

Approved: Carl Dean Holmes
Date 3/13/96

MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Vice Chairperson Freeborn at 3:35 p.m. on February 8, 1996, in Room 526-S of the Capitol.

All members were present except: Chairperson Holmes - Excused
Representative Doug Lawrence - Excused
Representative Laura McClure - Excused
Representative Bob Krehbiel - Excused

Committee staff present: Raney Gilliland, Legislative Research Department
Dennis Hodgins, Legislative Research Department
Mary Torrence, Revisor of Statutes
Marcia Ayres, Committee Secretary

Conferees appearing before the committee: Larry Holloway, Kansas Corporation Commission
Robert D. Fincham, American Institute of Architects
Robert Hogue, Kansas Building Industry Association
Don Moler, League of Kansas Municipalities
Bill Craven, Kansas Resource Council & Kansas Sierra Club

Others attending: See attached list

Vice Chairperson Freeborn opened the meeting by announcing a sub-committee for **HB 2711**. The sub-committee will meet on Monday, February 12th at 8:00 a.m. and again on Wednesday, February 14th at 7:30 a.m. The sub-committee members are Representatives McClure, Becker, Feuerborn, Aurand, and Freeborn.

Hearing on HB 2707: Corporation commission authority with regard to energy efficiency standards for buildings

Larry Holloway. Mr. Holloway reviewed the history of the Commission's orders affecting energy efficiency standards in new residential and commercial buildings, requirements under the energy policy act of 1992, recent Commission action, and changes in responsibilities if this legislation is enacted. The Corporation Commission does not support or oppose **HB 2707**. (Attachment #1)

Representative Don Myers asked the staff to review the bill for the members.

Robert Fincham. Mr. Fincham testified in support of **HB 2707**. (Attachment #2)

Robert Hogue. Mr. Hogue testified in support of **HB 2707**. (Attachment #3)

Don Moler. Mr. Moler appeared for the League of Kansas Municipalities and read the testimony of Chris McKenzie, executive director of the League, who supports the principle contained in **HB 2707** but had a technical concern about the drafting of the bill. (Attachment #4)

Chairperson Freeborn announced a FAX had been received today from Brian Dreiling, C/I Energy Use Specialist for Midwest Energy, Inc. and distributed a copy to each Committee member. (Attachment #5)

Bill Craven. Mr. Craven testified in opposition to **HB 2707**. (Attachment #6)

Questions and discussion followed after which the hearing was closed.

The meeting adjourned at 5:05 p.m.

ENERGY AND NATURAL RESOURCES COMMITTEE
COMMITTEE GUEST LIST

DATE: February 8, 1996

NAME	REPRESENTING
Bill Craven	KNRC / Sierra Club
Jan Stogor	KCC
Kim Gulley	League of KS Municipal.
Judith Cron	American Institute of Architects
Bob Finchem	AIA Kansas
Thaine Hoffman	DOAS
Pat Worey	DOAS
RUSSELL Rudy	BALANCE HOME ENERGY
Larry Holloway	Kansas Cooperation Committee
Don Miller	League of KS Municipalities
Whitney Damron	Empire District Electric Co.
TOM DAY	KCC

BEFORE THE HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

**PRESENTATION OF THE
KANSAS CORPORATION COMMISSION ON
HB 2707**

The Commission does not support or oppose this bill. Currently the State Corporation Commission implements building efficiency standards for new residential and commercial buildings through its jurisdictional electric and natural gas utilities. This proposal appears to affect the Commission's current jurisdictional authority to enforce these building standards as follows:

- 1) Rural Electric Cooperatives that have deregulated under the provisions of K.S.A. 66-104d would be returned to the KCC's jurisdictional authority for building standards.
- 2) The Commission could not require utilities to enforce building codes in a city or county that has adopted energy efficiency standards for commercial structures that meet the minimum standards for such structures under the federal energy policy act of 1992.
- 3) The Commission would no longer have authority to adopt energy efficiency standards for any residential structure.

This testimony will discuss the history of the Commission's orders affecting energy efficiency standards in new residential and commercial buildings, requirements under the energy policy act of 1992, recent Commission action, and changes in responsibilities if this legislation is enacted.

History of Thermal Treatment Standards¹

The following is a brief summary of the legislative and Kansas

¹ From a brief review of the minutes of the House and Senate and Special Committee on Energy and Natural Resources' minutes for the years 1975 through 1978, as well as the transcripts for the KCC docket 110,766-U.

Corporation Commission actions taken since 1975 to address energy efficiency in building construction.

1975 Special Committee on Energy and Natural Resources adopts proposal No. 62.

This proposal established statewide minimum building codes affecting new construction and any remodeling or reconstruction in excess of 25% of the gross area of the existing building. An architect or an engineer had to certify the energy compliance of each design prior to receiving a building permit in any locale. It would have set a maximum annual BTU /gross square foot of floor area energy use for residences and schools, offices and commercial buildings, hospitals, and assembly and mercantile buildings (the actual number for each category would be determined by ASHRAE Standard 90P). The director of state architectural services would be authorized and directed to promulgate and adopt rules and regulations to enforce and insure compliance with the provisions of the act. Provisions would be provided to allow exemptions of up to 20% over the maximum usage on a case by case basis.

HB 2669 (formerly Proposal #62) 1976 legislative session

The proposal was changed to adopt ASHRAE Standard 90-75, lower the exemption allowance to 10%, and to apply to any new addition or reconstruction of outside roof, walls and floor. In addition several exemptions were provided including any residential building outside city limits, any farm building, any remodeling or repair costing less than \$30,000, or buildings constructed by the owners or by builders for their own use. This bill was defeated in committee.

HB 2435 1977 legislative session

This bill was a weakened version of the previous session's HB 2669. It adopted insulation standards only in communities that already had building codes and building inspectors. In addition it was not mandatory, but instead allowed anyone who didn't wish to comply to pay a charge on excess energy used by not complying. After some consideration this bill was tabled by the sponsor based on the KCC opening a docket to consider heat loss standards.

Docket # 110,766-U - KCC hearings in April, 1977

this was a show cause order concerning all electric and natural gas utilities in reference to changes in tariffs to restrict connections in new residential dwellings and new commercial buildings to those meeting insulation requirements. The existing order was issued and placed in effect beginning November 1, 1977. At this time the KCC had no jurisdiction over municipal electric and gas utilities for the purposes of establishing these requirements.

HB 2698 1978 legislative session

This bill adopted KSA 66-131a. This statute gave the KCC jurisdiction over municipal owned and operated electric and gas utilities for the purposes of restricting connections to their systems with respect to heat loss standards.

SB 435 1992 legislative session

This bill adopted KSA 66-104d. This statute allowed certain electric cooperatives the option of becoming exempt from regulation of the state corporation commission except for matters of certified territory and the wire stringing rules. This in affect removes deregulated electric cooperatives from KCC jurisdiction in respect to heat loss standards.

The Energy Policy Act of 1992 (EPACT)

This legislation contains numerous energy efficiency requirements. From the standpoint of building codes, each state is required to:

- Adopt a commercial energy efficient building code that meets or exceeds the ASHRAE/IES² Standard 90.1.
- Consider, after public hearing, adoption of a residential energy

² American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE); Illuminating Engineering Society of North America (IES)

efficient building code that meets or exceeds CABO MEC92³.

- Administrators of agencies that control federally backed mortgages such as FHA, FmHA, VA and HUD are also required to adopt CABO MEC 92 or any subsequent energy efficient building code within 1 year of DOE's adoption.
- Each state had 2 years to comply or could request an extension. EPACT provided no details of any federal action that would be taken against any state that did not comply.
- The secretary of the Department of Energy is required to consider new revisions of either code and require the states to adopt (or in the case of residential codes, consider adopting) the new code revision if it is determined that the new revision will result in significant energy savings.
 - Each state then has 2 years to adopt the new code revision. As initially, the commercial building requirements are mandatory and the residential requirements must be considered following a public hearing. Federal mortgage requirements must adopt the new revision within 1 year.

Subsequent DOE action

In July, 1994 the secretary of DOE issued a finding that adopted the latest revision of the model energy code, CABO MEC 93 and the codified version of ASHRAE 90.1.

Docket 190,381-U KCC April 11, 1994

This docket opened a general investigation of the Residential and Commercial Building Code Energy efficiency standards as required by Title 1 of the EPACT. The following action has been taken to date:

- September 29, 1994 - KCC staff issued a draft memo for comment on

³ Council of American Building Officials (CABO); 1992 Model Energy Code (MEC92).

the adoption of CABO MEC 93 and ASHRAE Standard 90.1 (and the codified version). This memo was sent to all Kansas electric and gas utilities, as well as representatives of the building industry and other parties that had expressed an interest, and requested comments on the staff's proposed position.

- October 24, 1994 - KCC staff requested a one year extension from DOE to comply with the building code requirements - DOE granted request.
- December 1994 - KCC staff received final comments from respondents. To address comments regarding increased costs of applying such a code discussions began to obtain funding to provide an independent third party investigation.
- March 1995 - KCC energy office applied for a DOE grant to fund investigation of increased building costs due to adoption of residential code.
- May 1995 - DOE denied KCC request. KCC consultant efforts refocused on providing expert evaluation of existing codes and methods of compliance.
- September 18, 1995 - KCC staff issues letter to DOE requesting another one year extension - DOE granted extension to October 24, 1996.
- December 12, 1995 - Technical and public hearing.
- January 23, 1996 - Commission issued order (staff memo and order attached)

Elements of Commission order

- Adoption of ASHRAE/IES 90.1-89 Standard or Code for new commercial buildings
 - Natural gas or electric utility required to receive certification

prior to providing permanent service.

- Adoption of CABO MEC 93 disclosure for new residential buildings
 - Natural gas or electric utility required to receive either 1) certification, or 2) signed owner disclosure prior to providing permanent service.⁴
- Utilities in cities or counties that have adopted codes that equal or exceed energy efficiency standards adopted by the Commission are allowed to turn code enforcement obligations over to local code authorities.

Affects of Proposed Legislation

Several aspects of this legislation do not affect the current Commission order. The order already allows utilities to turn code enforcement over to local code authorities. In addition, the Commission order has already adopted the commercial building codes mandated by the Energy Policy Act of 1992 (EPACT) . Furthermore, this legislation would expand the Commission's authority to adopt these required commercial building codes to include all electric and natural gas utilities, by returning jurisdiction over rural electric cooperatives that have deregulated under the provisions of K.S.A. 66-104d.

However, one point that needs to be addressed is that this legislation would remove the Commission's ability to adopt residential energy efficiency building codes. It is important to point out that under the Energy Policy Act the Secretary of DOE, in the future may adopt later revisions to the CABO Model Energy Code and require the State of Kansas to hold public hearings to consider adopting these revisions. With passage of this legislation, future code revisions would then need to be considered either

⁴ The order allows multiple avenues for the builder to certify code compliance, however the builder may also inform the owner that the home does not comply to CABO MEC93. In this case the owner reads and signs a disclosure statement informing the owner that the house does not qualify for certain mortgages and that it may use more energy than a house that met the code. In this case the owner provides the signed disclosure statement to the utility and receives permanent service.

by the legislature or another designated state agency. The Commission has procedures in place to conduct public hearings as a routine part of their decision making process, while this process may be more difficult to implement for some other agencies.

MEMORANDUM

TO: Susan M. Seltsam, Chair
F.S. Jack Alexander
Timothy E. McKee

FROM: Larry Holloway
Dan Riley

SUBJECT: In the Matter of the General Investigation of Energy Efficient Building Codes as Required by the Energy Policy Act of 1992, Docket No. 190,381-U.

DATE: December 27, 1995

History of the Thermal Treatment Standards

During the energy crisis of the 1970's, both the Kansas Legislature and the Commission addressed numerous energy efficiency issues, including building codes. There was a growing concern that natural gas reserves and fuel supplies for electric generation would soon be insufficient for existing customers, much less new services. To address the concern that each new customer further endangered the energy services of existing customers, the Legislature began consideration of adopting state-wide building codes that would have required a minimum level of energy efficiency. After much legislative debate, the House Committee on Energy and Natural Resources decided to abandon it's efforts in favor for the Commission's investigation into building energy efficiency standards.

The existing thermal treatment standards were adopted by Commission order in September 1977. These standards required each jurisdictional electric or natural gas utility to obtain verification from the owner of a new building that the building met the required energy efficiency minimums before the utility could provide service. Later, in 1978, the Legislature expanded the Commission's authority over municipal utilities to include the thermal treatment standards. Until 1992 the Commission had jurisdiction over all state electric and natural gas utilities with respect to new building energy efficiency. Rural electric cooperatives that have deregulated after the 1992 passage of K.S.A. 66-104d are no longer under the Commission's jurisdiction for the thermal treatment standards, however, all other electric and natural gas utilities are still affected by the 1977 order.

Background of Federal Requirements

The Energy Policy Act of 1992 (EPACT) addressed a broad range of energy policy issues including building code energy efficiency standards. In addition to requirements that addressed federal mortgage programs, voluntary energy rating systems and appliance standards, each state was mandated to address their own building codes for energy efficiency. Within 2 years¹ of adoption of the EPACT, each state was required to verify to the Secretary of the Department of Energy (DOE) that the state had held public hearings to consider adoption of the Council of American Building Officials 1992 Model Energy Code (CABO MEC92) for new residential buildings, and that the state had verified that commercial building codes met or exceeded the energy efficiency of the American Society of Heating and Air Conditioning Engineers/ Illuminating Engineering Society of North America 1989 90-1 Standard (ASHRAE/IES 90.1-89 Standard). In July of 1994, by authority granted under the EPACT, the Secretary of the DOE issued notice that each state had 2 years to consider adoption of the 1993 CABO MEC, and that each state could allow usage of the ASHRAE 90.1-89 Code, a codified version of the ASHRAE 90.1-89 Standard.

History of General Investigation

This Docket was opened by the Commission on April 11, 1994. The Commission Staff issued a draft staff position paper on September 24, 1994 and solicited comments from 250 affected electric and natural gas utilities as well as representatives of the building industry.² In addition, the Commission Staff procured outside expertise to assist in developing its position through funds provided by the state energy office.³ The Commission held a technical hearing and a public hearing on December 12, 1995.

-
- 1 The Commission Staff has requested and been granted two extensions to this deadline. The State of Kansas now has until October 24, 1996. It should be noted that the EPACT does not specify any federal actions or penalties for states that do not comply with the requirements for commercial or residential energy efficient building codes.
 - 2 By December, 1994, comments were received from 10 parties. These comments were considered by Staff in adopting the final Staff position. The draft staff position paper, the mailing list and the comments received were provided respectively as exhibits 2 through 4 in the staff testimony.
 - 3 A summary of the work provided by the outside consultant, DynCorp, was provided as exhibit 5 of Staff testimony.

Summary of Testimony Presented at the Technical Hearing

Summary of Staff Testimony

The Staff testimony recommended that the Commission adopt the Council of American Building Officials 1993 Model Energy Code (CABO MEC93) for residential buildings and the American Society of Heating, Refrigeration, and Air Conditioning Engineers / Illuminating Engineering Society of North America 1989 90-1 Standard (ASHRAE/IES 90.1-89 Standard) or Code (ASHRAE/IES 90.1-89 Code) for commercial buildings. The Staff proposal allowed residential builders the option of several alternate, but equivalent in terms of energy efficiency, methods for meeting compliance with CABO MEC93. The Staff recommendations seek to protect the ability of residential customers to obtain service by requiring the utility to provide the homeowner with service, even if the new residential building does not meet the Commission's adopted code, as long as the new homeowner is made aware of the new home's energy and mortgage limitations.

In addition, the Staff proposed that when local code authorities adopt and enforce energy codes equivalent or exceeding those adopted by the Commission, the electric and natural gas utilities within the code authority's jurisdiction would no longer need to enforce the Commission's adopted energy codes. In this case, the local code authority, or the affected utilities within the code authority's jurisdiction, would petition the Commission for a determination of equivalence. If the Commission finds the local code authority's energy codes and enforcement practices equivalent or better than those adopted by the Commission, the utilities would be relieved of their energy code obligations (within the jurisdiction of the local code authority). Staff testimony also recommended that each utility be required to maintain documentation for five years.⁴

Summary of Western Resource's Testimony

Western Resource's testimony generally supported the staff position with the exception of enforcement for commercial buildings and document retention time. Western Resources advocated that the Commission allow utilities to provide service to commercial buildings with a disclaimer similar to the Staff proposal for residential buildings. Western Resources also testified that the utilities should not be required to retain documentation. In addition, Western Resources took the position that any energy efficient building codes adopted by the Commission should be enforced for all jurisdictional utilities

and requested that the Commission not designate a precise form of documentation, but allow flexibility.

Summary of Kansas Natural Resource Council Testimony

The testimony of the Kansas Natural Resource Council (KNRC) was generally supportive of Staff's position and only addressed residential energy efficient building codes. KNRC supported the use of the Home Energy Rating System (HERS) energy efficiency performance testing as an alternative to CABO MEC93 verbatim compliance and expressed concerns with many current construction practices.⁵ The KNRC testimony also expressed concern that the existing thermal treatment standards were outdated and difficult to calculate, and that while builders may incur some liability in providing documentation per the Staff proposal, this liability surely exists with the current thermal treatment standards.

Summary of Testimony Presented at the Public Hearing

Summary of Bob Fincham's Testimony

Bob Fincham represented the Kansas chapter of the American Institute of Architects (AIA). His written and oral testimony was generally supportive of the Staff proposal on residential building codes. He expressed the opinion that, where they are established, local code authorities be allowed to adopt and enforce their adopted codes. In addition, his written testimony expressed a concern with the complexity of ASHRAE/IES 90.1-89 Standard, but acknowledged that it was mandatory under the EPACT.

Summary of Robert R. Hogue's Testimony

Robert Hogue represented the Kansas Building Industry Association (KBIA). His written and oral testimony primarily addressed concerns with adoption of CABO MEC93 for residential buildings. It is the position of KBIA that the building industry will address energy efficiency through its own initiatives and adoption of CABO MEC93 would add additional cost to new homes with little increase in energy efficiency. KBIA also believes adopting CABO MEC93 would cause a hardship to first time home buyers. Additionally, Mr. Hogue pointed out that adoption of energy efficient residential building codes was not mandatory under the EPACT state requirements (unlike the commercial building code energy efficiency requirements).

5 HERS testing is one of the alternative compliance paths proposed by Staff. An energy efficient building code assumes energy efficiency is achieved by following the requirements of the code, a performance test actually measures the energy efficiency of the constructed home.

Discussion

The majority of testimony presented was supportive of Staff's proposal. Western Resources and the KBIA raised several concerns with Staff's position. While the KBIA felt that CABO MEC93 was expensive and too restrictive, it is important to note that the Staff proposal has attempted to address both issues. The Staff proposal does not make the adopted residential energy efficient building code mandatory, however it would require that the builder disclose the nonconformance to the new homeowner. The Staff proposal also allows the builder to comply with the code in a variety of ways including (contrary to KBIA testimony) substitution of higher energy efficient appliances. In response to the issues raised by Western Resource's, the Commission may want to consider the amount of retention time requested for documentation, the commercial building requirements and the prescriptive nature of the documentation.

As the Staff stated in its rebuttal testimony, the current thermal treatment standards do not prescribe a minimum time frame for retaining documentation. While it may be somewhat burdensome for the utilities to retain the documentation for five years, the current order (the thermal treatment standards) does not state a time frame. Some utilities have accumulated these documents for years while others never did. Some length of time, whether it is 2 years or 5 years would at least allow Commission Staff to verify compliance.

The EPACT requires each state to adopt commercial energy efficient building codes equivalent to or better than the ASHRAE/IES Standard or Code. Staff recommendations would require that the electric or gas utility withhold permanent service for new commercial buildings that do not meet this mandatory code. Western Resources has taken the understandable position that denying a new commercial customer service is undesirable. Staff maintains that commercial buildings are almost always designed by professional architects and engineers that are aware and knowledgeable about any required codes. Retail electric and natural gas service for commercial customers (as compared to residential customers) is also less threatened by any competitive restructuring of the utility industry. In summary, commercial buildings are normally custom designed, the EPACT requirements for commercial building energy efficient building codes are mandatory and commercial customers will likely have many options if retail competition is allowed in the natural gas and electric utility industry. The Commission is requested to consider these fundamental differences between commercial and residential customers in deciding whether or not to make the adopted commercial energy efficient building codes mandatory.

The final concern addressed by Western Resources was that the Commission should not be overly prescriptive in the documentation requirements. The Staff proposal contains 6 different methods for complying with CABO MEC93. While 2 of these methods are prescriptive, they refer to tables that will be provided to the utilities by Staff for builders to use as a checklist. However, the Staff proposal does provide 4

other methods of CABO MEC93 verification that allow the builder flexibility to attach varying types of documentation to the compliance form.

Additionally there is the administrative item of implementing any energy efficient building codes adopted by the Commission. The Staff would recommend that the Commission allow a minimum of 5 to 6 months for building projects already planned and under construction before requiring utilities to enforce the Commission's order.

Recommendations

- 1) Adopt the following energy efficient building codes, requiring jurisdictional electric and natural gas utilities to verify compliance prior to providing permanent service:
 - a) CABO MEC93 for new residential buildings;
 - b) ASHRAE/IES 90.1-89 Standard or Code for new commercial buildings.
- 2) Allow jurisdictional electric and natural gas utilities to provide permanent service to residential buildings that do not comply with CABO MEC93 provided the owner supplies the utility with disclosure verification (noncompliance form per recommendation 3).
- 3) Allow the staff suggested certification and noncompliance form for residential buildings (exhibit 8 of the Staff testimony) and the following alternatives to CABO MEC93 code compliance⁶:
 - a) A clearly stated set of prescriptive requirements for each building component (Staff testimony exhibit 6), consisting of three distinct sets for each of the five Kansas climate zones;
 - b) A very extensive list of alternative compliance options for three climate zones (exhibit 7 of Staff testimony illustrates an example for 1 climate zone, these can be further developed if the Commission adopts this alternative⁷), allowing the builder to trade off different building components;
 - c) Use of the simple MECcheck software developed by Pacific Northwest Laboratory for the U.S. Department of Energy;

6 A sixth form of code compliance is the conventional code compliance. This is compliance method "a" on the certification form.

7 This will require some additional Staff or Consultant man-hours to develop, energy office funds are still available for this purpose.

- d) A rating by an approved Home Energy Rating System⁸ that is considered equivalent to MEC compliance; and
 - e) A detailed systems analysis for complex innovative buildings⁹.
- 4) Adopt the commercial building compliance certification form provided in exhibit 9 of Staff testimony.
 - 5) Require enforcing utility to maintain certification and noncompliance forms with accompanying documentation for 5 years.
 - 6) Allow jurisdictional electric and natural gas utilities to request that the Commission release them from energy code enforcement obligations in cities or counties where the local code authorities have adopted equivalent or more stringent energy codes and enforcement practices.
 - 7) Require utilities to begin implementation of energy code requirements no sooner than 5 months and no later than 7 months following the Commission's order.

8 HERS, the home energy rating system, is an entirely voluntary program. HERS is a rating based upon the actual tested and inspected energy performance of a residential building. Building codes are a method to achieve energy savings through the design and specification process, but do not measure actual energy performance of the finished structure.

9 This analysis method is currently allowed in CABO MEC93 for buildings that use energy from renewable resources. The intent is to allow homes that utilize renewable energy sources such as wind or solar, to be compared to conventional buildings that meet the code. If the overall use of outside energy (such as electricity or natural gas) of the home using renewable energy is equal to a comparable conventional home that meets the code, it would pass the analysis method. This proposal would allow such an exemption for any house that could be shown by the analysis method to be equivalent in the use of outside energy (regardless of the method used to comply).

cc: David Heinemann
Glenda Cafer
Lori Fink
Judith McConnell
Stacey Boyles

copy

THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

JAN 23 1996

Before Commissioners: Susan M. Seltsam, Chair
F.S. Jack Alexander
Timothy E. McKee

In the Matter of the GENERAL)
INVESTIGATION OF ENERGY EFFICIENCY) Docket No. 190,381-U
BUILDING CODES as required by THE ENERGY)
POLICY ACT OF 1992.)

The above-captioned matter came before the State Corporation Commission of the State of Kansas (Commission) for consideration and determination. Having reviewed its files and records and being fully advised in the premises, it is the decision of this Commission that this application has been granted as set forth in the attached order.

For the Commission:

Susan M. Seltsam
F.S. Jack Alexander
Timothy E. McKee

Attest: _____
Executive Director

Approved: *Dan Riley*
Dan Riley

1-16

ORDER MAILED JAN 24 1996

THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

Before Commissioners: Susan M. Seltsam, Chair
F.S. Jack Alexander
Timothy E. McKee

In the Matter of the GENERAL)
INVESTIGATION OF ENERGY EFFICIENCY) Docket No. 190,381-U
BUILDING CODES as required by THE ENERGY)
POLICY ACT OF 1992.)

ORDER

COMES NOW, the above captioned matter for consideration and determination by the State Corporation Commission of the State of Kansas, (hereinafter referred to as "Commission"). Having examined its files and being fully advised in the premises, the Commission finds and concludes as follows:

BACKGROUND

1. On April 11, 1994, the Commission opened the docket in this matter to conduct a General Investigation into Thermal Efficiency Building Codes in response to the Energy Policy Act of 1992 (EPACT). EPACT Title I, Subtitle A, Section 304(a)(1) through (a)(3) requires each state to review residential building codes and hold a public hearing to consider adoption of the Council of American Building Officials 1992 Model Energy Code (CABO MEC 92). EPACT further requires each state to verify that each commercial building code meets or exceeds the energy efficiency standards adopted by the American Society of Heating and Air Conditioning Engineers/Illuminating Engineering Society of North America 1989 90-1 Standard (ASHRAE / IES 90.1-89). (EPACT 1992, Section 304, (b)(1).

2. The Commission Staff (Staff) issued a draft position paper on September 24, 1994, and solicited comments from 250 affected electric and natural gas utilities as well as trade associations and the building industry. On December 12, 1995, both technical and public hearings were held.

3. Testimony was filed by Staff, Western Resources Inc., and the Kansas Natural Resources Council in the technical hearing. The testimony filed by Staff recommended adoption of CABO MEC 93 for residential buildings and ASHRAE/IES 90.1-89 for commercial buildings. Incorporated in the proposal was several options for achieving compliance in residential construction, and provisions which would shift enforcement liability from the utility to local code officials if local codes satisfy the CABO MEC 93 standard.

Western Resources Inc. testimony generally supported the Staff position, while advocating a notice/disclaimer of non-compliance for commercial buildings similar to the residential proposal, enforcement for all jurisdictional utilities and flexibility in documentation and retention of records.

The Kansas Natural Resources Council concurred with the Staff position for the most part, while supporting use of the Home Energy Rating System as an alternative to CABO MEC 93.

4. Public hearing testimony and comments were submitted by Bob Fincham of the American Institute of Architects and Robert R. Hogue of the Kansas Building Industry Association.

The American Association of Architects, generally supported Staff's residential code proposals, and indicated favor for local code adoption and enforcement. Mr Fincham also noted the complexity of the ASHRAE/IES 90.1-89 code.

Mr Hogue's testimony primarily addressed concerns regarding residential construction and the impact that adoption of the CABO MEC 93 standard in terms of additional cost to new home buyers. Mr Hogue stated that the increased costs would be a particular hardship to first-time home buyers, and that the cost incurred would be greater than the benefit in terms of increased energy efficiency. Mr. Hogue also emphasized that adoption of state codes was not required by EPACT as in the case of commercial buildings.

FINDINGS AND CONCLUSIONS

The Commission finds and concludes the following:

5. The Energy Policy Act of 1992 requires that each state certify that its Energy Building Code for commercial buildings meets or exceeds ASHRAE/IES 90.1-89. EPACT further requires that consideration be given to adoption of the CABO MEC 92 Code for residential construction. As authorized by EPACT, the secretary of the Department of Energy, on July 14, 1994, determined that the ASHRAE/IES 90.1-89 Code was equivalent to the ASHRAE/IES 90.1-89 Standard and that adoption of the 93 version of CABO MEC provided a significant increase in energy efficiency and was technologically feasible and economically justified. This action allowed each state to certify the ASHRAE/IES 90.1-89 code for commercial buildings and

required each state to hold public hearings to consider adoption of CABO MEC 93 for residential construction.

6. The docket and general investigation created by the Commission for the purpose of complying with the State of Kansas' EPACT obligation was opened in 1994. The investigation, research and fact finding was culminated by hearings held on December 12, 1995. Throughout the investigation comment and participation was solicited from all interested parties who chose to respond.

IT IS THEREFORE, BY THE COMMISSION ORDERED THAT:

1. The American Society of Heating and Air Conditioning Engineers/Illuminating Society of North America 1989 90-1 Standard or Code, (ASHRAE/IES 90.1-89) shall be adopted as the applicable thermal efficiency standard for commercial buildings.

2. The Code of American Building Officials 1993 Model Energy Code (CABO MEC 93) shall be adopted as the applicable thermal efficiency standard for new residential construction.

3. Compliance with the respective codes shall be verified by the jurisdictional electric and natural gas utility prior to commencement of permanent service at the building site. The utility may provide permanent service to a non-complying residential building only if the residence owner provides the utility with written verification of non-compliance.

4. Verification of compliance or non-compliance shall be made on forms approved by the Commission.

5. The following shall also be acceptable alternatives to the CABO MEC 93 standard for residential buildings:

(A) Prescriptive requirements for each building component consisting of three (3) clearly stated and distinct sets for each of the five (5) Kansas climate zones. This alternative would allow extensive compliance options by way of trade-offs of thermal efficiency variations among various components. Further development of this option for all climate zones is required and is being compiled by the Commission.

(B) An extensive list of alternate compliance options for three (3) climate zones, allowing the builder to trade off different building components: Further development of this option is required and is being compiled by the Commission.

(C) Utilization of the MEC check computer software developed by Pacific Northwest Laboratory for the U.S. Department of Energy.

(D) A satisfactory rating by an approved Home Energy Rating System (HERS), equivalent to CABO MEC 93 compliance. The HERS method of evaluation is based upon the thermal efficiency performance of the completed structure, rather than efficiency through prescriptive code compliance and design.

(E) Detailed systems analysis for complex and or innovative building design, to allow innovative design methods development. This method is currently allowed by the CABO MEC 93 for buildings that utilize renewable energy resources. Residences utilizing conventional non-renewable energy sources could also achieve compliance by this means if the non-renewable consumption is

comparable to a conventional residence of the same size meeting the requirements of the code.

(6) Certification of both residential and commercial structures shall be made on forms approved by the Commission. The utility responsible for enforcement shall in each case retain certification and non-compliance forms with the accompanying documentation for three (3) years.

(7) Jurisdictional utilities may request that the Commission release them from their enforcement obligation in areas where local building code authorities have in effect energy codes that meet or exceed the thermal efficiency standards and enforcement provisions adopted by the Commission.

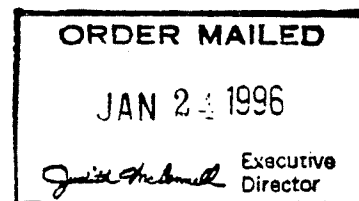
(8) Jurisdictional utilities shall begin implementation of these energy codes no sooner than 6 months, and no later than 12 months from the issuance of this order.

The parties have fifteen (15) days, plus three days if service of this Order and Certificate is by mail, from the date of this Order and Certificate in which to request rehearing on any matter decided herein.

BY THE COMMISSION IT IS SO ORDERED.

Seltsam, Chr.; Alexander, Com.; McKee, Com.

Dated: JAN 23 1996



Judith McConnell
Executive Director

Commercial Building Energy Efficiency Compliance Certification Form

(To be completed by builder)

Builder _____

Building Address _____

The above builder certifies that the new commercial building constructed at the above address either (check the appropriate block):

1) **Complies with the ASHRAE 90.1-89 Standard** _____

Attach supporting documentation from architect or engineer

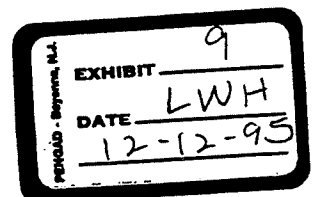
or

2) **Complies with the ASHRAE 90.1-89 Code** _____

Attach supporting documentation from architect or engineer

Builder's Signature/Date _____ / _____

Exhibit LWH-9



1-23

Residential Building Energy Efficiency Compliance Certification Form

(To be completed by builder)

Builder _____

Building Address _____

The above builder certifies that the new residential building constructed at the above address either (check the appropriate block):

1) Does not meet the energy efficiency requirements of CABO MEC93 _____

Attach builders disclosure form with owners signature.

Or

2) Does meet the energy efficiency requirements of CABO MEC93 _____

Verify compliance method below

a) Building is designed and constructed to CABO MEC93 (attach documentation such as NAHB¹ consolidated worksheet) _____

b) Building is designed and constructed using prescriptive requirements table for the applicable climate zone (attach table and circle selected building components) _____

c) Building is designed and constructed using the one of the trade off compliance options (attach compliance option sheet and circle selected option) _____

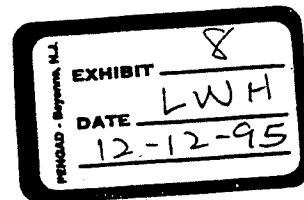
d) Building is designed and constructed using MECcheck software (Attach printout of MECcheck evaluation sheet) _____

e) Building energy performance is verified by a qualified HERS rating equivalent to CABO MEC93 (attach HERS documentation) _____

f) Building complies to energy efficiency of CABO MEC93 by detailed system analysis method, per CABO MEC93 chapter 4 regardless of the use of renewable energy sources (attach documentation) _____

Builder's Signature/Date _____ / _____

¹ National Association of Home Builders



Residential Building Energy Efficiency Compliance Certification Form

Declaration of Self-Exemption and Non-Compliance

Date: _____

_____, builder of record of the residential dwelling unit known as _____ hereby exercises his or her right to exempt said residential building from all requirements of the Kansas Corporation Commission's residential building energy efficiency standards, as set forth in the Commission's order in docket number 190,381-U.

Said builder hereby acknowledges that such home may not qualify for certain current and future federal mortgage programs, including those promoted by the Veterans Administration, Federal Housing Authority and Farmers Home Administration, and Housing and Urban Development agencies. Builder also acknowledges that such home may use more energy, and may therefore experience higher electric and/or natural gas utility bills, than a home constructed to meet the Commission's adopted energy efficiency Standards.

Said builder also certifies that a signed copy of this form will be provided the buyer or any agent offering said house for sale for first time occupancy, and that all such agents shall be instructed to provide a copy of this form to all prospective home buyers prior to acceptance of any offer to purchase said dwelling unit. Said builder further certifies that a copy of said form shall be attached to and made a part of the recorded Deed for said property at the time of sale.

Builder

Date

Owner

Date

AIA Kansas

A Chapter of The American Institute of Architects

75th Anniversary

1921-1996

February 8, 1996

TO: Representative Holmes and Members of the House Energy and Natural Resources Committee

FROM: Robert Fincham, AIA

RE: Support for HB 2707



I am Robert D. Fincham, AIA, a member of the American Institute of Architects in Kansas (AIA Kansas) and Chairman of our Energy Committee. Thank you for allowing us to testify in support of HB 2707. Last October I testified before your joint interim committee on this issue. I testified that we had no serious problems with the Energy Policy Act of 1992 (EPACT) requirement that states adopt ASHRAE 90.1-89 as the building energy standard for commercial buildings. However, we had serious concerns over the enforcement provisions for this standard. Since that time we have testified before the Kansas Corporation Commission and have come to the conclusion that the provisions in HB 2707 presents the easiest solution to a complex problem.

HB 2707 gives enforcement responsibilities to the local code officials in cities, counties, or other municipalities that have adopted building codes which include energy standards that meet EPACT. The latest version of the Uniform Building Code (UBC), used by most Kansas cities and counties, already include a model energy code. As enforcement departments update their codes, the provisions in EPACT will, naturally, fall under the enforcement of these local building departments.

In areas without local code enforcement or where the local entity has not adopted energy standards which meet EPACT, the owner, architect/engineer and builder/contractor would be required to state, to the local utility, that, to the best of their knowledge, the building complies with this energy standard prior to utility hook-up.

The following is presented as background on this issue:

Will the adoption of a statewide energy code result in decreased energy consumption by commercial buildings?

Maybe yes, maybe no. Today's buildings, without mandatory energy codes, are much more energy efficient than those built in the past. Clients are demanding more energy efficient buildings. The market place has greatly increased the efficiency of buildings -- residential and commercial over the past twenty-five years. The energy efficiency of building components -- electrical and mechanical systems; appliances; window/door, building skin and roofing materials -- are constantly upgraded to decrease energy use in buildings. We believe this trend will continue into the future. Further more, the adoption of proscriptive codes could actual undermine and/or delay the implementation of alternative energy sources such as solar, wind and geo-thermal.

President
F. Lynn Walker, AIA

President Elect
Vincent Mancini, AIA

Secretary
Alan M. Stecklein, AIA

Treasurer
Gregory E. Schwerdt, AIA

AIA Kansas City Director
Neal J. Angrisano, AIA

AIA Flint Hills President
Madlen Simon, AIA

AIA Topeka President
Jerry E. Volesky, AIA

AIA Wichita President
Martin (Tony) Rangel, AIA

Associate Representative
Leslie L. Fedde, Associate AIA

Directors At Large
David G. Emig, AIA
Sarah L. Garrett, Associate AIA
Gary R. Gegen, AIA
Jeffrey Van Sickle, AIA

Ex Officio Directors
Past President
Donnie D. Marrs, AIA
University Liaisons
John Gaunt, FAIA, KU
Eugene Kremer, FAIA, KSU

Executive Director
Trudy Aron, Hon. AIA, CAE

700 SW Jackson, Suite 209
Topeka, Kansas 66603-3757
Telephone: 913-357-5308
800-444-9853
Facsimile: 913-357-6450

House E+NR
2-8-96
Attachment 2

What impacts will the adoption of an energy standard for commercial buildings have on the architectural profession?

The adoption of energy standards for commercial buildings may increase design and documentation time - while designing a building to a proscriptive code is less desirable than one which is flexible; the greater the flexibility, the longer it may take to evaluate the various components within the design which will impact the overall energy use of the building and, hence, documentation of the selected scenario would take longer. Energy standards may increase paperwork - anyone involved in the design of a major project can attest to the weightiness of the paperwork involved. The documentation involved in proving that the design meets an energy code could substantially increase this paperwork. And, energy standards may increase design costs - the longer it takes to design a project, the more that design will cost. As nearly all commercial buildings are a one-of-a-kind custom design, it will take more time to evaluate, design, and document energy efficiency.

What impacts will the adoption of an energy standard for commercial buildings have on the buildings themselves?

Energy standards may restrict building designs - when a code is very proscriptive, the less flexibility the architect has to meet the clients' unique needs. The adoption of building standards may effect indoor air quality - many buildings designed during the '70s and '80s greatly reduced energy consumption but, because, in part, of the poor air exchange, many occupants of the building suffered illnesses. The "sick building syndrome" has become a well known problem. We need to make sure that reducing our energy costs is not done at the expense of the health of the occupants of the building. The adoption of energy standards will, most likely, increase construction costs - since the adoption of an energy code effects the economics of a project, not its life safety, the cost for construction just like the cost of design will likely increase. The more proscriptive the adopted code would be, the more likely the cost would increase. With more voluntary or out-come based regulations, the more flexibility the architects and engineers would have in designing a building that meets the energy efficiency standards as well as the project budget. We have numerous concerns about how these standards will affect older and historic buildings. The renovation and reuse of older buildings are a major portion of the work done by the design and construction industry. The adoption of a proscriptive code could make it difficult, if not impossible, to recycle our older building stock.

Thank you for allowing us this opportunity to provide you with information on our support for HB 2707. I'll be happy to respond to any questions you may have.

House Bill 2707
Kansas Building Industry Association
Robert R. Hogue

	1980	1996
Federal Gov't Mandate	Imposition of BEPS Nationwide	States required to consider MEC 92/93 as a statewide code
Energy Rates	Climbing rapidly 20-50% inflation	Stable
Energy Supplies	U.S. held hostage by energy producing nations.	Stable Supply
Energy Innovation	None occurring	Many innovations since 1980

Our association supports HB 2707 because the recent KCC order initiating a Statewide Energy Code was not generated in response to any compelling problem. Kansas has a new residential energy code because the Federal Government ordered us to consider adopting one and the KCC did. Problems were not identified, solutions and goals were not derived, but an action plan was implemented.

Kansas homebuilders have continued to improve the energy performance of their homes because of market driven initiatives without the benefit of a prescriptive code. The new Kansas energy code will not "fix" any existing problem but it will make it increasingly difficult for young families and older retirees to move into newer, more energy efficient homes and will make it more difficult for those building new homes to select the appropriate best mix of energy saving tools in today's builder tool box.

Under this order, builders in each of the state's five climatic regions would have three prescriptive options, or in three of the climatic zones, various building components could be traded off for other prescriptive solutions. Like BEPS in 1980, more complicated computer driven solutions would be available, but they will be shunned by the industry as needlessly complex. While none of these prescriptive methods have been published by the Corporation Commission, it is highly probable that they will share the common pitfall of MEC 93 or any other prescriptive solution--- they lack economic validity. While the KCC ignored our concerns about costs, benefits and affordability for Kansas consumers, I hope you will not. Let me show you what our industry has been doing to increase energy efficiency while the KCC derived additional statewide regulations.

I have included below an excerpt from the testimony I gave in 1980 at the Federal BEPS hearings

House E+NR
2-8-96
Attachment 3

FIGURE A-1

YEAR	R-VALUES		NO. OF GLASS PANELS IN FENESTRATIONS	VOLUME OF AIR CHANGES PER HOUR
	CEILING	WALL		
1974	10.1	7.68	2	1
1975	10.1	11.5	2	1
1976	18.6	11.5	2	1
1977	22.9	11.5	2	1
1978	22.9	11.5	2	.6
1979	32	11.5	2	.6
1980*	32	11.5	3-	.6
1996	32	14.7	2 LoE-ARGON	.3
BEPS	38	27	3	.6

* PROBABLE MID-YEAR CONSTRUCTION

This chart lists the major elements of the thermal envelope for a standard practice home in Topeka in the years leading up to BEPS plus the data for a standard practice Topeka home in 1996. The energy lost from these thermal envelope elements in a typical 1144SF Topeka ranch home is calculated and shown in Figure A-2 on the next page. As you can see, a standard practice home in Topeka has steadily improved and currently exceeds the performance that would have been mandated by BEPS. This was achieved by the same market driven industry initiatives that are in place today.

As is readily seen in Figure A-2, as furnace efficiencies have increased, and rate of increase in energy costs is not as great as the increase in the cost of construction, there is a diminishing return for brute force prescriptive methods.

The benefit derived by the consumer must be greater than the cost to the consumer. As illustrated in Figure C-1, also updated from my 1980-BEPS testimony, there is a point of diminishing returns for each increasingly efficient change in any element of the thermal envelope. While this graph is for a wall section, the principle would be equally valid for any part of the thermal envelope. Mandating prescriptive improvements in any given section of the thermal envelope will save energy, but the resultant savings will be a continued drain on Kansan's economic well being in the form of higher initial home costs, higher mortgage payments, higher property taxes, and higher insurance rates. If these increased costs are not offset by the savings of reduced energy consumption, it is a net loss to Kansas homeowners. Of greater importance and economic impact are the second order effects of non-market driven prescriptive energy codes.

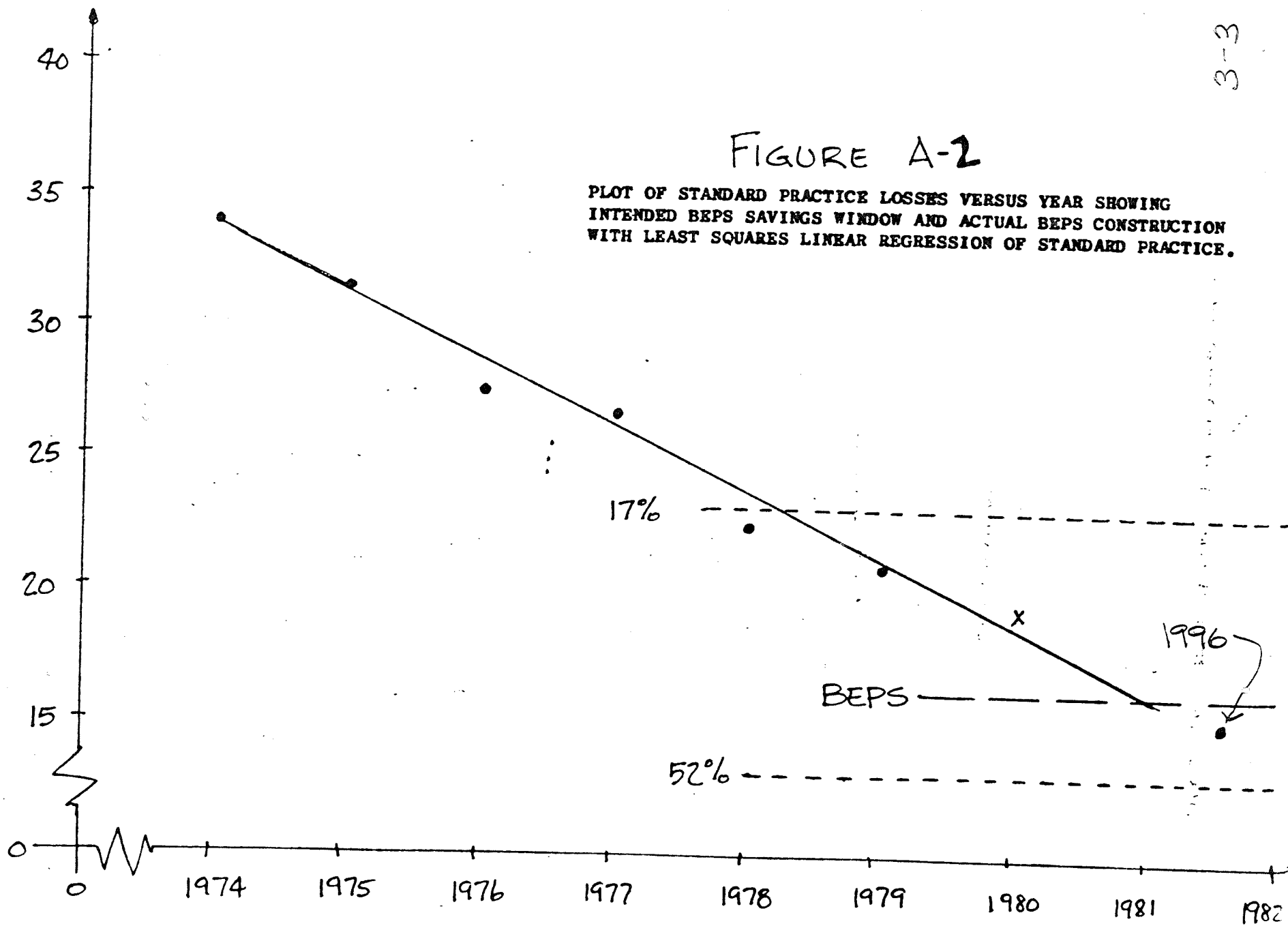
The most dramatic impact will be on young families and older Kansan's of limited economic means, especially in the rural areas and smaller cities and towns where incomes have not kept pace with increased construction costs. Many of these individuals only

BTUH/ft² @ 80°F ΔT × 10³

3-3

FIGURE A-2

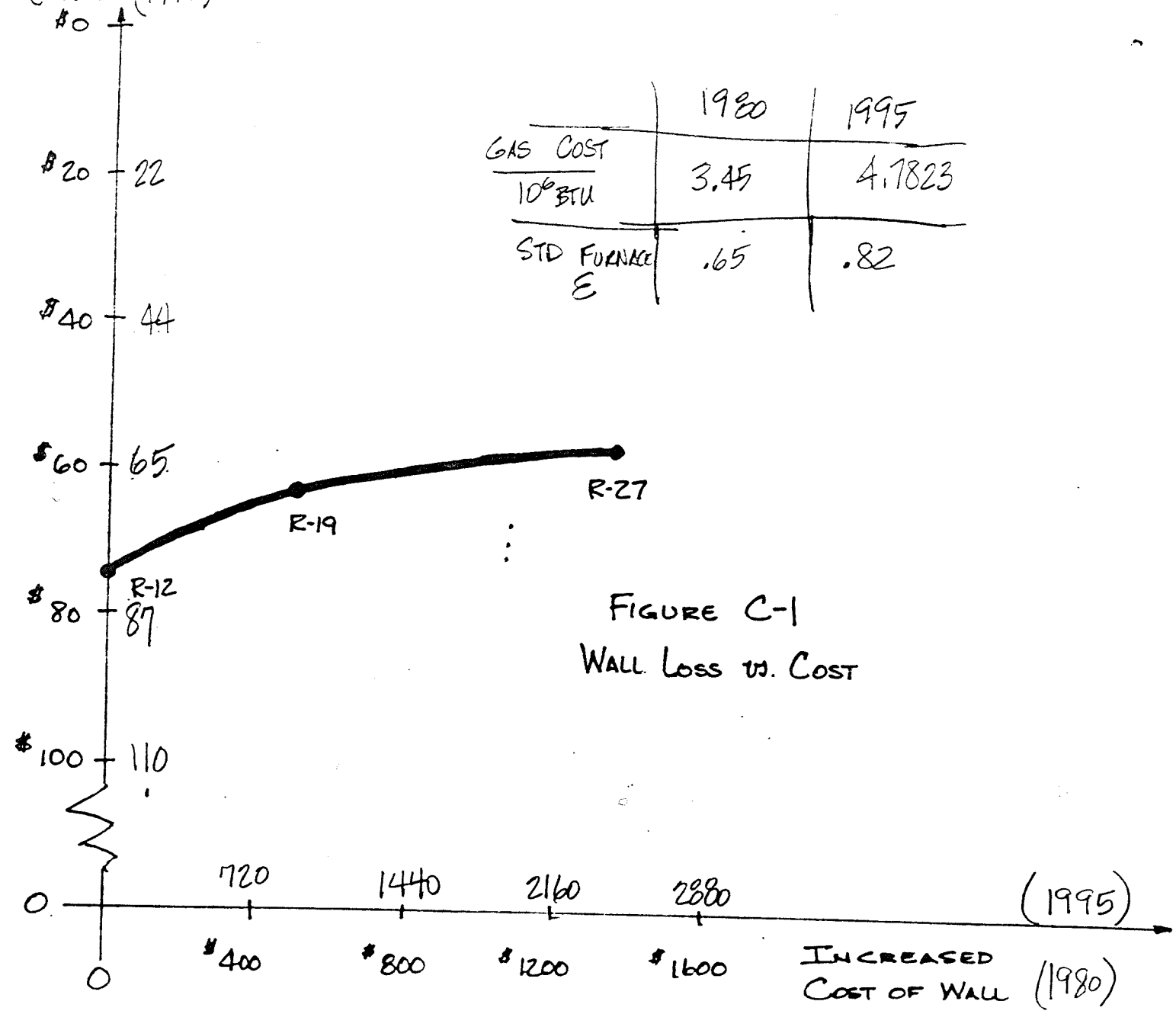
PLOT OF STANDARD PRACTICE LOSSES VERSUS YEAR SHOWING INTENDED BEPS SAVINGS WINDOW AND ACTUAL BEPS CONSTRUCTION WITH LEAST SQUARES LINEAR REGRESSION OF STANDARD PRACTICE.



)

FOR HEAT LOSS THRU WALL (1989)

(1980) (1995)



marginally qualify for new home loans because of the additive effects of step function changes in the cost of new construction from new regulations like this energy code. Some of these families will stay in, or be relegated to older, less energy efficient homes than the new homes they would be able to buy if this code did not exist.

Another second order affect, which has ramifications for long term energy improvements, is that private initiatives will be stymied. The easiest route to compliance for most homes built in Kansas will be the minimum prescriptive solution which will become the defacto standard practice. As an example of the type of private initiatives the building industry supports, my firm is currently engaged in a study with the National Association of Homebuilders Research Center. Information about this program is included as Appendix 1 along with the results of a random test conducted on two of my standard practice homes early in the program. As part of this program, I have built four homes in Topeka that are being tested in a group of 30 homes nationally. We are looking for more efficient ways to distribute energy in the home and to gain real world data on cost/benefit ratios. If these methods can stand the test of market value, they will begin to appear in our homes. Other market driven initiatives by the industry have resulted in improved glazing U-Values (as of January 1, 1996 my window supplier only stocks low E argon filled glass), higher furnace efficiencies, reduced infiltration techniques (not quantifiable for prescriptive codes), and linear performing insulation products (Foam and cellulose in lieu of non-linear fiberglass). All these innovations are in place because they made economic sense as opposed to an attempt to reach some arbitrarily chosen theoretical performance figure.

Finally, local units of government have the ability to impose energy codes that make sense for their community. What makes sense in a rapidly growing, affluent 5200 heating degree day community on Kansas's east end, may not make any sense in an economically depressed rural region in the same climatic zone. These types of prescriptive codes will only add to the economic distress of many families and do not address the real energy consumers in Kansas ---older less well constructed homes.

Once again, we hope you will allow communities to retain control of their own values and support House Bill 2707. Thank you for your time.

Appendix 1

THERMAL DISTRIBUTION EFFICIENCY PROGRAM

The NAHB Research Center is conducting a project to promote the adoption of cost-effective and performance enhancing construction practices for duct systems that will result in higher levels of energy efficiency and thermal comfort. An improved approach to HVAC systems will include practical recommendations on duct layout, installation/sealing techniques, air balancing, and accurate equipment sizing guidelines.

This project is intended to:

- gain recognition among builders, HVAC contractors, and consumers of the importance that thermal distribution systems have on overall energy usage;
- inform builders of the issues, possible solutions and the associated benefits and costs;
- give builders the tools to ensure that their customers are getting the greatest value possible for their dollars invested in a home's HVAC system, particularly the ductwork;
- develop specifications and guidelines from the builder's perspective to assure quality installations;
- promote mutually beneficial relationships with HVAC subcontractors who have varying degrees of technical capability; and
- quantify operational benefits for presentation to buyers if additional first costs are incurred.

The Research Center is looking for volunteer builders to participate in the development of this program. A practical study will be arranged to implement various recommendations on improving duct efficiency on a home(s) under construction. The Research Center will provide HVAC design assistance, coordination with HVAC subcontractors, and financial compensation for direct costs associated with this study. Performance data on these homes will be collected with follow-up testing over a two-day period after the house is complete.

3-6

FIELD STUDIES DESCRIPTION

The NAHB Research Center will be performing field studies with cooperating builders to document changes in duct efficiency and costs associated with various modifications to existing HVAC duct practice. Actual changes incorporated in field testing will be dependent on the typical practices already in place. Additional costs incurred due to research modifications will be financially compensated by the Research Center.

The following is a list of possible issues the field testing will focus on:

- location of duct systems with regard to unconditioned or conditioned space
- using multiple return outlets as opposed to central return grilles;
- sealing/insulating duct systems to various degrees;
- use of Variable Air Volume (VAV) controls to increase comfort and efficiency;
- use of different duct materials with regard to cost, installation, and performance.

In order to determine which modifications are most appropriate for a specific application, we will need to obtain the bid package you provide to your HVAC contractor, including a complete set of drawings. We will work in close association with your HVAC subcontractor and keep you informed of all activities. Performance testing of the home's HVAC system and ductwork will be conducted after the home is substantially finished.

Ideally, the testing will be performed in the fall or winter. The testing can be done over a weekend, requiring two to three days. All testing work will be done by the NAHB Research Center. All equipment will be removed after testing is completed.

The benefits of this study will include a detailed energy analysis of the actual performance of the house. This data will include:

- a blower door test to determine overall air infiltration;
- a duct blaster test to determine the tightness of your HVAC ductwork;
- a coheat test to evaluate the overall thermal performance of the building envelope; and
- an evaluation of the system efficiency of your complete HVAC system.

3-7

NAHB RESEARCH CENTER

400 Prince George's Boulevard • Upper Marlboro, MD 20772-8731 • (301) 249-4000 • FAX 249-0305

Appendix 2

November 1, 1995

Bob Hogue
RHCI
3400 South Topeka Blvd.
Topeka, KS 66611

Dear Bob,

Listed below are the results of the blower door tests we performed last week at your two model homes. The ducts were in full communication with the house during the tests, meaning that the grilles were open and not sealed.

Site : 3421 SW Glendale Dr.
Topeka, Kansas

ACH50 = 5.2

$$\frac{5.2}{20} = .26 \text{ ACH}_{\text{ASHRAE}}$$

Site : 3301 SW Westport Dr.
Topeka, Kansas

ACH50 = 5.9

$$\frac{5.9}{20} = .295 \text{ ACH}_{\text{ASHRAE}}$$

I hope you find these helpful. A full battery of air leakage tests, which we will perform on the baseline, central return, and "gasket" houses, evaluates total duct leakage, duct leakage to unconditioned spaces, and room pressurization.

Also, I would like to keep up to date with the schedules for the central return house and the gasket duct house. Please let me know if any major schedule changes occur. My current understanding has the central return model finishing in early December and the gasket model house finishing in mid January.

Please call me if you have any questions regarding the results or our future testing.

Sincerely,

James M. Lyons

3-8



**League
of Kansas
Municipalities**

PUBLISHERS OF KANSAS GOVERNMENT JOURNAL 300 S.W. 8TH TOPEKA, KS 66603-3896 (913) 354-9565 FAX (913) 354-4186

TO: House Energy and Natural Resources Committee

FROM: Chris McKenzie, Executive Director

DATE: February 8, 1996

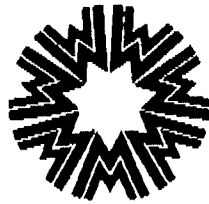
RE: Comments on HB 2707

Thank you for the opportunity to appear today and offer some comments concerning HB 2707. First, to the extent the KCC's January 23, 1996 order in Docket No. 190,381-U mandates municipal electric and gas utilities to verify compliance with the codes adopted therein, the League supports the principle contained in this bill. Most municipal utilities are not adequately staffed to verify such compliance since most cities do not have building codes. Furthermore, the idea that municipal utilities will be able to secure verification from the residence owner of noncompliance is simply unrealistic.

We also have a technical concern about the drafting of the bill. Section 1 amends K.S.A. 66-131a which currently only extends jurisdiction to the KCC over municipal utilities for energy efficiency standards for air conditioners and heat pumps. We are concerned that the bill contains amendments in subsection (a) that unintentionally broaden the KCC's jurisdiction over municipal utilities to include standards adopted under the federal energy policy act of 1992. We would respectfully suggest that such an amendment is not appropriate and that a new section consisting solely of the text in subsection (b) would more clearly accomplish the same purpose without bringing municipal utilities into it at all.

Thank you for this opportunity. Clearly neither the building industry nor municipal utilities need more requirements such as those recently issued by the KCC concerning building efficiency standards. Most communities in our state today are crying out for housing. We do not need another impediment to meeting that need.

House E + NR
2-8-96
Attachment 4



Midwest Energy, Inc.

2/8/96

Rep. Carl Holmes
House of Energy and Natural Resources

Carl:

In light of the proposed house bill 2707, I need to express the importance of a uniform building energy code. A building code not only promotes energy efficiency but also safety.

Last year the city of Hays implemented a building code requiring that all new houses built must pass a series of ventilation and combustion air tests. Along with these tests a certified energy rating is performed. Many of the tests used to check safety are also needed for a energy rating so it makes sense that both should be offered at the same time. The City of Hays does not require these houses to meet any of the new energy codes, but does require all safety regulations to be followed. Rating information is given to the house builder, who in return should share it with prospective buyers. This does not always happen, so the house buyers may not know the efficiency level of that house. A uniform building code could insure the house meets a reasonable standard. A uniform energy building code for the 90's and beyond would make our buildings more efficient, healthier and safer. If you have any questions please call at 1-800-222-3121.

Thank You

Brian Dreiling

Brian Dreiling

C/I Energy Use Specialist

1330 Canterbury Road
P.O. Box 898
Hays, Kansas 67601-0898
(913) 625-3437

House E + NR
2-8-96
Attachment 5



Kansas Natural Resource Council

P.O. Box 2635
Topeka, KS 66601-2635

Officers

President
Bill Ward, Lawrence

Vice President
Joan Vibert, Ottawa

Secretary
Ann Fell, Winfield

Treasurer
Art Thompson, Topeka

William J. Craven,
Legislative Coordinator
935 S. Kansas Ave.
Suite 200
Topeka, KS 66612
913-232-1555
Fax: 913-232-2232

Testimony of Bill Craven
Kansas Natural Resource Council and
Kansas Sierra Club
H.B. 2707

House Energy and Natural Resources Committee
February 8, 1996

Thank you for the opportunity to express strong opposition to this proposed bill. The bill, in my view, sets the wrong policy and sends the wrong message.

With me today is Russ Rudy, who has appeared before the interim committee on this matter, and who served as KNRC's expert witness in the technical hearing before the KCC. Russ, who has conducted energy audits on more than 500 homes, is here to answer your questions.

The bill would reverse a carefully constructed decision of the Kansas Corporation Commission which creates, for the first time, long overdue residential energy efficiency standards. The current system is cumbersome, inflexible, and ineffective.

The order adopted by the Commission is flexible. In ordering new homes to meet the requirements of the Model Energy Code (MEC), the KCC allows builders to certify compliance by using trade-offs in construction techniques, and it allows for compliance to be certified by a variety of means, including a home energy rating or the MEC computer software developed by NREL, among others. In addition, the residential construction rule of the KCC takes into account three sets of requirements for five different Kansas climate zones. The KCC worked hard to avoid a "one size fits all" approach.

It is my understanding the KCC plans a series of educational workshops to inform builders of the order and how to achieve compliance. We support that sort of educational effort.

For commercial structures, the bill voids the KCC action in communities which have standards which meet the EPACT standards of 1992. This provision is unnecessary. EPACT requires that a state certify compliance with ASHRAE/EIS 90.1-89 for commercial buildings. It doesn't make any sense to void the KCC action when standards at least as stringent have been adopted locally.

Greater energy efficiency is the least disruptive way to reduce energy use. Today's buildings will last well into the future, and it important to recognize that the cost and availability of energy may be very different. Efficiency is much more cost-effective when incorporated into a building at the time of initial construction. The KCC order thus represents a very conservative strategy. It is also a strategy which will provide greater security to home buyers by informing them that homes meet minimal standards. It is also important to point out that homeowners who certify to a utility that a home does not meet the standards may still obtain utility service. In other words, the KCC order allows a builder to persuade a willing homebuyer that compliance with the energy efficiency codes is not necessary.

Finally, I want to point out that a legislative reversal of this policy is, in my opinion, an unwise interference with the KCC. If this bill passes, it would be historically unprecedented. After checking with those who are more aware of the history of this sort of thing, I am unaware of any previous legislation which reverses a KCC decision made following an evidentiary hearing. The Commission conducted both a technical hearing and a public hearing. All points of view were considered, including the point of view of the main proponent of this legislation. There comes a time when an issue has been



House E+NR
2-8-96
Attachment 6

resolved by the body best able to consider and weigh the evidence. My view is that the quasi-judicial administrative proceedings of the KCC are the best place to resolve this issue. The legislature arguably has the power to reverse that decision, but the question remains whether such an exercise of power establishes a responsible precedent. This bill, if passed, would represent a major insult to the deliberative processes of a major independent state agency.