversight for the possession, use, and disposal of many kinds of radioactive materials, including commercially generated low-level radioactive wastes.² By agreement

¹ In 1974, Congress enacted the Energy Reorganization Act, which abolished the Atomic Energy Commission (AEC) and created the Nuclear Regulatory Commission (NRC) to carry out the AEC's licensing and regulatory duties.

² "Low-level radioactive waste" is radioactive material that is not high-level radioactive waste, spent nuclear fuel, or byproduct material . . . and that the NRC classifies as low-level radioactive waste. 42 U.S.C. § 2021b(9). See also K.S.A. 48-1603(k). "High-level radioactive waste" means: (1) Irradiated reactor fuel; (2) liquid wastes resulting from the operation of the first cycle solvent extraction system, or equivalent, and the concentrated wastes from subsequent extraction cycles, or equivalent, in a facility for uranium processing irradiated reactor fuel; and (3) solids into which such liquid wastes have been converted. K.S.A. 48-1603(j).

HOUSE ENERGY AND UTILITIES

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effective January 1, 1965, Kansas became an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended, under which the Atomic Energy Commission relinquished to Kansas portions of its regulatory authority to license and regulate byproduct materials, source materials, and certain quantities of special nuclear materials.

Congress enacted the Low-Level Radioactive Waste (LLRW) Policy Act of 1980 and the Low-Level Radioactive Waste Policy Amendments Act of 1985 to give states the responsibility to dispose of low-level radioactive waste generated within their borders and to allow them to form compacts to locate facilities to serve a group of states. The Act provides that the facilities will be regulated by the NRC or by states that have entered into agreements with the NRC under Section 274 of the Atomic Energy Act.³

The Nuclear Waste Policy Act of 1982, as amended, establishes both the federal government's responsibility to provide a place for the permanent disposal of high-level radioactive waste and spent nuclear fuel, and the generators' responsibility to bear the costs of permanent disposal.

Under its status as an Agreement State, Kansas has the authority to regulate siting low-level radioactive waste disposal facilities. See K.S.A. 48-1620. Kansas is without authority to regulate the disposal of high-level radioactive waste. Currently, Kansas does not have regulations in place for siting a low-level radioactive waste disposal facility nor is the department adequately staffed or funded to undertake the review of such an application.

To avoid unintended consequences and confusion regarding the handling of high-level radioactive waste, the department suggests that subsection (b)(3) should be clarified. The department is ready and willing to assist the committee in providing clarifying language.

Thank you for your consideration of these comments.

³ Kansas is a member of the Central Interstate Low-Level Radioactive Waste Commission, along with Arkansas, Louisiana, and Oklahoma.