

MINUTES OF THE House SUB COMMITTEE ON EnergyThe meeting was called to order by Representative Keith Farrar at
Chairperson8:00 a.m.~~p.m.~~ on March 1, 1983 in room 521-S of the Capitol.All members were present except:
Representative Edgar Moore (excused)Committee staff present:
La Nelle Frey, Secretary to the Committee

Conferees appearing before the committee:

HB 2215 - Representative Bill Bunten.
Bob Douglas, Douglas Asphalt Company.
Richard von Ende, University of Kansas.
Bob Graham, Kansas City Power and Light Company.
Dale Satterthwaite, Gas Service Company.

HB 2425 - Representative Ken Grotewiel.
Richard Hayter, Director, Kansas Energy Office.
Mari Peterson, Kansas Natural Resource Council.

HB 2215 - An act relating to public utilities; billing customers when meter erroneously read.

Representative Bill Bunten, sponsor of HB 2215, testified in support of the bill. He said the bill provided that if a utility customer is charged or billed erroneously because of a meter that was either improperly read or malfunctioned or had the wrong factors applied, the utility could not come back after 90 days and assess the customer for those charges. He said the utility would have to absorb that loss. He stated he was not sure that 90 days was the right amount of time to be allowed; maybe it should be a longer period of time. He exemplified this utility/customer billing situation by discussing a problem which had occurred between the Board of Public Utilities and the University of Kansas Medical Center (see attachment 1). Representative Bunten also provided Subcommittee members with a proposed amendment to HB 2215 (see attachment 2).

Bob Douglas, Douglas Asphalt Company, Topeka, testified in support of HB 2215. He related a personal experience in which a gas meter installed at his asphalt company was being incorrectly read. He noted that when the meter was installed, the Gas Service Company had instructed his personnel on how to read the meter. Each month, both the utility and his personnel read the meter, and each month for five months, the calculations coincided. In the sixth month, he said, the utility's calculation did not coincide with his so they contacted the utility to see whose reading was correct. Gas Service told him that his reading was correct. Then, in the twelfth month, Gas Service sent him a bill for \$48,000 saying he owed them nine times more than they had been charging him all year long. Mr. Douglas pointed out that under current law, he must pay the bill. He said the error which caused the added charge was in the interpretation of the reading of the meter, in that the meter was factored by 10 rather than 100 as he was originally told. He felt that at some point, the utility should have to accept responsibility since they own the meter, read the meter, and interpret the reading on the meter.

Richard von Ende, executive secretary of the University of Kansas, testified in support of HB 2215. He referred briefly to the billing error between the Board of Public Utilities and the University of Kansas which Representative Bunten outlined in his testimony (see attachment 1). He said that a point he would like to make was that the KU Medical Center had paid in good faith every bill that was submitted to them. Since the meters are the property of the utility, where does the responsibility lie when an erroneous billing occurs? He asked, should it lie with the utility company or with the utility customer who receives a bill two years after the fact for an enormous sum which he didn't know he owed? He said the KU meter reading error was due to equipment failure involving "shorting" screws.

CONTINUATION SHEET

MINUTES OF THE House SUB COMMITTEE ON Energy,
room 521-S, Statehouse, at 8:00 a.m./~~p.m.~~ on March 1, 1983

Bob Graham, Kansas City Power and Light Company, testified in opposition to HB 2215 on behalf of the Electric Companies Association of Kansas. He noted that in cases where a meter is regularly read by utility meter readers, if the customer is underbilled for one month, the correct reading the following month automatically corrects the misreading of the previous month. He said that in cases where meters are not accessible, the customer reads the meter and sends the reading to the utility. The Kansas Corporation Commission requires that the utility must read these meters at least every fourth month. He said if the three-month restriction was required in correcting an erroneous bill read by the customer, the utility would have to depend on the customer to read the meter accurately. If the utility was not allowed to collect the full cost of service used, the unbilled usage would drop into system losses and the cost would be spread to all customers. He noted that Kansas City Power and Light's meter-reading accuracy is well over 99% which is also probably generally true of all utilities (see attachment 3).

Dale Satterthwaite, Gas Service Company, testified in opposition to HB 2215. He noted that a number of Gas Service customers in Kansas read their own meters for periods up to a year. The utility reads each meter once each year to verify the customer's reading. He said HB 2215 would prevent the utility from collecting uncollected amounts due it even though the error in reading was not the error of the utility. He also pointed out that a large number of meters are inside meters and if the customer is not available to give the utility access the bill is estimated. He said HB 2215 could prevent them from collecting any past-due amounts created by an underestimated bill. He noted there are also occasions when through human error or mechanical failure, the customer is billed improperly, requiring a refund to the customer the amount of any excess improperly billed to his account. He said HB 2215 does not address this situation. He stated that each customer should pay for the amount of gas used and should not be entitled to take advantage of either human error or mechanical failure. He said HB 2215 might result in discriminatory treatment of customers and unnecessarily limit the utility's ability to collect the proper charge for services rendered (see attachment 4).

A brief question and answer period followed several of the presentations of testimony on HB 2215.

HB 2425 - An act concerning the state corporation commission; authorizing the creation of the Kansas energy research and development board.

Representative Ken Grotewiel, sponsor of HB 2425, testified in support of the bill. He said the purpose of the proposed legislation was to direct 40% of the research and development surcharge on electric bills to appropriate research and development projects within Kansas. He noted that at present, 80% of these monies collected go out-of-state to the Electric Power Research Institute. He said this is disadvantageous to Kansas in that: (1) the money is not spent in Kansas so has no positive influence on our state economy; and, (2) the money is often used for research and development projects that are not specifically geared to Kansas. Representative Grotewiel noted that he had a proposed amendment to the bill (see attachment 5).

Dr. Richard Hayter, director of the Kansas Energy Office, testified in support of HB 2425. He noted that the Kansas economy would benefit from an increased emphasis on energy-related research which is specific to Kansas. He said that Kansas should have a deliberate energy research plan and should provide the funding necessary for that research. He also provided a sampling of the research that is presently underway within Kansas (see attachment 6).

Mari Peterson, Kansas Natural Resource Council, testified in support of HB 2425. She noted that for the first time since 1900, Kansas is a net importer of energy. She said that HB 2425 recognizes the need for applied energy research and development in the state to avert a state economic crisis which can result from a loss of hundreds-of-millions of dollars

CONTINUATION SHEET

MINUTES OF THE House SUB COMMITTEE ON Energy,
room 521-S, Statehouse, at 8:00 a.m./~~a.m.~~ on March 1, 1983

to pay for imported energy. She stated that currently there is scattered energy research in Kansas, but it lacks direction and coordination. She said HB 2425 would establish the energy research board whose members would assess what research is going on in the state and what is needed. Funding for the board and its activities would be provided by retaining 40% of the electric utility research and development surcharge (see attachment 7).

Due to a lack of meeting time, Vice-chairman Farrar asked that testimony continue on HB 2425 at the Subcommittee meeting scheduled for later in the day at 3:30 p.m.

There being no further business to come before the Subcommittee, the meeting adjourned at 9:00 a.m.

The next meeting of the Subcommittee will be held at 3:30 p.m., March 1, 1983.

Rep. Keith Farrar, Vice-Chairman



THE UNIVERSITY OF KANSAS

Office of the Chancellor
223 Strong Hall, Lawrence, Kansas 66045
(913) 864-3131

February 28, 1983

The Honorable William W. Bunten
Chairman
House Committee on Ways and Means
Third Floor, The Statehouse
Topeka, Kansas 66612

Dear Representative Bunten:

This is in response to your request for a brief history of the problem involving the Board of Public Utilities (BPU) and the University of Kansas Medical Center and the decision by the BPU to sue the State for \$3,007,172.89 for what they claim is unbilled usage of electricity by the Medical Center.

In April 1981 personnel at the Medical Center detected some problems with the power supply at the University of Kansas Medical Center. Consequently, they invited representatives of the Board of Public Utilities to inspect the electrical system and determine what, if any, corrections could be made. During that inspection, BPU officials found that "shorting" screws were partially engaged in the primary meter and were diverting to ground a portion of the current which should have been recorded on the meters. This obviously resulted in a lower meter reading.

When the shorting screws were disengaged the recorded energy usage increased considerably. In fact, in the first day it went from approximately 60,000 kilowatt hours to 168,000 kilowatt hours.

There is no way to know how long the shorting screws were engaged. It is possible that they were engaged when the meters were first installed (which we believe to have been November 16, 1975) and until the discovery in early May of 1981.

In the time since May, 1981 the Board of Public Utilities has attempted to estimate how much unrecorded electricity was used by the Medical Center and to be compensated accordingly. In fact, the BPU has gone through an extensive analysis, but that analysis can in no way be validated because there is no way to determine absolutely the extent to which usage of electricity was unrecorded nor is it known absolutely for how long such usage may have been unrecorded.

The following facts may be pertinent to this case.

1. The equipment was manufactured by S&C Switchgear Company. A representative of that company has told us that the policy of the company was to ship switchgear with the shorting screws engaged and that such screws are normally disengaged at the time of completion of the installation of such equipment.
2. The switchgear was installed by Evans Electric Company, which was the primary electrical contractor on the construction of the new hospital at the KU Medical Center.
3. Records indicate that the Board of Public Utilities had a competent representative on site when the equipment was installed and one presumes that the installation work done by the Evans Electrical Company was checked by that representative.
4. I am not certain who owned the piece of equipment involved. The Board of Public Utilities in its claim stated that "The metering problem existed in Bay 10-F of the custom switchgear." In a report to the State Architect, Frank Applegate, a consulting engineer, has stated that "The Board of Public Utilities owns and controls access to switchgear sections 5F, 6F, 7F, 9F, 10F, 11F"

To this point then we have established the following. The switchgear was installed by Evans Electric in the presence of a representative of the Board of Public Utilities. We have always maintained, and I believe Mr. Applegate's records so indicate, that the equipment is technically under the jurisdiction of the Board of Public Utilities. The BPU has responsibility for assuring its proper operation. That is why law or ordinance in virtually every municipality in this state provides that electrical connections--whether one is remodeling a home or building a new hospital--must be made by licensed or certified electricians and checked by a representative of the appropriate governing unit, city government or, in this case, the Board of Public Utilities.

As you know, the BPU filed a claim with the Kansas Legislature in the amount of \$3,007,172.89. That claim was rejected because the Board of Public Utilities had earlier authorized one of its employees to sign for receipt of a check in payment of another claim it had filed and had released the State from any further claims for electrical usage by the KU Medical Center prior to June 30, 1981. Within the last week, the Board of Public Utilities has announced its intention to file suit in

The Honorable William W. Bunten
February 28, 1983
Page Three

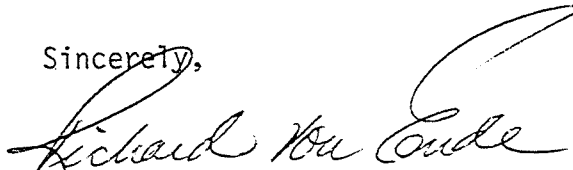
court for the \$3 million claim and has also asked for interest to be paid at the statutory rate. The claim for \$3 million is based on an analysis that the Board of Public Utilities has done. We permitted the Board of Public Utilities to have its representatives on the campus of the University of Kansas Medical Center although we did not necessarily approve or disapprove of the techniques which it employed in its analysis. I have since learned that the BPU used in its analysis a meter with different characteristics from the meter which was removed; the new meter also had a different impedance. This will create some inconsistency in the metering and render, in our opinion, unreliable the results of the analysis. Several other points should also be made.

--We don't know how much current was going to ground because the screws were partially engaged. Consequently, it is impossible to determine how much current was being unrecorded and should have been billed because it would be virtually impossible to duplicate or replicate the situation precisely. Consequently, no specific claim could be validated.

--It has always been the Board of Public Utilities' obligation to handle the metering component of the switchgear installed when the new hospital was constructed. Because the Board of Public Utilities had representation on site during the original switch over to the new switchgear, we find it unreasonable for them now to make claim against the State.

In summary, it appears that there may well have been some unrecorded usage of electricity at the University of Kansas Medical Center for some period of time. How long that period of time may have been and how much unrecorded usage may have occurred are questions which are unanswerable. What is answerable, however, is that the Board of Public Utilities must have primary responsibility for having overseen the installation of the equipment and assuring that it was maintained and operating properly over the years. Consequently, there is no justification for their coming before the Legislature or the courts at this date seeking funds some years after the fact.

Sincerely,



Richard von Ende
Executive Secretary
of the University

RvE:dw

cc: Chancellor Budig

BPU plans to sue state for \$3 million

KCK charges medical center owes for electricity

By Barbara Cornell

staff writer

Charging that the University of Kansas Medical Center owes \$3 million on an electricity bill, Kansas City, Kan., officials today authorized the city's utility to sue the medical center and the state of Kansas to recover the amount plus interest.

The city's legal department plans to file the suit Friday or Monday in U.S. District Court in Kansas City, Kan., said Kathryn Pruessner Peters, assistant city attorney.

A spokesman at the medical center said this morning, "We haven't seen it yet and we don't know anything about the suit. It would be a matter for the attorney general" because the suit also names the state as a defendant.

The utility bill resulted from a meter malfunction at the medical center, discovered in May 1981, that had kept bills artificially low, perhaps since 1975.

The city and the Board of Public Utilities will claim in the suit that the medical center has an unpaid bill of \$3,007,172.89, Ms. Peters said. The suit also will ask for 10 percent interest allowed by state law, increasing to 15 percent for the time after the judgment if it is in the city's favor.

She said the city and the BPU would not seek any punitive action.

In November a state legislative committee sided with the medical center, saying that the BPU already had signed a release with the state for all but \$133,489 of the unpaid bill.

Utility officials, however, have said they considered the \$133,489 to be a partial payment from the state, not a release.

When the meter mix-up was discovered, BPU officials determined that someone "grounded" equipment in the medical center's power station by inserting three or four screws into an electrical cabinet—standard safety procedure during installation or maintenance. Because the screws were not removed the meter malfunctioned.

against any person who commits, authorizes, solicits, aids, abets or attempts any of the following acts:

(a) Diverts, or causes to be diverted, utility services by any means whatsoever.

(b) Makes, or causes to be made, any connection or reconnection with property owned or used by the utility to provide utility service without the authorization or consent of the utility.

(c) Prevents any utility meter, or other device used in determining the charge for utility services, from accurately performing its measuring function by tampering or by any other means.

(d) Tampers with any property owned or used by the utility to provide utility services.

(e) Uses or receives the direct benefit of all, or a portion, of the utility service with knowledge of, or reason to believe that, the diversion, tampering, or unauthorized connection existed at the time of the use, or that the use or receipt, was without the authorization or consent of the utility.

(f) Publishes the number or code of an existing, canceled, revoked or nonexistent telephone number, credit number or other credit device or method of numbering or coding which is employed in the issuance of telephone numbers, credit numbers or other credit devices under circumstances evincing an intent to have the telephone number, credit number, credit device or method of numbering or coding used to avoid the payment of a lawful charge for any telecommunication service, or knowing or having reason to believe that the same may be used to avoid the payment of any such charge.

(g) Obtains credit for or purchases any utility service by the use of any false, fictitious or counterfeit telephone number, credit number or other credit device, or by the use of any telephone number, credit number or other credit device without the authority of the person to whom the number or device was issued, or by the use of any telephone number, credit number or other credit device knowing that such number or device has been revoked.

(h) Avoids the lawful charges, in whole or in part, for any utility service, by the use

of any fraudulent scheme, device, means or method.

History: L. 1982, ch. 273, § 2; July 1.

66-1603. Damages and costs. In any civil action brought pursuant to K.S.A. 1982 Supp. 66-1602, the utility may recover as damages three times the amount of actual damages, if any, plus the costs of the suit as defined in K.S.A. 60-2003.

History: L. 1982, ch. 273, § 3; July 1.

66-1604. Presumption of violation. There is a rebuttable presumption that there is a violation of this act if, on premises controlled by the customer or by the person using or receiving the direct benefit of utility service, there is either, or both, of the following:

(a) Any instrument, apparatus or device primarily designed to be used to obtain utility service without paying the full lawful charge therefor.

(b) Any meter that has been altered, tampered with or bypassed so as to cause no measurement or inaccurate measurement of utility services.

History: L. 1982, ch. 273, § 4; July 1.

66-1605. Injunctions. (a) A utility may, in accordance with K.S.A. 60-901 *et seq.* bring an action to enjoin and restrain any of the acts specified in K.S.A. 1982 Supp. 66-1602.

The utility may, in the same action, seek damages for any of the acts specified in K.S.A. 1982 Supp. 66-1602.

(b) It is not a prerequisite to an action pursuant to this section that the utility has suffered or been threatened with monetary damages.

History: L. 1982, ch. 273, § 5; July 1.

66-1606. Exemption; holder of official amateur radio station license. The provisions of this act concerning telephone or telecommunications service shall not apply to any acts done in good faith by any person who holds an unrevoked and unexpired official amateur radio station license issued by the federal communications commission.

History: L. 1982, ch. 273, § 6; July 1.

Rep. Bunten

HOUSE BILL No. 2215

By Representative Bunten

2-4

2-1-83
Attachment 2

0016 AN ACT relating to public utilities; billing customers when
0017 meter erroneously read; amending K.S.A. 66-119 and repealing
0018 the existing section.

19 *Be it enacted by the Legislature of the State of Kansas:*

0020 Section 1. K.S.A. 66-119 is hereby amended to read as fol-
0021 lows: 66-119. (a) The commission may ascertain and prescribe for
0022 each kind of public utility governed by the provisions of this act,
0023 suitable and convenient standard commercial units of products in
0024 service. These shall be the lawful units for the purposes of this
0025 act. It shall prescribe reasonable regulations for examinations and
0026 testing of such products or service and for the measurement
0027 thereof. It shall establish reasonable rules, regulations, specifica-
0028 tions and standards to secure the accuracy of all meters and
0029 appliances for measurements, and every public utility is required
0030 to carry into effect all orders issued by the commission relative
0031 thereto.

0032 (b) *In the event a customer is charged or billed based in whole*
0033 *or in part upon the reading of a meter, and a meter is erroneously*
0034 *read resulting in a charge or bill which is less than the bill would*
0035 *otherwise have been, the error shall not be corrected unless cor-*
0036 *rected within three months of the time when the erroneous bill or*
0037 *charge was received by the customer. The provisions of this*
0038 *subsection shall apply to municipally owned utilities/as well as to*
0039 *public utilities/regulated by the state corporation commission.*

0040 Sec. 2. K.S.A. 66-119 is hereby repealed.

0041 Sec. 3. This act shall take effect and be in force from and after
0042 its publication in the statute book.

and one city private utilities

whether

or not

As used in this subsection "erroneous bill or charge" means a billing or charge which is erroneous because the meter was not properly read, the meter had a malfunction or the bill was computed erroneously by misapplication of a meter multiplier or for any other reason.

TESTIMONY BEFORE
HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE
HB 2215
MARCH 1, 1983
BY ROBERT H. GRAHAM
KANSAS CITY POWER & LIGHT COMPANY
FOR
THE ELECTRIC COMPANIES ASSOCIATION OF KANSAS

THIS BILL ADDRESSES THE SITUATION OF A METER BEING ERRONEOUSLY READ AND RESULTS IN THE CUSTOMER BEING UNDERBILLED. IF THIS IS A METER WHICH IS REGULARLY READ BY UTILITY METER READERS, THE SITUATION IS NEARLY ALWAYS SELF-CORRECTING. THE CORRECT METER READING THE FOLLOWING MONTH WILL AUTOMATICALLY CORRECT THE MISREADING OF THE PREVIOUS MONTH. THIS SEQUENCE WOULD USUALLY PRODUCE THIS SAME BILL OR SLIGHTLY LESS FOR THE TWO MONTHS.

THE LANGUAGE IN THE BILL PROHIBITS THE UTILITY FROM CORRECTING AN UNDERBILLING IF IT IS NOT DETECTED AND CORRECTED WITHIN THREE MONTHS OF THE CUSTOMER RECEIVING THE BILL. THIS IS DIFFICULT IN THE CASES WHERE THE METERS ARE NOT ACCESSIBLE AND THE CUSTOMER IS NOT PRESENT. WE ASK THE CUSTOMER TO READ HIS OWN METER AND SEND IN THE READING. WE ARE REQUIRED BY THE KANSAS CORPORATION COMMISSION TO READ THESE METERS AT LEAST EVERY FOURTH MONTH. IF WE HAD THE THREE-MONTH RESTRICTION IN CORRECTING AN ERRONEOUS BILL READ BY EVEN THE CUSTOMER, WE WOULD BE AT THE MERCY OF THE CUSTOMER TO READ THE METER ACCURATELY. IF A CORRECTION IS NOT MADE, THE UNBILLED USAGE WOULD DROP INTO SYSTEM LOSSES AND THE COST SPREAD ACROSS ALL CUSTOMERS.

IN OUR COMPANY OUR METER READING ACCURACY IS WELL OVER 99% AND I THINK THAT IS GENERALLY TRUE OF ALL UTILITIES. WE DO NOT DENY THAT MISTAKES OCCUR, WHICH OF COURSE, THEY DO. I DO FEEL HOWEVER, THAT EVERY EFFORT IS MADE TO CORRECT THESE MISTAKES ON A TIMELY BASIS AND THAT THE KANSAS CORPORATION COMMISSION DOES AN EXCELLENT JOB IN POLICING THE UTILITIES IN ALL BILLING ACTIVITIES AND PROVIDES THE CUSTOMER WITH VERY ADEQUATE PROTECTION. IT IS OUR BELIEF THAT THIS BILL SERVES NO REAL PURPOSE AND SHOULD NOT BE ENACTED.

D e Satterthwaite



ADDRESS REPLY TO
TOPEKA, KANSAS DIVISION
200 WEST SIXTH AVENUE
TOPEKA, KANSAS 66601

IN RE: HOUSE BILL NO. 2215

COMMENTS

The Gas Service Company is opposed to the enactment of House Bill No. 2215. The bill if enacted would create serious problems for The Gas Service Company. A number of Company customers in the State of Kansas read their own meters for periods up to a year. The Company reads each meter once a year in order to verify the customer's reading. The proposed legislation would prevent the company from collecting uncollected amounts due it even though the error in reading was not the error of the Company.

A large number of the Gas Company meters in the State of Kansas are inside meters. The Company can gain access only through the customer. Where the Company cannot gain access the bill is estimated. The proposed legislation could prevent the Company from collecting past due amounts even though the Company made an effort to read the meter but was unable to do so because of limited access.

There are occasions when through human error or mechanical failure, the customer is billed improperly. This can result in the bill being more than it should have been. The legislation makes no provision for refunding to a customer the amount of any excess improperly billed to his account.

The legislation speaks to erroneously read meters but may be interpreted to also apply to those situations caused by mechanical failure. There are occasions when meters fail to register, under-register or over-register. These are corrected by the Company when they come to the Company's attention. This occasionally occurs in additional charges to the customer but may also result in refunds to the customer. The proposed legislation does not adequately address this problem.

It has been The Gas Service Company's policy, where a customer is billed less than he owes, to allow that customer a reasonable time to pay the additional amount. Any different policy would allow that customer to pay less than he should have paid for the gas he used. The public policy of the State of Kansas has always avoided discrimination between customers in the price of utility service. This legislation would allow the person who has been fortuitously underbilled to pay less for the gas he received than other customers. The cost of this underbilling will have to be borne either by the shareholders of the Company or by other ratepayers. It is respectfully submitted this is not a desirable result. Each customer of The Gas Service Company should pay for the amount of gas used and should not be entitled to take advantage of either human error or mechanical failure.

There are customers of all utilities who choose to cheat the Company through bypasses or tampering with the meter to cause the meter to reflect less consumption than actually occurs. Presently, when the Company discovers this kind of activity, it takes every effort to collect the correct amount due it. The proposed legislation would arguably affect the Company's right to recover the correct amount due for the gas used by these customers. It should be noted that even in these situations, the Company has generally worked with the customer to provide him a reasonable time in which to pay the past-due amount.

It is, therefore, respectfully submitted that the proposed legislation may result in discriminatory treatment of customers and will unnecessarily limit the Company's ability to collect the proper charge for services rendered. For these reasons, the Company opposes this legislation.

Attachment 4 3-1-83

KEN GROTEWIEL
 MEMBER OF THE HOUSE OF REPRESENTATIVES
 DISTRICT 10
 WICHITA, KANSAS 67203



TOPEKA

COMMITTEE ASSIGNMENTS
 MEMBER OF THE ENERGY AND NATURAL RESOURCES
 FEDERAL AND STATE AFFAIRS
 SELECTED

HOUSE OF
 REPRESENTATIVES

March 1, 1983

PRESENTATION TO: ENERGY SUB COMMITTEE OF THE HOUSE ENERGY
 AND NATURAL RESOURCE COMMITTEE

BY: Ken Grotewiel

RE: HOUSE BILL 2425

INTRODUCTION

Kansas electrical consumers pay nearly \$3.8 million each year to fund electrical research and development projects around the country (it is collected from a surcharge on electric bills). While there are sound arguments for funding research and development, who conducts the research and what types are undertaken is critically important.

PURPOSE OF HOUSE BILL 2425

The purpose of the bill is to direct 40% of the money now collected from the surcharge to appropriate research and development projects within the state.

BACKGROUND

At present, 80% of the monies collected go out of the state to a research and development group called the Electric Power Research Institute (EPRI). How much this institute gets is determined by the Edison Electric Institute (a trade organization for the utility industry) which mandates the total budget for EPRI and the share for each utility. The Kansas Corporation Commission gave utilities the option of applying the surcharge in 1972.

Eighty percent of this money goes out of state and this is disadvantageous to Kansas in two ways. First, the money is not spent here, thus having no positive influence on our state economy.

Secondly, the money is often put into projects that are not specifically geared to Kansas. Our state has its own version of the weather and has energy resources in proportions unlike other states. Our particular situation warrants research into dealing with our particular problems.

PRESENTATION: Energy Sub Committee
RE: HB 2425

CONCLUSION

Kansas consumers are paying for research and development projects, contributing more each year since the amount of contributions is tied to the cost of electricity. Passage of this bill would assure greater control of these funds in how they are spent and would contribute to reducing the energy import needs of the state, as well as contributing to utilizing the least expensive energy resources within the state.

KEN GROTEWIEL
State Representative
District 92

KG/sw

HOUSE BILL No. 2425

By Representative Grotewiel

2-9

0017 AN ACT concerning the state corporation commission; authoriz-
0018 ing the creation of the Kansas energy research and develop-
0019 ment board.

0020 *Be it enacted by the Legislature of the State of Kansas:*

0021 Section 1. The state corporation commission shall establish a
0022 nonprofit organization known as the Kansas energy research and
0023 development board.

0024 Sec. 2. The board shall oversee research and development
0025 programs designed to reduce the energy import needs of the state
0026 of Kansas and increase utilization of the least costly energy
0027 resources within the state. This objective shall be accomplished
0028 through maximizing efficiency of current energy resources and
0029 by studying alternate and traditional energy supply systems.
0030 Emphasis shall be given to applied rather than basic research.

0031 Sec. 3. Any electric public utility may apply to the state
0032 corporation commission for the authority to impose a surcharge
0033 on the sale of electricity to the utility's customers. Forty percent
0034 of all money derived from such surcharge shall be paid to the
0035 Kansas electric research and development fund and shall be
0036 distributed to research programs in Kansas as provided by this
0037 section. ~~Sixty~~ percent shall be distributed to projects conducted
0038 by the electric power research institute, the Kansas electric utility
0039 research program and the utilities imposing the surcharge. No
0040 program which has received money from the electric power
0041 research institute shall be allocated money from the Kansas
0042 energy research and development fund in any one year.

0043 Sec. 4. The state corporation commission shall (a) establish a
0044 structure with the board of directors to reflect public and private
0045 sectors; (b) establish guidelines for research and development

the current research and development

Forty

and twenty percent to

Testimony on House Bill No. 2425

by: Dr. Richard B. Hayter, Director
Kansas Energy Office
March 1, 1983

I appreciate the opportunity to testify on House Bill No. 2425 regarding the creation of the Kansas Energy Research and Development Board.

Research is fundamental to the growing economy of Kansas. An excellent example is the benefit derived from research on the development of wheat strains and farming practices. All Kansans have benefited directly or indirectly from the increased production which has resulted from this research.

In a manner similar to that of agricultural research, the Kansas economy will also benefit from an increased emphasis on energy related research which is Kansas specific. Energy is germane to the economy of Kansas. As a state we consume more energy per capita than the national average because of the industries which exist in Kansas, one of which is agricultural. Therefore, we are dependent on a reliable energy source, as well as one that is not accompanied by excess cost. Kansas should have a deliberate energy research plan and should provide the funding necessary for that research. Although significant knowledge is gained through research conducted within Kansas regarding energy, but funded by outside sources, there are a number of Kansas specific energy issues which should be addressed through a viable research program. This program should receive support from Kansas resources.

Prior to my discussion of the samples of research which could benefit the State, I have two concerns which I wish to share with you.

As you are aware, some of the utilities in Kansas are members of the Electric Power Research Institute (EPRI). This membership is possible because a portion of the R&D research surcharge collected by the member utilities goes toward the support of EPRI research. Although the benefits of this research to Kansas may seem at first difficult to ascertain, the results of EPRI research benefits all electric customers including those in our state. I would hope that the action taken as a result of this bill would not jeopardize the opportunity for Kansas utilities to participate as members of EPRI.

The Kansas Electric Utilities Research Program (KEURP) is a relatively new organization within the state. A portion of the aforementioned research surcharge is retained by the member utilities in the state for direct contribution to Kansas specific research. This research benefits all electric consumers within

the state. The organization of KEURP is such that utility representatives as well as non-utility interests share in the decisions as to appropriate research to be funded. Both the technical committee as well as the executive committee include non-utility representatives. By virtue of my position as Director of the Kansas Energy Office, I serve as a member of the executive committee. I feel that KEURP is providing a beneficial function and should be allowed sufficient time before any modification to its structure or funding is considered.

The primary emphasis of my testimony deals with the benefits of Kansas specific energy research. I would like to provide a sampling of the research that is presently underway within the state that, given sufficient resources, will undoubtedly benefit the entire economy of the state, as well as reduce the dependence of the state on imported energy resources.

Kansas has within its boundaries a sleeping giant in the form of coal fields found in Southeast Kansas. Because of the high sulfur content of the coal, its widespread use is presently restricted because of air pollution concerns. This problem is being addressed through research directed at coal liquifaction, coal gasification, and fluidized bed combustion. Limited resources restrict the rate at which research can be accomplished in this area. The intent of the research is to develop a method by which the sulfur, contained within the coal, can be controlled and would not produce an environmental hazard. A most interesting study involves the gasification of biomass, and the mixing of this gas with gasified coal. Gasified biomass is low in sulfur. Thus when it is combined with gasified coal, a fuel that is low in sulfur content is produced. Various forms of biomass are available as waste material in Kansas including such products as wheat straw, corn fodder, wood chips, and manure.

Research is also underway on the gasification of these biomass materials for direct combustion in stationary engines such as irrigation equipment as well as grain drying equipment. Here crop residue is fed to a gasifier, the gas is supercharged, and fed to the combustion equipment; be it a grain dryer or an engine.

Similarly vegetable oils are being investigated as substitutes for diesel fuel. Typically the vegetable oil is mixed with a given quantity of diesel fuel which is then introduced into the standard diesel engine. The economic potential for such a substitute is potentially attractive. Given sufficient resources, this research could be developed such that Kansas could soon benefit from its results.

Another alternative fuel presently under investigation is the use of hydrogen in stationary as well as mobile engines. The problem in the use of hydrogen is twofold; first certain

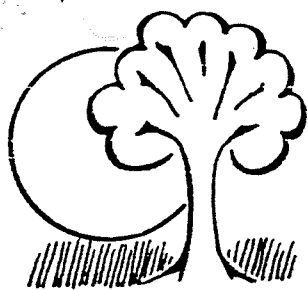
modifications to engines may be necessary, and secondly a safe method of storage is important. Again, this alternative fuel is being investigated, but with additional resources the research could be accelerated.

There is a variety of research which is needed that would directly relate to the utilities as well as the Kansas consumer. An example is fugitive dust control. Wind causes major losses from large coal storage piles, as well as at coal handling facilities, or during the transportation of coal. This loss is costly not only because of potential pollution but also as a lost fuel. Methods for reducing this loss is a topic for future research.

Lastly, I would suggest that the the interaction of water depletion and energy requirements needs investigation. An example of the research which address this issue is that of minimum tillage in field cultivation. A sufficient water supply is a necessity to the Kansas economy. However, it has been predicted by some that the dollar value of that water will be greater for use in energy transportation systems such as the coal slurry pipeline than it will be the production of crops. Issues such as this must be investigated so that future policies affecting both water and energy can be developed in a timely manner.

There is a critical mass in research funding which provides sufficient resources for the results of that research to be available as the need demands. Although research will continue, without sufficient resources, the benefits of that may not be realized for an extended period. Therefore, I am fully in support of legislation which would create the necessary funding for energy research keeping in mind the concerns mentioned at the beginning of my testimony.

I again thank the committee for the opportunity to comment on this bill.



Kansas Natural Resource Council

5130 Mission Road
Shawnee Mission, Ks 66205
913 362-5933

Testimony before the House Energy
and Natural Resource Committee

by

Mari Peterson

March 1, 1983

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Please note the graph on the following page.

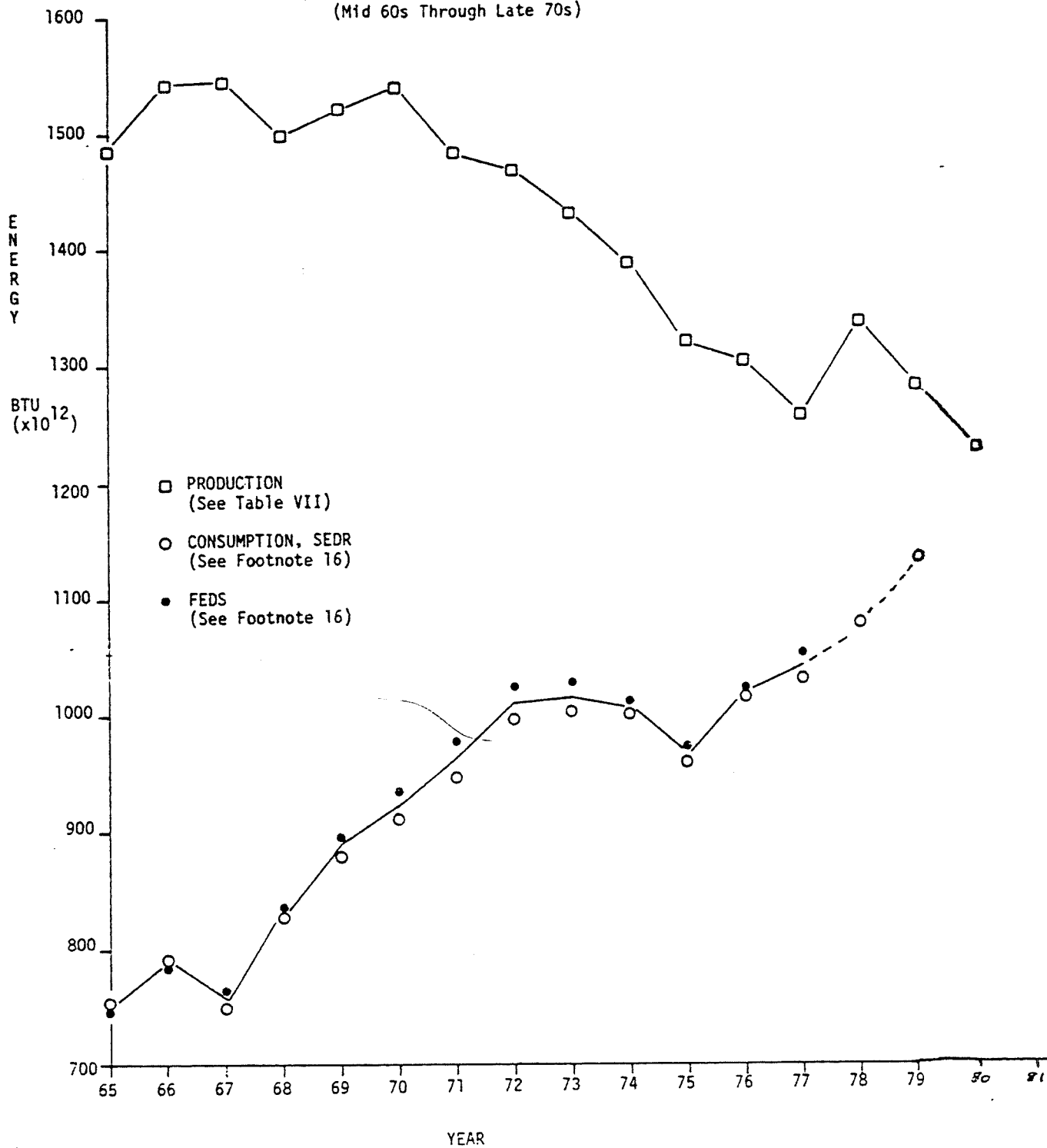
The top line represents Kansas' production of energy, the bottom line - consumption. The distance between the two lines represents the energy we have been able to export from the state. Now, for the first time since 1900, and perhaps for the first time in our history, Kansas is a net importer of energy. If these trend lines continue, before long we will be importing hundreds of millions of dollars worth of energy into the state each year.

This fate is not inevitable. The Kansas Legislature can take a leadership role in setting a clearly defined and directed state energy policy. House Bill 2425 recognizes the need for applied energy research, development, and demonstration in this state to avert a state economic crisis which can and will result from a loss of hundreds of millions of dollars to pay for imported energy. Section 2 gives the R&D program direction, specifically "to reduce the energy import needs of the state of Kansas and increase utilization of the least costly energy resources within the state."

There is scattered energy research going on in this state but it lacks direction and coordination.

Attachment 7 3-1-83

FIGURE 5
 KANSAS PRODUCTION AND CONSUMPTION
 (Mid 60s Through Late 70s)



The energy research board established through H.B. 2425 would be composed of individuals from the public and private sectors who would assess what research is going on throughout the state and what is needed. The board could accept bids on research project contracts from the public or private sectors.

To avoid becoming net energy importers, we will need to level out consumption and increase production of Kansas' energy resources. There are many measures which will permit us to use energy more efficiently. We're familiar with the concept of labor productivity. Now we must work on energy productivity. As a model, Sweden uses one-third as much energy per capita as the U.S. but has a higher income or standard of living per capita. As for energy production, Kansas has excellent solar input which can be used for space and water heating; wind for electricity, especially in the rural electric cooperative's service areas; low-head hydro electric potential; biomass and landfill feedstock for methane production; and of course the Hugoton natural gas field.

By pursuing applied research in least costly energy resources and energy efficiency, the ratepayer will ultimately benefit from lower energy costs. The state will generate more jobs directly and indirectly (through money retained in the state.) The utilities will be able to extend the useful life of their generating plants and be better able to forecast electricity needs through a clearer assessment of energy consumption patterns and trends in this state.

H.B. 2425 proposes to fund this energy research board and its activities through retaining an additional 40% of the electric utility R&D surcharge in this state. In 1982, approximately \$3.88 million was collected with this surcharge. This would make

slightly over \$1.5 million available for this research program. In 1982, about \$3.1 million of this total was sent to Palo Alto, California to the Electric Power Research Institute. The remainder was used in Kansas by the Kansas Electric Utilities Research Program and the individual utilities. These latter programs would not be affected.

This \$3.88 million is a large sum of money which is spent with minimal public oversight and review. As ratepayers, we simply trust we're getting benefits from these R&D expenditures.

H.B. 2425 challenges our level of contribution to EPRI. I will acknowledge that EPRI is doing some fine research, but I submit that Kansas would be better off to use some of that money in the state to more appropriately direct our energy research needs.

EPRI is aware of the problem that states and member utilities may not be getting their money's worth from its research program. The following quotes are from the January/February 1983 EPRI Journal.

There is a broad concensus that technology transfer is EPRI's most urgent problem and conceivably its greatest and most fundamental challenge for the 1980s.

Ric Rudman, director of the Information Services Group, describes the attitude of industry as shifting from 'a consideration of R&D as an insurance policy to that of an investment. With insurance, one tends to forget it after the purchase, but with an investment, there is a continuing need for justification. How good is my investment? How is it doing? What is my return?

There may be increasing temptation to turn to EPRI for consultation and support in matters well beyond those of R&D. How far EPRI can go in devoting resources to the transfer and commercialization of technology is today the clearest manifestation of this concern about boundaries. . . an all-out response would seem to put the Institute at risk of diluting its resources. . . pointing logically toward a whole new class of information, marketing, business development, and perhaps even customer service activities.

EPRI is having difficulty transferring its research to member utilities, and Kansas utilities are getting and using less than is acceptable given out \$3 million+ level of investment. We should consider using more of this money in Kansas where we can be guaranteed

of a return.

The Corporation Commission would need to determine if some of the EPRI money could be retained in Kansas. In addition, they may assess whether some of the member utilities would be better off contributing the bulk of their R&D surcharge funds to a state R&D program. For example, Midwest Energy has shown a very low level of participation in implementing EPRI research projects.

It may be that Kansas will be unable to retain these EPRI dollars, however we need to investigate that possibility. If we can retain this money, we not only gain \$1.5 million for state energy R&D, but also reduce the possibility that we will be importing hundreds of millions of dollars of energy into the state in the next decade. If the KCC determines that H.B. 2425 can be implemented, the state of Kansas will reap great economic benefits.