

MINUTES OF THE House COMMITTEE ON Energy and Natural ResourcesThe meeting was called to order by Representative David J. Heinemann at
Chairperson3:30 ~~am~~ p.m. on February 8, 1983 in room 519-S of the Capitol.

All members were present except:

Representative Keith Roe (excused)

Committee staff present:

Ramon Powers, Research Department
La Nelle Frey, Secretary to the Committee

Conferees appearing before the committee:

Paul Johnson, Public Assistance Coalition of Kansas.
Mark McConnell, Harvest America.
Genevieve Funk, Cross-Lines Cooperative Council.
Sylvia Hougland, Secretary of the Department on Aging.
Pat Marrin, Let's Help.

Several representatives of the Social and Rehabilitation Services Weatherization Task Force appeared before the committee to present information on the state's low-income weatherization program and direct energy assistance program.

Task Force member Paul Johnson, director of the Public Assistance Coalition of Kansas, discussed the Low-Income Energy Assistance Program and its source of funding. He stressed to committee members the importance of securing additional funding for weatherization efforts for Kansans and suggested that the Legislature should set clear priorities on coordinating adequate weatherization efforts along with direct energy assistance. He also suggested that an interim legislative study be done on all aspects of weatherization (see attachment 1). Mr. Johnson distributed to committee members a county-by-county breakdown of total Kansas households eligible for low-income weatherization; the total number of homes in each county which had been weatherized since the inception of the weatherization program; and, the total number of homes in each county weatherized in calendar year 1982 (see attachment 2).

Mark McConnell, a representative from Harvest America, addressed the migrant housing needs of the state. He said migrant housing is being inhabited year-around now, rather than seasonal, and most of the homes are in dire need of weatherization.

Genevieve Funk, Cross-Lines Cooperative Council, spoke to the committee about the need for an effective statewide weatherization program. She also suggested utilizing personnel from the Community Work Experience program to do the weatherization (see attachment 3). Miss Funk read testimony for another Cross-Lines associate, David Shulman, which told of the needs in Wyandotte County for assistance in paying utility bills (see attachment 4).

Sylvia Hougland, secretary of the Department on Aging, testified before the committee saying that the high cost of home energy is the single-most important problem facing the majority of older Kansans. She provided the committee with a thorough compilation of background information on energy-related issues affecting elderly Kansans, and concentrated her presentation on the areas of: (1) weatherization and direct energy assistance; (2) conservation rates; and (3) private utility initiatives (see attachments 5, 6, & 7).

Pat Marrin, representing Let's Help of Topeka, addressed the needs in Topeka for assistance in paying utility bills, and confirmed to committee members that the number of people needing utility-payment assistance increases each year.

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Energy and Natural Resources,
room 519-S, Statehouse, at 3:30 ~~AM~~/p.m. on February 8, 1983

Throughout the Weatherization Task Force presentation, discussion took place among conferees and committee members.

There being no further business to come before the committee, the meeting adjourned at 4:30 p.m.

The next meeting of the committee will be held February 9, 1983.

Rep. David J. Heinemann, Chairman

Date February 8, 1983

GUESTS

HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

NAME

ADDRESS

ORGANIZATION

many in attendance
roughly

18 in attendance

PUBLIC ASSISTANCE COALITION OF KANSAS
P.O. Box 2815
Topeka, Kansas 66601
(913) 354-4635

To: House Energy and Natural Resources Council
From: Paul Johnson, director of the Public Assistance Coalition
Date: February 8, 1983
RE: Testimony on weatherization and direct energy assistance

The Public Assistance Coalition of Kansas, a statewide coalition of church, civic and labor groups, as well as emergency service providers, welcomes the opportunity to testify before this committee. My name is Paul Johnson, and I am the director of the Public Assistance Coalition. PACK would like to offer some specific comments on the present low-income weatherization effort and direct energy assistance. The importance of these issues cannot be overstated. Inflation and inadequate increases in income have been squeezing many Kansans, especially those living on fixed and/or low incomes. This, coupled with the dramatic increases in home heating costs, has overwhelmed these Kansans' ability to afford heat, along with other necessities such as food. Hypothermia incidences are on the increase, and longer term illnesses due to inadequate nutrition will be some of the costs of this crisis. Decisive, definitive leadership is demanded of the Legislature to set clear priorities on coordinating adequate weatherization efforts along with direct energy assistance.

Weatherization

PACK applauds this committee's efforts to secure the \$2.1 million oil overcharge windfall to be used for weatherization purposes. Only \$200 million of the present \$500 million oil overcharge fund has been dedicated, so Kansas may, in the future, get even more of these funds.

The source of funds for LIEAP (which include the weatherization set-aside) is the 1979 Crude Oil Windfall Profits Tax. When the tax was originally passed, a full 25% of the tax was to be used for LIEAP. This mandate was not written into the law, so every year the Congress decides on an appropriation, which is significantly less. The full 25% would have increased LIEAP from \$1.875 billion to \$3.2 billion for this year. For the 1984 federal fiscal year. President Reagan wants to cut LIEAP to \$1.3 billion. Given the dramatic increases in natural gas costs and the sizeable number of low-income housing units in need of weatherization (over 80,000), a full 25% allotment for LIEAP funds would be well-used.

Another portion of the Windfall Profits Tax was to be used for synthetic fuel development, but with the cost of oil dropping there are no takers for the \$15 billion set aside for loan guarantees. Those

funds would be much more cost effectively spent if used to provide a serious full scale conservation program. At a time when the states are expected to pick up more of the federal government's responsibility it only seems right that the federal government make available adequate funding sources. These windfall profit funds are already collected and need to be turned back to the states. Formal, written communication from this Committee and the Legislature as a whole could help expedite this process.

This committee raised concerns about weatherizing rental units and rightly so. Over one-third of all housing units in Kansas are rentals. Except for low-income elderly, a majority of the low-income families do live in rentals, and these units are often at the bottom of the housing stock. This is the only housing that many of these families can afford. An interim legislative study on all aspects of weatherization would give all parties the time to talk out options. Some of these options could include low-interest loans from utility companies (such as Gas Service is offering in Kansas City, MO) or Rural Electrification Administration's conservation options. Also, housing could be discussed, and the problems with weatherizing some rental units that are structurally unsound.

General Assistance work projects for weatherization could be increased. This area will be addressed by representatives from Cross-Lines, a Kansas City, Kansas social service agency.

A cross-checking of utility records should be done to establish a worst case/first served weatherization list. In the case of the rentals, the landlord will need to be talked to, and in some cases a low-interest loan offered.

Direct Energy Assistance

LIEAP funds are always spoken of as a supplemental to the clients' own energy payments. What is not clear is the percentage of income that is expected to be paid by the client. The average American household spends on the average of 5-7%. For low-income households, the percentage is much higher. The average cash grant for a typical ADC family (mother and two children) is \$334/month; for a GA recipient it is \$135/month; and an SSI recipient gets \$297/month. As will be discussed by other witnesses, the average bills for these households are far greater than 10%-15% of the household's income. There is only so much discretionary income after the rent has been paid. You can see that there is a serious income crisis in many of these households.

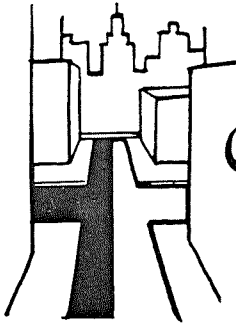
The K.C.C. reconnect order has been life-saving, but it runs out March 15 with the question of bad debt to be decided yet. If the weather continues to stay cold, there will be serious political pressure to use the oil overcharge funds for direct energy assistance.

There are few easy answers. Certainly one great help would be the tapping of more of the \$1-\$2/mcf Hugoton gas. This cheap gas should be reserved for the first 15 mcfs for all residential customers, with greater amounts of gas being priced closer to today's replacement cost. This pricing scenario would lengthen the LIEAP funds. Secondly, those households with chronic gas bill problems will need special attention (for example, special budget counseling and weatherization help). To implement this properly, SRS will need full-time LIEAP staff instead of the present part-time winter effort. Thirdly, clients should know what percentage of their income must be paid for energy, and they should understand that LIEAP will supplement the difference between their payments and the actual bill.

In summary, PACK supports:

- a full 25% of the Windfall Profits Tax for LIEAP and weatherization along with the redirecting the synthetic fuel money for weatherization and energy assistance.
- use the oil overcharge funds (presently Kansas' share is at \$2.1 million) for weatherization
- an interim legislative study on all aspects of weatherization
- worst case/first served priority list for weatherization efforts
- establishing an expected percentage of a household's income to be paid for energy costs
- a conservation utility rate with low-cost Hugoton gas as the first necessary block of usage.

I would be happy to elaborate on any of these suggestions at your convenience. Thank you for the opportunity to present them to you.



CROSS-LINES COOPERATIVE COUNCIL

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Mrs. Joy Clark

*A Non-Profit
Private Agency
Serving South
Kansas City, Kansas
Since 1965*

Testimony of Genevieve Funk to
Energy & Natural Resources Committee
2/8/83

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PROGRAM SERVICES:
EMERGENCY ASSISTANCE
TRANSPORTATION
EDUCATION
RECREATION
HOUSING

SPINOFF PROJECTS:
HEALTH SERVICES
LEGAL SERVICES
HOUSING

ACTION OBJECTIVES:

UPLIFT
HUMAN DIGNITY

BREAK BARRIERS
OF PREJUDICE

SENSITIZE TO
PLIGHT OF POOR

ENABLE
SELF-DEVELOPMENT

ADVOCACY ROLES
FOR SOCIAL CHANGE

NEIGHBORHOOD
EMPOWERMENT

COOPERATIVE
SERVICE

POOLING OF
RESOURCES

UTILIZE
VOLUNTEERS

I would like to thank the committee for allowing me to speak at this time. My name is Genevieve Funk and I work for Cross-Lines Cooperative Council in Kansas City, Kansas and actively work on energy issues.

The issue I would like to address today is the need for an effective statewide weatherization program. Weatherization is very important since it cuts the energy use. In looking at low income energy assistance, it is much more effective in the long run to weatherize a home and cut its usage than to continue paying higher energy assistance payments.

Kansas spent \$2.8 million dollars in 1982 weatherizing 3,613 houses costing at an average of \$905 per household. In Wyandotte County we have 12,000 households below poverty level. At the statewide rate of only 3,613 households weatherized a year, it would take all the statewide resources, 3½ years and over \$8.5 million dollars to weatherize Wyandotte County alone.

I would like to suggest money from LIEAP and the oil over-charge be used for weatherization. The type of weatherization we should mainly look at is infiltration. One half of the heat loss in a home is due to infiltration and one fourth of the bill can be cut by simply putting up plastic, caulking and weatherstripping.

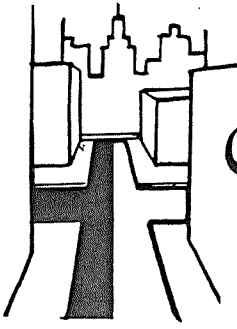
At Cross-Lines we use a lot of General Assistance workers, especially for our home repair program. The G.A. workers either have some home repair skills or are shown how to do it and with supervision they are sent out to do the jobs. We have had great success with our G.A. workers and our programs wouldn't run nearly as efficiently without them.

The State Economic Opportunity Office should possibly look at using Community Work Experience people to do the weatherization. To do infiltration doesn't take a lot of skilled help, just supervision. For the recipients of weatherization who are capable of doing it themselves, a weatherization kit with instructions could possibly be used. Also, with the

Testimony of Genevieve Funk
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weatherization money, low interest loans could be made available to moderate income home owners for more extensive weatherization.

Why don't we look at using our resources more wisely. The people resource more efficiently by using the Community Work Experience Program, the money resource by concentrating more on infiltration, spending a lot less money per home and helping more homes, and in the end we will be saving on our energy resource.



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I would like to thank the committee for the time you are spending looking at the problem of utility aid and weatherization efforts.

My name is David Shulman. I work for Cross-Lines Cooperative Council, Inc., a private social service agency in Kansas City, Kansas. Among its many programs Cross-Lines helps pay utility bills and we also have a minor housing repair program.

As one of the largest emergency assistance agencies in Wyandotte County, we are becoming increasingly aware of the dilemma facing utility aid programs. This dilemma is, the more we help with utility bills, the more help is going to be needed.

In Wyandotte County, public and private spending (including LIEAP) for utility aid from December 1 through January 31 totaled over \$800,000 for over 4,000 households. In spite of the tremendous amount of money, we haven't yet dealt with the bills for the winter of 1982-1983. Most of the money went to catch up old bills, or on December usage. In order to meet the need in Wyandotte County alone for the rest of the winter, we would need another \$2.5 million or \$3 million. This figure already anticipates households paying 20% of their income for utilities.

By the winter of 1983-84 the total need in Wyandotte County could easily reach \$4 to \$5 million. These figures make it quite obvious that just paying bills is not enough to deal with the problem, especially in light of raising energy prices. We are going to have to take a hard look at controlling costs. Part of the controlling costs includes controlling usage, e.g., weatherization. If the state is really going to make an impact on the utility needs of the poor in this state we need to get serious about weatherization.

DS:jc

ENERGY ASSISTANCE AND THE ELDERLY
KANSAS DEPARTMENT ON AGING

The Kansas Department on Aging has prepared the following material:

1. Background paper on Energy Assistance and the Low Income Elderly;
2. Summary of Private Utility Initiatives
3. Statistical Background Material
 - a. Fuel Consumption by Age
 - b. Fuel Consumption by Household Size
 - c. Fuel Expenditure by Income
 - d. Consumer Advocate
4. Demographic Information of Kansas Elderly
 - a. Income
 - b. Household Size
 - c. Energy Related
5. Bibliography

BACKGROUND INFORMATION
to
HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES
by
KANSAS DEPARTMENT ON AGING

The high cost of home energy is the single most important problem facing the majority of Older Kansans. A national Harris poll showed that 72% of the elderly rated energy costs as a very serious problem for older people. Last spring at the Governor's Conference on Aging, 83% ranked the high cost of energy as a very serious problem for most people over 65. The lowering of utility bills was ranked as the number one priority for state action above all other issues.

In my review, I'd like to concentrate on 3 areas:

1. Weatherization and Direct Assistance
2. Conservation Rates
3. Private Utility Initiatives

ENERGY COST AND THE OLDER KANSAN

The trend in the cost of energy for home use is clear. The prices for the principal home heating fuels have increased twice as fast as the general inflation rate. Between 1976 and 1981, energy prices rose 123% while the CPI increased only 59%. Since 1973, the price of natural gas, which nationally is the heating fuel for over $\frac{1}{2}$ of all older households, has more than quadrupled.

In Kansas, the price of natural gas from the Gas Service Company, the largest in Kansas, increased by 221% between August, 1978 and January, 1983. In August of 1978, the price of one mcf of gas was \$1.61. Today, it is \$5.17 per mcf. Certainly the age of cheap energy is over.

The burden of home energy price increases is not borne equally. In 1980, during winter months in Kansas, the average coldest month home energy cost was \$105. The average social security check was \$371; the average SSI check was \$238; and 34% of all Older Kansans made less than \$400 per month. The elderly and low income bear a disproportionate share of the burden. Low income elderly spend almost 4 times (between 15-19%) of their wages on home energy costs as do median income households who expend between 5-6%. This is true even though elderly low-income households are typically low energy users. The Department of Energy Residential Energy Consumption survey showed that low income elderly households use 40% less natural gas. The DoE study showed a positive correlation between income and home energy use.

- Average U.S. household expends 5-6% of their income on home energy.
- Low income elderly spend between 15-19% of their income on home energy.
- During the winter, 25% of the elderly spend more than 40% of their income on home energy.
- Fuel expenditures tend to rise with income for elderly and non-elderly.
- Fuel consumption is correlated to age with older people tending to use less.

| (Gas) | Age | BTU's |
|-------|-------|-------|
| | 65+ | 118 M |
| | 45-64 | 144 M |
| | 30-44 | 150 M |

- Fuel consumption is correlated to family size.

| (Gas) | Family Size | BTU's |
|-------|-------------|-------|
| | 1 | 89 M |
| | 2 | 119 M |
| | 4 | 148 M |

The home energy that low-income persons do use is often less beneficial to them than others as their homes are often older and less efficient. The Congressional Budget Office found that 43% of low-income households have no insulation; 58% have no storm windows; 39% no thermostat or valve to regulate heat.

Of low-income households, elderly households are perhaps most burdened by home energy costs, despite the fact that they use less energy than any other age group. (The RECS study found that average consumption increases with the head of household's age up to age 60; then there is a sharp decline in consumption.) This is true in part because the elderly often live in older houses with minimal energy saving features. KDOA's needs assessment study found only 16% of low-income Older Kansans lived in houses built in 1960 or after. (Over 80% of low-income older persons in Kansas own their own homes.) The estimated annual heating bill for a 1,250 square foot home built in 1980 is \$301. For

one built in 1960 it is \$794, a 164% increase. It is expected that homes built before this date would show an even larger discrepancy.

In order to assist the elderly and other low-income who have been hardest hit by rising costs, a multi-faceted program must be developed. An effective energy assistance effort requires a combination of programs that would include at least the following:

1. Direct assistance to those least able to bear the costs of energy and/or who are unable to adjust consumption downward.
2. Effective weatherization program to assist and act as a link between weatherization, conservation, and direct assistance.
3. Conservation rates or rate structures which would offer positive encouragement for conservation, weatherization, and other energy conserving measures.
4. Load management programs applicable to industry and residential customers to reduce peak demand and slow-down needed for new construction.
5. Private utility initiatives to assist low and moderate income families.

6. See Chapter 10

Although the focus of today's review is weatherization, a brief discussion of direct assistance and rate restructuring is necessary to put the weatherization issue in perspective.

Direct assistance refers to financial assistance in paying utility bills. Currently no state funds are committed to this purpose. The primary source of direct assistance in Kansas is the LIEAP program which is federally funded. This program benefits substantial numbers of older persons. Last winter, over 45% (approximately 27,000) of LIEAP households contained a member age 60 or above. About 22% of LIEAP households had a member age 75 or above. The average monthly income of elderly LIEAP households last year was \$416, only \$26 more than the poverty level for a one-person household. In 1980, 34% of all elderly (60+), approximately 140,000, would have been eligible for LIEAP benefits if they had applied.

The benefit provided to elderly LIEAP households averaged \$140. This benefit level constitutes about 20% of the average annual primary fuel costs for low-income Kansans. Thus it is clear that LIEAP only covers a small proportion of home heating costs and an even smaller proportion of total utility bills.

This year's LIEAP program has had several significant changes. The maximum allowable income has been reduced from \$594 for a one-person household and \$777 for a two-person household to \$487.50 and \$648, respectively; except that all income attributable to persons age 65 and above is subject to a special 10% disregard recognizing the special need of low-income elderly.

This policy change, along with a mild January and the requirement that utility payments have been made in 2 of the 3 months prior to application, has resulted in a 26% drop in applications received and a 37% drop in applications approved. As the benefit formula was changed this year to reflect increased fuel costs, the winter's average benefit is about \$186 per month, and estimated LIEAP obligations are only about 2% below last year.

It's obvious that the demands on direct assistance will continue to grow in succeeding years as natural gas prices increase. For the elderly, LIEAP is one of the most utilized social programs. In addition to SRS efforts, outreach is provided through Area Agencies on Aging, Information and Referral programs, and volunteers.

LIEAP is not perceived as a "welfare" program by many Older Kansans which further increases participation. With concern about bill paying and inelasticity of income, older people traditionally have applied for LIEAP, whereas they do not apply for other programs.

Energy assistance programs must be simple, substantial, and targeted if they are to work. The President has recommended a substantial reduction for 1984, approximately \$675 million in LIEAP funds. A reduction of this magnitude would reduce Kansas' share of LIEAP funds by \$5.8 million.

Although most people recognize that direct assistance programs will not be adequate to deal with problems that have been created by rising energy costs and income shortages, direct assistance will always be needed. 14 states have instituted some additional state subsidies at great expense. Energy costs will continue to rise more rapidly than social security, pensions, or welfare assistance. The problem is not temporary. Direct aid will be increasingly needed and increasingly expensive, and will always be a temporary solution. Therefore, additional mechanisms are also needed including rate restructuring and weatherization.

A major approach to assisting Kansans and encouraging conservation is through rate restructuring. It is possible to design rates that encourage conservation, provide a minimum survival block, as long as total revenue covers all costs and there is a sufficient return on investment to ensure an adequate flow of capital.

Most Kansas utilities currently have a basically flat rate structure in which energy is sold at a uniform rate per unit. While this is an improvement from the past when declining block structures (in which successive blocks of energy used are priced at a lower level) were prevalent, flat rates neither provide a specific incentive to conserve nor reflect the replacement cost of the energy used.

Such a rate structure would benefit substantial numbers of elderly and low-income consumers as these groups are generally low usage customers. Figures 1-4 show that energy use declines for older persons and for those with lower incomes.

The Grier partnership has estimated that during 1981-82 in Kansas a subsidy of \$51.4 million would be required to bring all low-income households' (125% of poverty) energy expenses to 5% of their income, approximately the level that the average U.S. household spends. (See Figure 6.) Clearly, LIEAP alone, or for that matter, LIEAP and a conservation rate alone, cannot alleviate the energy problems of the elderly and the low-income. Weatherization is a critical third approach to dealing with this issue. In the long run weatherization may be the most cost-effective strategy, especially when linked with the other two.

A study by the Consumer Energy Council found that the Department of Energy funded weatherization program reduced energy consumption by 26%, saved 27% in fuel bill costs, and created more jobs per dollar invested than any other fuel production option. The demand for the DoE weatherization program is great. At the 1981 level of funding, it would take 29 years to weatherize all eligible homes in Kansas. As of December 31, 1982 there were 2,345 homes on the waiting list for weatherization.

The weatherization program serves a substantial number of elderly households. SRS estimates that 40% of households weatherized contained a 60+ member. KDOA is concerned, however, that many elderly are above the income maximum for weatherization, yet do not have the discretionary capital to pay up-front for weatherization and then recoup their investment through tax breaks and lowered utility bills. Additional public and private utility company initiatives are needed.

KDOA also has some concern about the inability under DoE guidelines to do significant amounts of HVAC (heating, ventilating, air conditioning) system modification. The Consumer Energy Council study previously cited concluded that major improvements in energy savings could be achieved by systematically incorporating this service into the weatherization program. A state weatherization program could have the flexibility to do this activity and could provide weatherization services to persons above 125% of poverty on a sliding fee schedule basis.

Due to the recurring benefit provided by weatherization, KDOA supports the full 15% weatherization set-aside allowed by the LIEAP program. In the past the weatherization set-aside has been 10% or less.

Weatherization programs are an essential component in any energy strategy. Weatherization can make a significant contribution to the reduction of energy costs. Since weatherization is also permanent, it can be the most cost effective strategy over the long run.

A review of the CECA data demonstrates that low income weatherization saves a great deal of energy and that the DoE program is doing an excellent job of achieving those savings and that there is a direct correlation of investment dollars to energy savings. (See chart on page 6.)

The national average reduction in annual energy costs for heating and cooling is \$182. The reduction in costs ranges from a low of \$78 in California to a high of \$384 in Vermont. For the low income population, these are considerable sums of money. In fact, the savings represent about 4% of the average household income of the low income population. And, of course, the dollar savings are achieved year after year and increase as energy prices rise.

APPROXIMATE ENERGY SAVINGS AT VARIOUS LEVELS OF
INVESTMENT IN WEATHERIZATION ^{1/}

| Level of Investment (in Dollars) | Estimate of Energy Savings (% reduction) | | Best Estimate of Energy Savings (% reduction) |
|-------------------------------------|---|-----|---|
| | High | Low | Mean of High + Low |
| 400 | 19 | 11 | 15 |
| 600 | 21 | 15 | 18 |
| 800 | 23 | 18 | 20.5 |
| 1000 | 26 | 20 | 23 |
| 1200 | 28 | 23 | 25.5 |
| 1400 | 30 | 25 | 27.5 |
| 1600 | 33 | 27 | 30 |
| 1800 | 36 | 29 | 32.5 |
| 2000 | 38 | 31 | 34.5 |

^{1/} High and low estimates derived from the various studies. See text, pp. 18-27.

Energy issues are of paramount concern to Older Kansans and others. There is no simple, quick fix to the problem of high home energy costs. Any solution will require a multi-faceted approach. In light of this, KDOA offers the following possible solutions for your consideration.

POSSIBLE SOLUTIONS

1. Kansas Energy Assistance Fund

Kansas' current fiscal problems probably preclude the earmarking of state funds for weatherization and/or LIEAP supplementation. In the future though, the possibility of establishing a pool of state funds to be used for weatherization or direct assistance should be kept in mind. In the meantime, the use of federal energy assistance program dollars should be limited to energy-related programs and the maximum allowable amount should be transferred to weatherization.

2. Conservation Rate Structure

The establishment of a conservation rate structure will benefit the great majority of low income and elderly consumers. As it is available to all consumers, it is not "unduly discriminatory" and will benefit all persons who reduce their energy consumption.

3. Research and Development Funds

Currently 80% of the electric utility R & D surcharge collected in Kansas is sent out of state. Keeping a higher percentage of this money in Kansas and using it for weatherization or conservation activities would benefit Kansas customers.

4. Requirements and Incentives for Private Utility Initiatives

Loans, insulation, etc. be provided by private utility companies.

5. Coordination and Linkage to Local Programs.

UTILITY ENERGY INITIATIVES

Recent years have been significant increases in utility energy initiatives across the nation. They have been developed in response to a variety of influences: perceived cost savings to the utilities, public utility commission mandates, state law mandates, and consumer group pressures. In general, the initiatives have been financed by including them as expense items in rate cases.

KANSAS INITIATIVES

Since 1978, Kansas law (K.S.A. 66-117) has allowed utilities to build qualifying conservation program costs into their rates at a 1/2% to 2% higher rate of return. To date, few Kansas utilities have availed themselves of this opportunity. Kansas Gas and Electric has developed a new electrical load management program using radio-controlled switches to regulate summer air conditioner use. Kansas Power and Light has a rebate program for those who buy high efficiency central air conditioning systems or heat pumps.

In response to a 1981 KCC order, Kansas utilities have to make on-site home energy audits available to their customers, for a charge not to exceed \$5.00. In the initial months of operation, over 6,800 requests for audits have been received.

Most other Kansas utility energy efforts have been directed towards assisting in the raising of funds to help persons in paying their utility bills.

OTHER STATE INITIATIVES

Michigan

The Michigan Public Service Commission initiated a Home Insulation Promotion and Financing Program in 1973. At least seven of Michigan's regulated utilities have developed programs in response to this initiative. In addition to this, Consumers Power, Michigan Consolidated Gas and Detroit Edison have implemented an Insulation Outreach Program financed through their rate structure which provides qualifying customers with R-19 attic insulation at no charge or a \$50 incentive payment for do-it-yourself installation.

Michigan also has, through the State Housing Development Authority, offered low interest loans to low income households, for both general home improvements and insulation/weatherization activities. The program is financed by a combination of general revenue funds and revenue bonds.

Missouri

The Gas Service Company has a pending proposal before the Missouri Public Service Commission to offer low-interest conservation loans to specified customers. The original proposal allowed for up to \$2,000 to be loaned at an interest rate between 0 and 10% depending upon income. Funding would come from revenues freed up as a result of the adoption of incremental pricing.

Two other Missouri utilities (Kansas City Power and Light and Union Electric) have established low interest weatherization loan programs. KCPL has also developed a community-wide 20-year conservation plan in conjunction with community business and civic leaders which has won the electric utility industry's Edison award in 1982.

Oregon

State law requires utilities to offer weatherization programs to consumers. The program is either in the form of a low interest loan of up to \$4,000 or a cash rebate of up to \$350 for conservation activities undertaken. The loan option costs are absorbed by the utilities if they provide the loan or, if a lending institution provides the loan, the difference between the loan interest rate and the market interest can be deducted from the lender's corporate excise tax.

Wisconsin

In 1982, the Wisconsin Public Service Commission mandated that utilities devote .2% of gross operating revenue to low-income weatherization programs. Each company develops a plan and submits it to the PSC. Six companies will offer zero-interest, declining principal deferred payment loans.

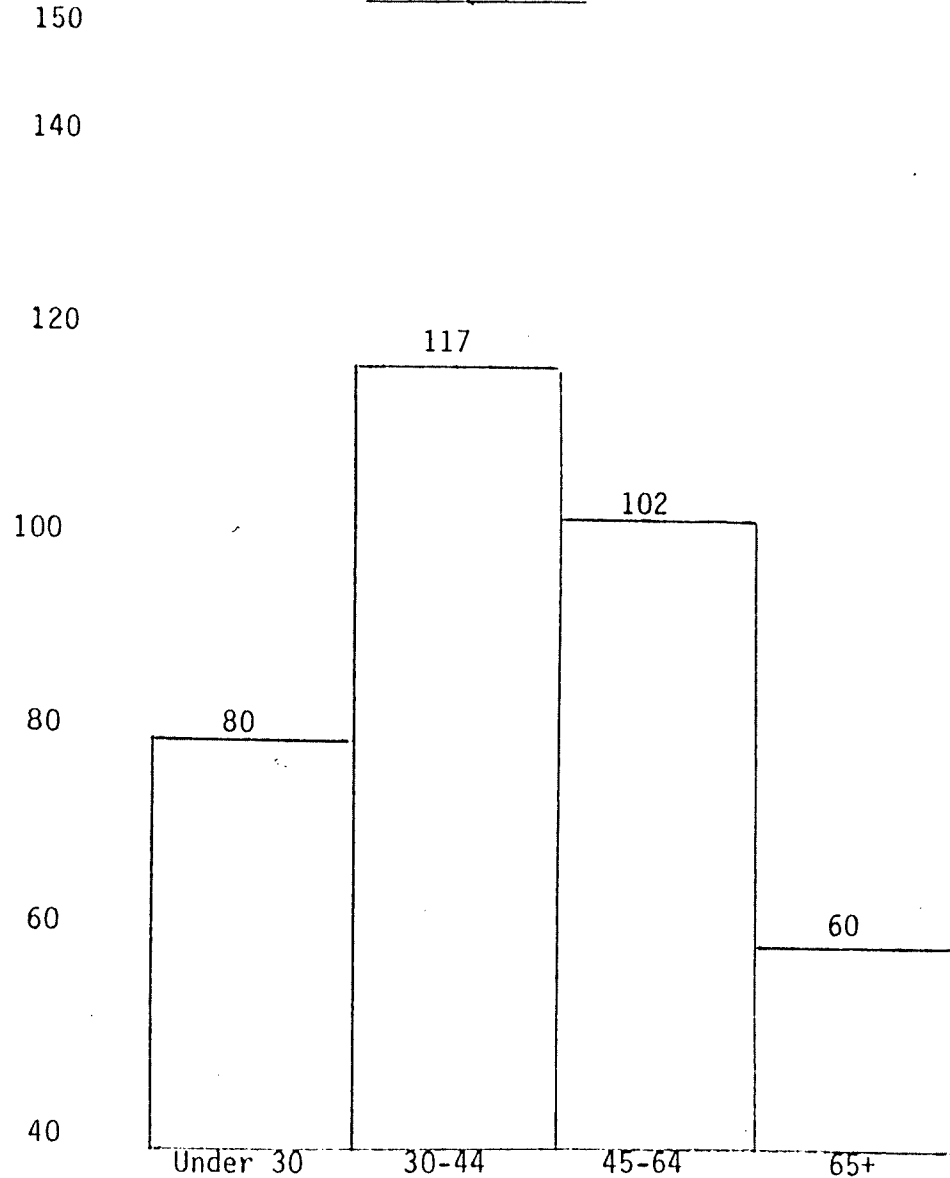
Minnesota

The Northern States Power Company, in conjunction with a local planning and economic development department offers deferred payment low interest weatherization loans.

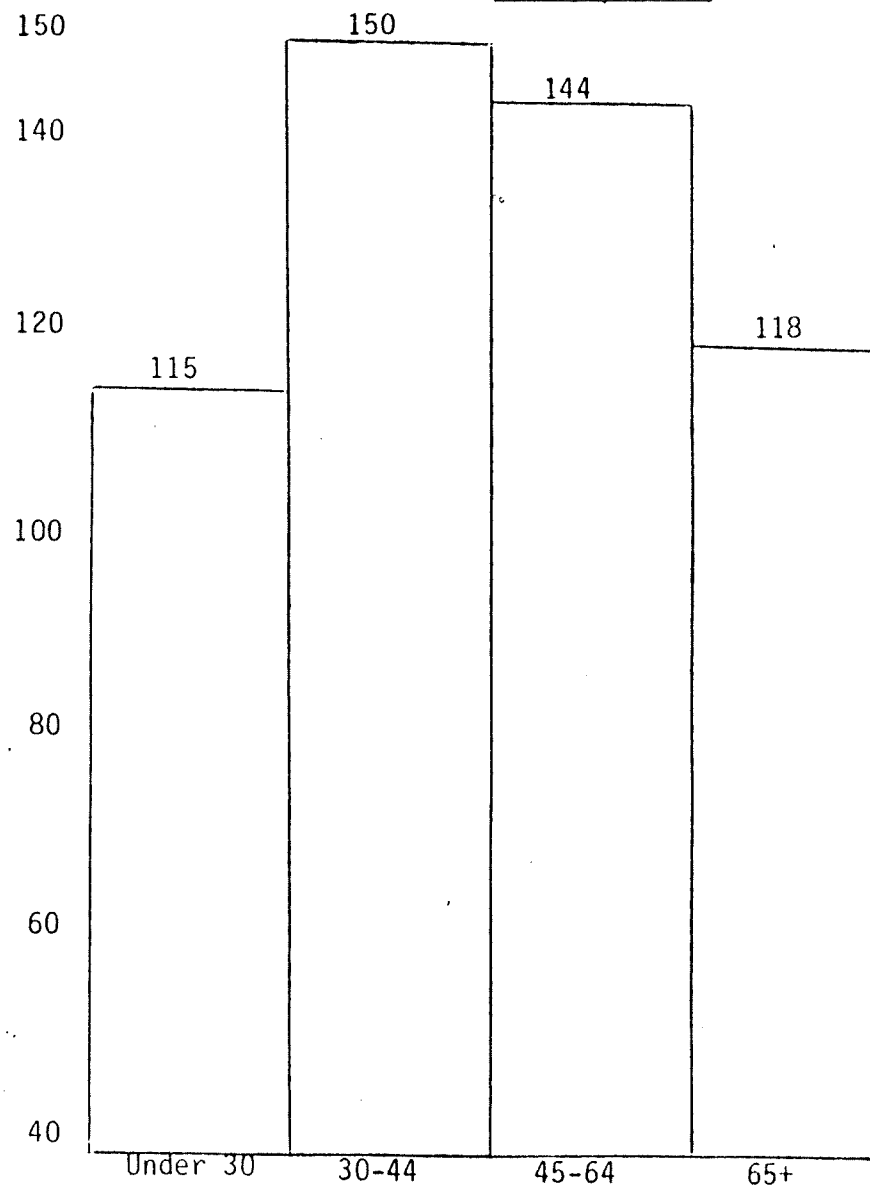
FIGURE 1
FUEL CONSUMPTION RISES AND FALLS WITH THE LIFE CYCLE

Millions of BTUs
per household
150

ELECTRICITY

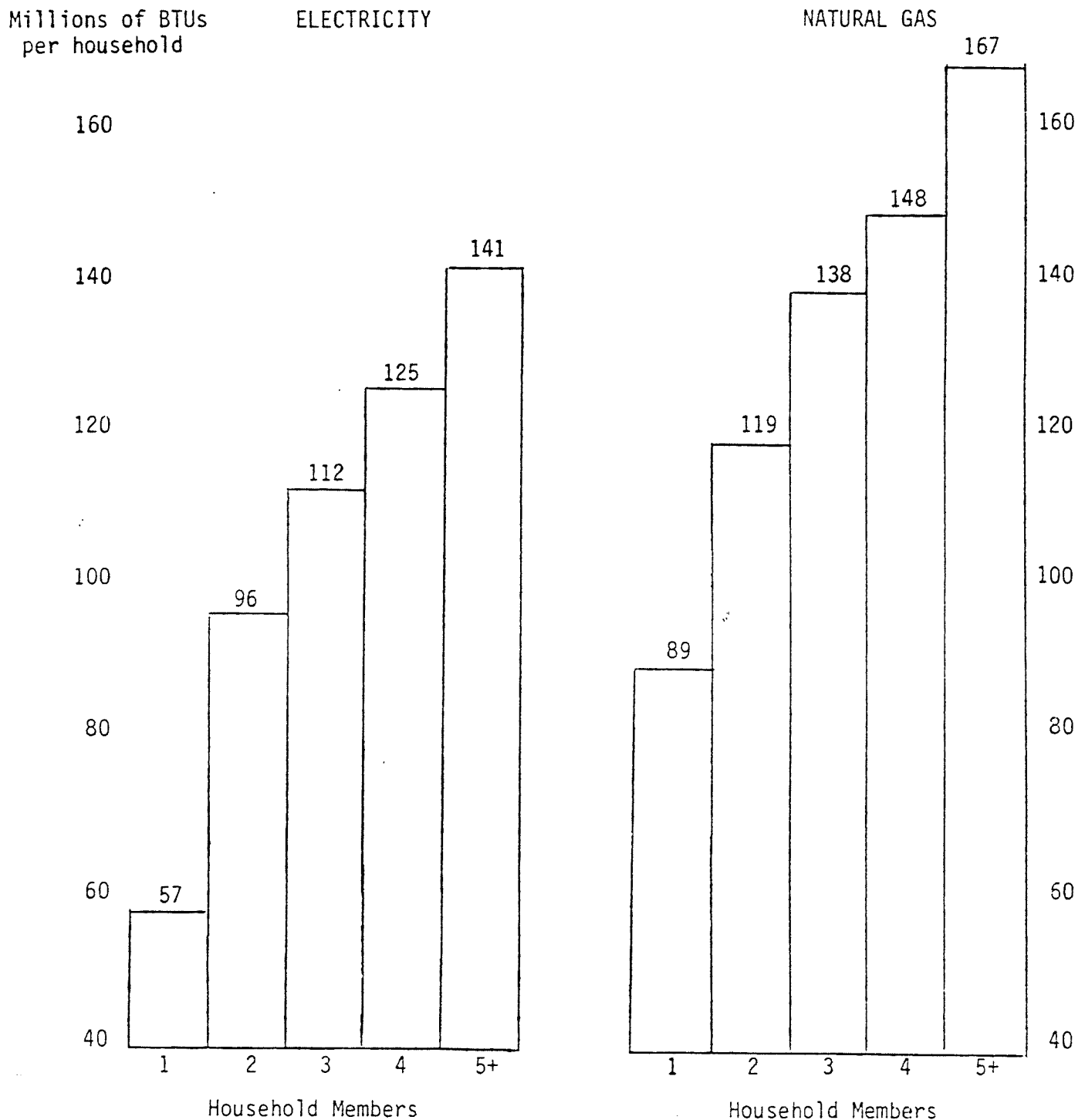


NATURAL GAS



SOURCE: Unpublished tabulations from the 1974-75 National Residential Energy Consumption Survey of the U.S.

FIGURE 2
FUEL CONSUMPTION RISES WITH HOUSEHOLD SIZE

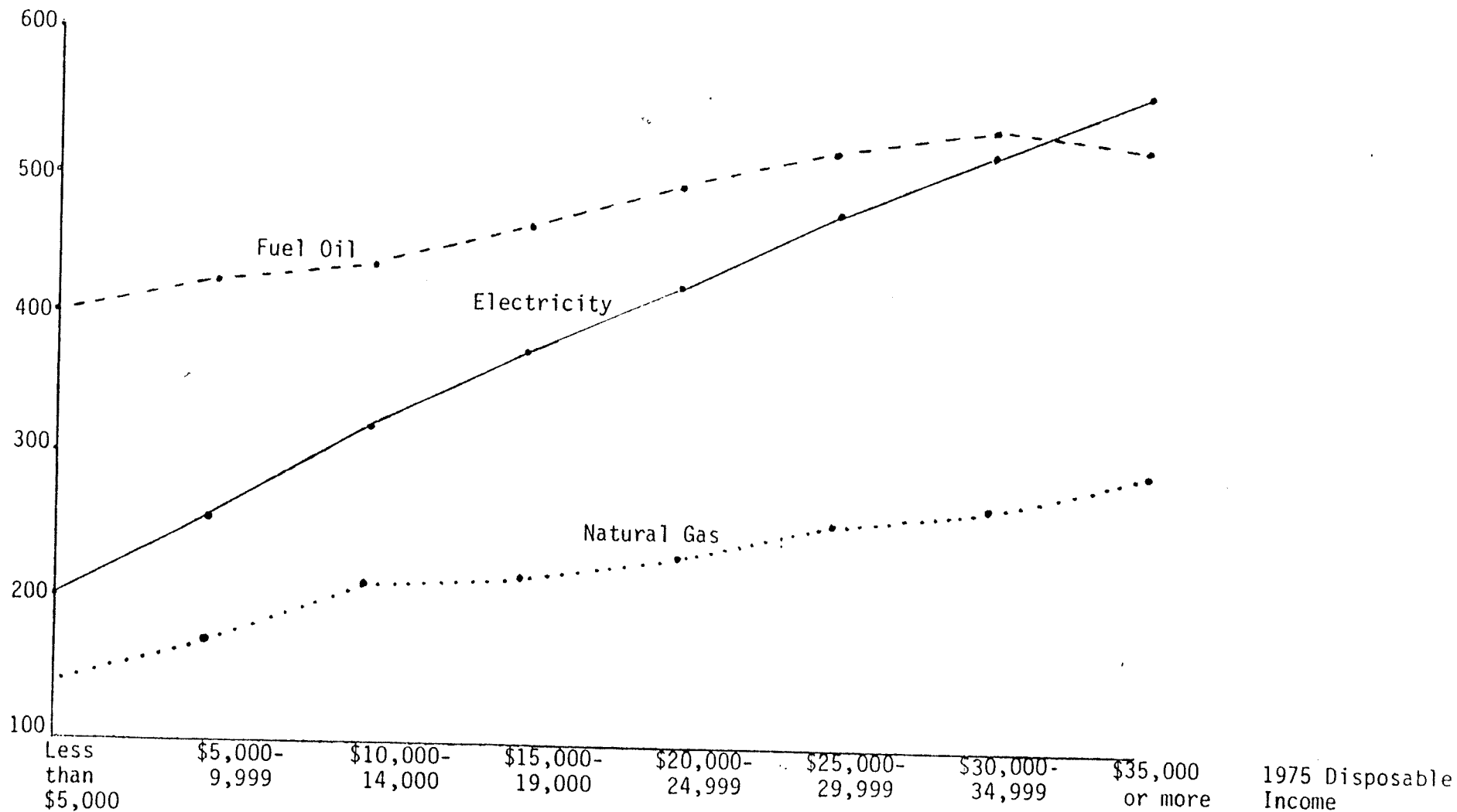


SOURCE: U.S. Department of Energy, Energy Information Administration, Residential Energy Consumption Survey: Consumption and Expenditures, April 1978 through March 1979. July 1980. Tables 4 and 5.

FIGURE 3

FUEL EXPENDITURES TEND TO RISE WITH INCOME--NONELDERLY

Annual expenditures
per household

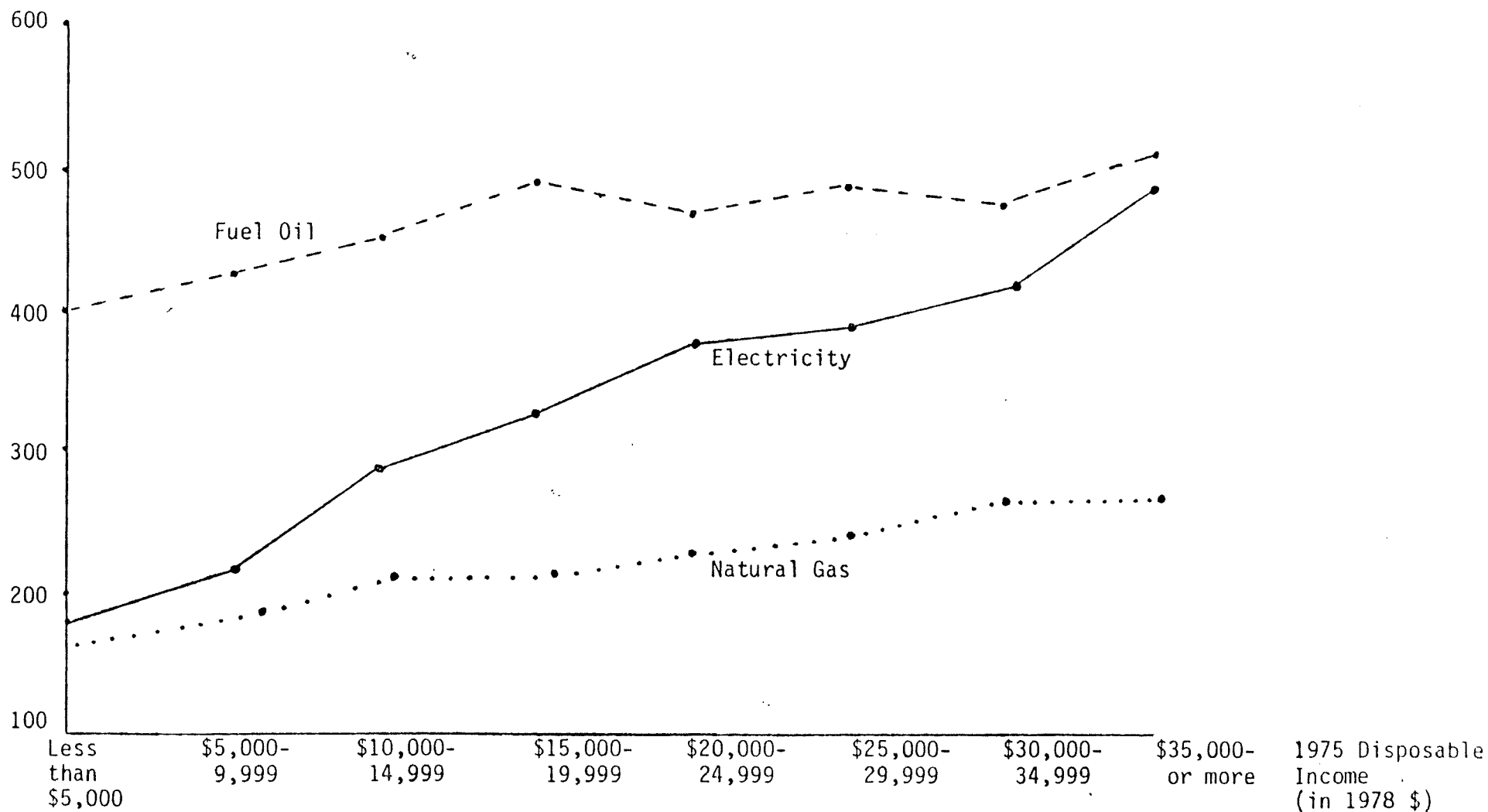


SOURCE: U.S. Department of Energy, Energy Information Administration. Analysis Report. A Comparison of Energy Expenditures by Elderly and Non Elderly Households - 1975 and 1985. May 1980. Table A-12.

FIGURE 4

FUEL EXPENDITURES OF ELDERLY HOUSEHOLDS ALSO
TEND TO RISE WITH INCOME

Annual expenditures
per household 1974-75



SOURCE: U.S. Department of Energy, Energy Information Administration. Analysis Report. A Comparison of Energy Expenditures by Elderly and Non Elderly Households - 1975 and 1985. May 1980. Table A-12

FIGURE 5
INCOME AND ELECTRIC ENERGY
CONSUMPTION IN KANSAS

| <u>ELECTRIC CONSUMPTION PER CUSTOMER</u> | | | | | |
|--|---|-------------------------------------|--------|---------------------------|--------|
| Income Group \$/yr. | Portion of Population in Income Group | <u>USE PER CUSTOMER</u> | | | |
| | | Based Upon Battelle SHAPES Model | | Based Upon DPRA Survey | |
| | | kwh/yr | kwh/mo | kwh/yr | kwh/mo |
| \$0 - 6,499 | 5.44% | 5162 | 430 | 5198 | 433 |
| \$6,500 - 9,999 | 4.69% | 5945 | 495 | 6168 | 514 |
| \$10,000-14,999 | 8.24% | 6534 | 545 | 7279 | 607 |
| \$15,000-19,999 | 12.04% | 8316 | 693 | 8702 | 725 |
| Over \$20,000 | 69.59% | 11077 | 923 | 12610 | 1051 |

SOURCE: "LIFELINE ELECTRIC RATES KANSAS RESIDENTIAL ENERGY CONSUMERS MINIMUM ELECTRICAL NEEDS AND CUSTOMER ELIGIBILITY CRITERIA," Development Planning & Research Associates, Inc., May 1981 — a research project commissioned by the Kansas Corporation Commission. The data shown reflects consolidation of Tables 8 and 14 pg 5-19 of source.

SUMMARYDATA ON ENERGY EXPENSE AS A PERCENT OF INCOME
AND \$ SUBSIDY TO CORRECT SHORT-FALL

1. REGRESSIVE IMPACT OF ENERGY EXPENSE ON INCOME-ENERGY EXPENSE AS % OF INCOME.

| ANNUAL INCOME RANGE | 1975 | | 1985 | |
|------------------------|---------|-------------|---------|-------------|
| | ELDERLY | NOT ELDERLY | ELDERLY | NOT ELDERLY |
| Under \$5,000 | 17.4% | 28.6% | 20.9% | 35.6% |
| \$5,000-\$9,999 | 11.5% | 15.0% | 13.1% | 16.8% |
| \$10,000-\$14,999 | 9.6% | 12.0% | 10.7% | 16.3% |
| \$15,000-\$19,999 | 8.2% | 10.0% | 8.9% | 10.7% |
| \$20,000-\$24,999 | 7.3% | 8.8% | 7.6% | 8.9% |
| \$25,000-\$29,999 | 6.9% | 7.8% | 7.4% | 8.0% |
| \$30,000-\$34,999 | 6.3% | 7.0% | 5.9% | 7.2% |
| \$35,000 and Over | 3.2% | 4.6% | 4.3% | 5.3% |

2. U. S. AVERAGE ENERGY EXPENDITURE AS % OF INCOME FOR PERSONS ABOVE AND BELOW POVERTY.

| INCOME CLASS | 1975 | | 1985 | |
|--------------|---------|-------------|---------|-------------|
| | ELDERLY | NOT ELDERLY | ELDERLY | NOT ELDERLY |
| Poverty | 21.2% | 23.8% | 25.9% | 30.5% |
| Not Poverty | 9.0% | 9.9% | 9.7% | 9.2% |

Source: "A COMPARISON OF ENERGY EXPENDITURE BY ELDERLY AND NON-ELDERLY HOUSEHOLDS 1975 and 1985" - U. S. Dept. of Energy (May 1980). Data is excerpted from Tables 2 and 6.

3. THE TOTAL \$ SUBSIDY REQUIRED TO KEEP LOW-INCOME (125% Poverty) KANSANS HOUSEHOLD ENERGY EXPENSES BELOW THE STATED % OF TOTAL HOUSEHOLD INCOME FOR 1981-82.*

| IF SUBSIDY TO: | SUBSIDY REQUIRED IF ENERGY EXPENSE | | | | % OF INCOME |
|---|------------------------------------|---------|---------|---------|-------------|
| | 5% | 10% | 15% | 20% | 25% |
| Direct and in-direct energy bill payers | \$51.4M | \$27.1M | \$16.6M | \$12.7M | \$8.8M |
| Direct bill payers only | \$36.5M | \$19.2M | \$11.8M | \$9.0M | \$6.3M |

*DoE indicates average household presently spends 5-6% of income on energy.

SOURCE: "THE COST OF SURVIVAL-SUBSIDIES REQUIRED TO HELP ELDERLY AND LOW-INCOME AMERICANS MEET HOME ENERGY BILLS," THE GRIER PARTNERSHIP, (Oct. 1981) - a report to the National Council of Senior Citizens, Inc. and the National Council of Churches. Data reflected in Table 5, p. 16 and Table 6, p. 14.

FIGURE 7

NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES
Members as of 10/1/82

| <u>STATE</u> | <u>OFFICE LOCATION</u> | <u>BUDGET</u> |
|------------------------|---|---------------|
| Alabama | Attorney General's Office | \$250,000 |
| Arkansas | Attorney General's Office | 203,000 |
| * Connecticut | Independent Agency | 223,603 |
| Delaware | Independent Agency | 124,000 |
| * District of Columbia | Independent Agency | 391,700 |
| Florida | Legislative Agency | 1,061,522 |
| Georgia | Office of Planning and budget (for administrative purposes only) | 344,864 |
| Hawaii | Division of the Department of Commerce and Consumer Affairs | 945,755 |
| Illinois | a. Governor's Office | 220,000 |
| | b. Attorney General's Office | NA |
| Kentucky | Attorney General's Office | 400,000 |
| Maine | Independent Agency | 300,000 |
| * Maryland | Independent Agency | 1,184,583 |
| * Massachusetts | Attorney General's Office | 325,000 |
| Michigan | Attorney General's Office | 387,000 |
| Minnesota | Division of the Department of Commerce | 270,000 |
| Missouri | Division of Department of Consumer Affairs, Regulation, and Licensing | 361,928 |
| Nevada | Attorney General's Office | 450,000 |
| * New Jersey | Divison of the Dept. of Public Advocate | 2,000,000 |
| New York | a. Division of State Consumer Protection Board | 703,885 |
| | b. Attorney General's Office | NA |
| * North Carolina | Legislative Agency | 2,900,000 |
| * Ohio | Independent Agency | 6,946,982 |
| Oklahoma | Attorney General's Office | NA |
| Pennsylvania | Attorney General's Office | 1,525,000 |
| South Carolina | Division of Dept. of Consumer Affairs | 299,678 |
| South Dakota | Attorney General's Office | NA |
| Utah | Independent Agency | NA |
| Virginia | Attorney General's Office | 250,000 |
| * West Virginia | Public Service Commission (financially and departmentally independent) | 410,980 |

* Partially or fully funded by assessments on utility companies.

KANSAS AGING (60+) DEMOGRAPHIC DATA

| <u>Household Composition</u> | <u>60+</u> | <u>75+</u> | <u>Income less than \$4,800</u> | <u>Female</u> |
|------------------------------|------------|------------|---------------------------------|---------------|
| Lives Alone | 39% | 52% | 62% | 56% |
| Lives with non-spouse others | 10% | 14% | 14% | 14% |
| Lives with Spouse | 51% | 34% | 25% | 30% |

Home Ownership

| | | | | |
|---------------------|-----|-----|-----|-----|
| Own (or are buying) | 83% | 79% | 71% | 79% |
| Rent | 17% | 21% | 29% | 21% |

Date Home Was Built

| | |
|--------------|-----|
| Before 1910 | 19% |
| 1910-1929 | 18% |
| 1930-1945 | 12% |
| 1946-1959 | 18% |
| 1960-Present | 21% |
| Unknown | 13% |

Home Heating

| | |
|-----------------------|-----|
| Heat Whole House | 60% |
| Heat Parts, Part-time | 40% |

INCOME DISTRIBUTION

Reported Annual Income of Respondents (60+ Noninstitutionalized Population in Kansas) and spouses when applicable in KDOA Household Interview Survey.

| | <u>Statewide</u> |
|---------------------|------------------|
| Less than \$2,400 | 6% |
| \$2,400 to \$4,800 | 28% |
| \$4,800 to \$7,200 | 19% |
| \$7,200 to \$9,600 | 12% |
| \$9,600 to \$13,000 | 9% |
| More than \$13,000 | 15% |
| Refused to disclose | 11% |

Source: Statewide Summary Report - Needs Assessment Survey, Kansas Department on Aging - Winter 1979-1980.

Poverty Level Income Status of Persons by Age: 1979

| <u>Age</u> | <u>Percent (%) in Poverty</u> | <u>Number in Poverty</u> |
|------------------|-------------------------------|--------------------------|
| 60 and over | 12.7% | 52,411 |
| 65 and over | 14.2% | 40,322 |
| Total Population | 10.1% | 239,839 |

Source: U.S. Census STF 3A.

BIBLIOGRAPHY

Energy Assistance Programs and Rising Policies in the 50 States to Benefit Elderly, Disabled, or Low Income Households

1. Direct Assistance
2. Weatherization and Conservation
3. Rate Structuring
4. Rate Reductions for Special Groups
5. Load Management Programs

Special Committee on Aging, 1979

The Impact of Rising Energy Costs on Older Americans
Special Committee on Aging, 1978

Energy Assistance Programs: Energy Program
Cleveland State University, 1981

Comparison of Energy Expenditures by Elderly and Non-Elderly Households 1975 and 1985
U.S. Department of Energy (May, 1980)

The Cost of Survival: Subsidies to Help Elderly and Low-Income Americans Meet Home Energy Bills
The Grier Partnership
National Council of Senior Citizens (Oct., 1981)

A Comprehensive Analysis of the Costs and Benefits of Low-Income Weatherization and Its Potential Relation to Low Income Energy Assistance
Consumer Energy Council (June, 1981)

Needs Assessment of Older Kansans
Kansas Department on Aging (1979/1980)

Seared Hopes - Frozen Promises: Energycare Report on Home Energy and the Elderly
National Council of Senior Citizens (June 30, 1981)

SELECTED MODEL ENERGY ASSISTANCE PROGRAMS

From A Report Provided By The

Regional Administration on Aging Office

THIRD-PARTY NOTIFICATION

Third-party notification programs were reported by 49 companies. There were many analogous features in the programs which were described by the companies who responded to this survey question. In general, third-party notification allows the residential customer the opportunity to select a third-party to be notified in addition to themselves in the event that disconnection becomes a possibility. A few companies have offered this special service to their customers since 1971, however, in more recent years many more companies have introduced third-party notification programs. The program is mandated in many states by regulatory commissions.

Most of the programs submitted included the following elements:

- The program is designed for the elderly, infirm, handicapped, the customer who has language or reading problems, and the customer who is away from home for extended periods of time.
- The designated third-party can be a relative, friend, clergyman, social agency, or community interest group.
- Many companies annually mail a copy of the third-party notification brochure to all residential customers.
- Interested customers should come into the business office to sign the necessary papers. If this is impossible, permission forms are mailed and must be signed by both the customer and the third-party. A copy of the agreement must be filed with the utility company.

- The third-party is not responsible for payment of the electric service bill, but can remind the customer of the pending disconnection.
- Third-party information is usually maintained on a computer file.
- Implementation of the program has been praised by both community and religious groups.
- Relatively few customers utilize this service.

The following companies submitted programs which are somewhat unique:

ARKANSAS POWER & LIGHT COMPANY has instituted the "Protected Customer Plan" of third-party notification for the elderly and handicapped. To be eligible, a customer must be 65 years of age or older with a gross income of \$5,698 or less, or must suffer from a permanent, severe, physical or mental impairment which substantially limits their ability to pay for utility service. They must also be certified as being physically or mentally disabled. Under this plan, service will not be terminated when the National Weather Service forecasts a maximum daily temperature of 95 degrees or higher. Also, service will not be terminated during the months of November through March if the customer pays at least one-half the bill as due or as otherwise agreed to by the company.

BOSTON EDISON COMPANY reported that in 1976, the Massachusetts Department of Public Utilities ruled that service cannot be terminated for failure to pay a past due bill in households where all members are 65 years of age or older. Boston Edison annually mails an insert to their customers describing this program. The company also distributes copies of the regulation to the Councils on Aging located within the company's service area. This program is in addition to the regular third-party notification plan.

PENNSYLVANIA ELECTRIC COMPANY makes their program available to all residential, commercial and industrial customers.

PUBLIC SERVICE COMPANY OF NEW MEXICO has a policy of granting an extension of time on a balance outstanding to any residential customer who has received assistance or intervention from a recognized third-party or agency. This intervention usually negates termination of service through the next delinquent date. This policy is directed towards hardship cases as determined through a responsible third-party. Exceptions may be made by the Credit Supervisor.

SPECIAL PAYMENT PLANS

Special payment plans were reported by 58 companies. The plans have been divided into seven categories as described below.

Elderly and Handicapped Plans

CENTRAL HUDSON GAS & ELECTRIC CORPORATION instituted the Extra Security Plan (ESP) in 1978. A special billing procedure was introduced in order to provide special assistance to the customer who is 62 years of age or older, retired, or dependent on Social Security Disability or Social Security Survivor Benefits. These accounts are on budget and are never disconnected for non-payment during cold weather.

CONSUMERS POWER COMPANY'S program emphasizes the utility's concern for senior citizens. Once the older customers are identified, special efforts are made to assist them in attaining federally funded heating assistance, and/or provide extended payment terms designed to eliminate further collection effort and possible disconnection for non-payment.

JERSEY CENTRAL POWER & LIGHT COMPANY mails a bill insert to all residential customers once a year requesting that they advise the company if they are over 65 years of age. All responses are noted in the company's master file. The company attempts to first contact this customer by telephone prior to taking any field action regarding termination. This program was mandated by the New Jersey Board of Public Utilities in August, 1978.

Extended or Deferred Payment Plans

Deferred payment plans were reported by 27 companies. In many states, they are mandated by the commission. There is great similarity in many of the programs. In many cases a down payment is required and the other terms are determined by the amount due, the customer's ability to pay, customer's payment history and any other important factors. An agreement is usually signed by both parties with a customer service person representing the utility. If the agreement is broken, service is usually terminated. Some companies include a finance charge of approximately one and one-half percent while others charge nothing. In general, the community relations impact is good, but many utilities eventually are forced to terminate service. Some program variations are described below.

ATLANTIC CITY ELECTRIC COMPANY customers receive a suspension notice with an arrearage of \$300 or less and are given the opportunity to participate in a budget plan which spreads the balance due over a 12 month period. The plan has been favorably accepted by those customers who have elected to use it. It has also provided customers owing in excess of \$300 an incentive to make the necessary payment to become eligible for the plan.

BALTIMORE GAS AND ELECTRIC COMPANY customers agree to make a down payment of 25 to 50 percent of the outstanding amount with the balance due in six equal payments. The program has been successful since approximately 90 percent of the monies have been paid.

PACIFIC GAS AND ELECTRIC COMPANY requires immediate payment of the oldest monthly bill; payment of subsequent monthly bills before they become past due; and payment of balances over a period of up to four months. Service is terminated after proper notice, if arrangements are not followed.

Heat Relief Plan

ALABAMA POWER COMPANY notifies its offices not to disconnect residential customers for nonpayment in extreme hot weather where there are conditions which may prove dangerous to the life or health of a customer.

KANSAS CITY POWER & LIGHT COMPANY activated a program in the summer of 1980 which provides for special deferred payment agreements during extreme heat temperatures to credit worthy customers. From July 15 to September 15 a customer is allowed to pay 75 percent of any total bill (this amount is printed on the bill). The total deferred amount of all bills must be paid by October 15. The plan has generated good public relations impact within the community.

Medical Related Plans

THE DAYTON POWER AND LIGHT COMPANY reports that in March 1981 the Public Utilities Commission of Ohio passed a regulation requiring utility customers to be notified by mail twice a year concerning the availability of a medical certificate program. The certificate must be signed by a licensed physician and will prohibit non-pay termination of utility service for a total period of 90 days. The initial extension is for 30 days and this can be renewed two additional times. Although this program has been positive from a public relations perspective, there has been relatively little customer participation. This program could possibly contribute to higher individual balances or uncollectible accounts.

WISCONSIN ELECTRIC POWER COMPANY allows a customer experiencing a medical emergency extra time to seek financial assistance in order to avoid disconnection. A letter from a physician or representative of a public health or social services agency can postpone disconnection for up to 21 days.

Retirement or Benefit Check Plans

DUQUESNE LIGHT COMPANY, PENNSYLVANIA ELECTRIC COMPANY and PENNSYLVANIA POWER & LIGHT COMPANY described a plan which was accepted by the Pennsylvania Public Utilities Commission and enacted in March 1981. The plan appears to have been accepted favorably by qualifying ratepayers. The purpose of the program is to provide residential customers who are receiving Social Security or equivalent monthly checks the opportunity to extend their bill due date to the sixth of the month, which more closely corresponds to the time the check is received. To be eligible, the customer first must be receiving Social Security or equivalent income. The normal due date for their particular billing cycle must fall after the twenty-first of the month or up to and including the fifth of the succeeding month. No extension is allowed for those customers whose normal bill due date falls between the sixth and twentieth.

FLORIDA POWER CORPORATION began using a special credit code for customers who always pay their bills, but who are unable to pay them on time because of the date that they receive their benefit check. The code will stop the delinquent notice for accounts in arrears for 30 days. If the customer has any 60-day arrears, they will receive a delinquent notice and be subject to disconnection. This program saves the company postage and handling expenses and creates improved customer relations.

GULF STATES UTILITIES COMPANY designed the Help Exempt Late Payments (HELP) program. The late payment on gas and electric bills in Louisiana amounts to five percent of the first \$50 and two percent of any amount above that.

This plan exempts from the late payment charge those who are retirees over 65, those who receive survivors benefits, the totally disabled or those who receive Supplementary Security Income (SSI). Approximately 500 customers have applied for the program. The majority of customers wish to maintain a good credit rating, and this program allows them to do so.

Winter Moratorium Plans

DELMARVA POWER & LIGHT COMPANY reports that the Delaware and Maryland Commissions mandate no shut-offs on days that the 8:00 a.m. temperature is 20 degrees Fahrenheit or less. On less severe days before terminating service, the company must make two attempts to reach the customer by telephone (one after 6:00 p.m.) and they must also send them a list of available social service agencies. This plan has been well received and the company now uses the telephone contact as a year-round collection tool.

THE DETROIT EDISON COMPANY implemented a Winter Protection Plan in December 1980 to protect low-income households from disconnection of service for non-payment during the space heating season (December 1 through March 31). Eligibility is based on household income (Bureau of Labor Statistics Lower Living Standard). Customers are required to pay a monthly amount equal to at least seven percent of their estimated annual electric bill during the heating season. Customers with arrears at the beginning of the heating season are allowed 12 months to pay. During the 1980-81 heating season, approximately 6,000 customers participated in this program. Detroit Edison has instituted the Settlement Agreement which is a formal payment plan based on the customer's ability to pay. The customer and the company representative tailor a payment arrangement to meet the customer's need.

NORTHEAST UTILITIES codes identified hardship customers on their revenue system in order to avoid disconnection of service during the winter moratorium period. These customers are referred to social agencies for energy assistance. In order to avoid termination of service, these customers must, after April 15, enter into a reasonable payment arrangement. This program, mandated in 1979, often has a significant adverse effect on customer's receivable balances and, therefore, increases the number of write-offs. Northeast Utilities has an intensive campaign as a follow-up to their winter moratorium program. Customers are reminded that their service is subject to disconnection unless suitable payment arrangements are made on their past due balances. Business hours are extended to accommodate the customer and collectors' hours are also extended so that the customers who work during normal business hours can be contacted.

OHIO EDISON COMPANY has established a procedure to provide reasonable alternatives for customers who are having difficulty paying their winter heating bills. From December through February, service is not disconnected when the forecasted low temperature for the next 24-hour period is 20 degrees Fahrenheit or below. The Public Utilities Commission of Ohio has established two payment options for customers who are unable to pay the amount due during this period.

INSTALLATION AND FINANCING ARRANGEMENTS

Installation and financing program were reported by 14 companies.

Financing Arrangements

CONSUMERS POWER COMPANY, with the approval of the Michigan Public Service Commission, implemented one of the first utility insulation financing programs in the country in 1973. They provided company financing for the installation of up to R-19 ceiling insulation in owner-occupied, single-family homes of their gas space heating customers. Financing was limited to \$300 after a down payment of 20 percent with up to 36 months for repayment, including interest of one percent per month. In April 1982, the company received approval from the commission to expand the program. The new program, Energy Conservation Financing Plan, has been extended to renters and owners living in duplexes and multi-family dwelling units with either individual gas heating systems or central gas heating systems. The plan also includes the cost of adding necessary ventilation if incidental to the total cost. The terms include: \$1,000 loan limit per dwelling unit if contractor installed, or \$700 if customer installed; no down payment; no interest; and up to five years for repayment. The company has the right to terminate gas service for non-payment of the loan. The cost of the program over and above the principal of the loan, paid by participating customers, will be recovered through a uniform surcharge applied to all customers' gas usage -- approximately \$1.88 per year for the average residential space heating customer.

MINNESOTA POWER & LIGHT COMPANY offered, in the fall of 1980, a pilot Low-Interest Financing Program for energy saving home improvements. This program was offered to 6,000 customers who had participated in Minnesota Power's Energy Savers Calculator Program and to senior citizens through local community action agencies. Customers whose income was less than \$12,000 were eligible for a five percent interest loan; whereas, customers with income of over \$12,000 had to pay eight percent interest. The maximum loan was \$1,000 and the minimum was \$100. The maximum payback period was 60 months with a minimum of \$10 per month. Out of the 7,500 customers contacted, only 90 took out loans (1.3 percent return) and of these, only 13 (14 percent) took advantage of the five percent loan. Minnesota Power is considering the possibility of offering the program in the future if the Minnesota Commission will allow the incurred expenses to be included in the rate base.

MONTANA-DAKOTA UTILITIES COMPANY began offering their customers interest-free weatherization loans of up to \$1,500 in July 1980. The financing can be used to purchase and install insulation, storm window, storm doors, caulking and weatherstripping in residential buildings. A company audit is required to substantiate the cost effectiveness of weatherization before financing can be obtained. The loan must be repaid within three years. The lost interest is partially recouped by the company through a tax credit which is allowable under Montana law. During the 12 months, \$125,000 was loaned to MDU customers.

PACIFIC GAS AND ELECTRIC COMPANY has a pilot zero-interest plan for both owners and renters of residential property. Marketing is designed to assure adequate participation by the elderly, minorities and low income. Loans of up to \$3,500 at zero-interest are available to Pacific Gas and Electric customers for specified energy conservation measures. The loans provide financial incentives to customers, particularly the low income, to weatherize and install cost-effective conservation measures without making an initial cash investment.

ROCHESTER GAS AND ELECTRIC CORPORATION has had an energy home improvement plan in operation since 1978. After a customer's home has been audited, the customer receives a written report recommending conservation measures which will pay for themselves in energy cost savings in less than seven years. Customers can finance these home improvements through loans from local banks guaranteed by the utility. The loans carry an annual interest rate of 11.5 percent and must be paid back within seven years. The minimum loan is \$200 and the maximum is \$4,500 for a four family home. An additional \$1,500 can be financed for installation of a heat pump. The customer must agree to allow the company to inspect all financed work to assure conformity with commission standards.

SOUTHERN CALIFORNIA EDISON COMPANY has designed an interest-free loan program for eligible low-income customers which will be activated in January 1982. Interest-free loans for up to \$3,700 will be payable over a 100-month period to install energy saving measures. Two hundred dollars of this amount can be used for minor home repair. Additionally, low-income customers have the option of receiving an incentive payment, instead of an interest-free loan, for each energy saving measure implemented.

Another program instituted by Southern California Edison attempts to motivate low-income customers to install domestic solar hot water systems. Both installation and financial arrangement benefits are offered to the customer and the community. The first option provides the low-income customer a loan of up to \$3,500 through a traditional lending institution without any credit restrictions. The company guarantees all loans issued. The second option allows the company to contract with non-profit community groups to manufacture and install passive solar water systems for qualified low-income customers. This plan provides a viable mechanism for community participation and an alternative approach to stimulate maximum participation of low-income customers.

UNION ELECTRIC COMPANY in January 1977, instituted an insulation financing program for credit-worthy customers who reside in owner-occupied single, two-, three- or four-family dwellings. The five percent loan is included on the customer's service bill over a 36 month period. An entire attic insulated to an R-30 factor is the minimum insulation to qualify for this financing. Insulation installation under this program must be arranged through Union Electric Company authorized participating contractors.

Installation Arrangements

CONSUMER POWER COMPANY's Insulation Outreach Program provides ceiling insulation of up to R-19 at no cost to qualifying low-income residential electric and gas customers. To be eligible, a customer must purchase either direct space heating or direct electric service and must utilize a fuel other than gas for heating purposes. They must receive approved low-income assistance; must receive income for a four-person household not to exceed \$12,600 per year; must agree to a home energy audit; must agree to an inspection upon completion of the installation; and must reside in a home in which the cost of installation and supply will not exceed the total estimated energy cost savings for the seven year period following installation. The company offers a \$50 incentive payment to customers who install their own insulation. Company inspection is required to assure satisfactory completion. The program costs will be recovered through a 1 cent per Mcf and .01 cent per kwh surcharge on all gas and electric sales. This would generate about \$10,000,000 over a two year period and insulate approximately 25,000 residences.

PENNSYLVANIA POWER & LIGHT COMPANY has instituted a program that provides insulation blowing machines, at no cost, to social and community organizations for the purpose of insulating the homes of low-income persons. First priority for machine use is reserved for organizations working with people who do not qualify for existing government-sponsored weatherization programs because their incomes fall just above the poverty guidelines. Second priority is given to organizations directly involved in weatherization. The third priority is to utilize the machines in skills training workshops for social service agency representatives. To insure the safe use of the machines, Pennsylvania Power & Light has developed an Operating Safety Manual that is given to each organization and employee using a machine. There is also an operating/safety video tape.

NORTHEAST UTILITIES participates in a project called Operation Fuel. This is a tax exempt vehicle to obtain contributions from large corporations to help finance the work of local fuel banks. The project has operated each year since 1977 during the months of October through April. It is sponsored by the Christian Conference of Connecticut (CHRISCON) which is exempt from federal taxes, making contributions to the project tax-deductible. Operation Fuel is administered by an Executive Committee which is appointed by the Board of Issues Management Team. During the 1980-81 heating season the program distributed \$88,000 to local fuel banks. The company reports that the project is a worthwhile community relations endeavor and the company has received recognition from the governor and other leaders for participating in the project.

PENNSYLVANIA ELECTRIC COMPANY established a Hardship Case Assistance Program in 1978. The program was initiated on a trial basis with two county Community Action Agencies serving as the third-party organization. The program was considered successful and was expanded company-wide with Community Action Agencies or similar organizations assuming the responsibility for administering the program. During the three years the stockholder-funded program has been in existence, it has distributed \$55,000 through 14 community welfare agencies to 493 customers. About one-quarter of these customers have repaid \$5,083. Customers are not required to pay back assistance, but if customers choose to do so, a Loan Payment Record is used to document the pay back arrangement. The fund is replenished each January with \$25,000.

PENNSYLVANIA POWER & LIGHT COMPANY established in January of 1980 a one-time-only emergency financial assistance program for low- and fixed-income customers who are unable to pay their total utility bill without having to forego the purchase of other necessities such as food or medical supplies. The program will be implemented for a minimum three-year test period and is designed to be a temporary measure until a more permanent solution is developed through legislative action. If such a program should be established the company program would immediately terminate. If no other program is established within the three years, the company will review the effectiveness of its program and determine whether it should be continued. The program is designed to be conducted by operation divisions jointly with community groups, social service agencies or committees composed of such groups and agencies. The company will make contributions through its Public and Charitable Contribution Budget, and community groups/agencies/committees will administer the funds. Administering organizations will establish the need for funds and make requests to the divisions. Division management will review the requests and recommend appropriate company participation. There is a \$5,000 limit per division per year with a \$90,000 limit system-wide for the three-year test period. The company has established certain criteria which organizations must meet in order to participate. Organizations must be on-going with an established record of responsible community service. They must have their own established procedures for raising money, budgeting, distributing and accounting for monies received. The company required that administrative costs must be met with other than company funds and that organizations raise funds for the program from community sources other than the company. Organizations must determine if an individual applicant is eligible to participate in existing government-sponsored weatherization programs and budget counseling services, and funds cannot be distributed to individuals who are eligible for other emergency assistance programs, unless there are extenuating circumstances.

SPECIAL RATE PROJECTS

Special rate structures to benefit low- and fixed-income customers were reported by 15 companies.

SENIOR CITIZEN RATES

CONSUMER POWER COMPANY implemented a senior citizen rate in August of 1978. The rate is available to customers who are 65 years of age or older and who are heads of households and who use below a fixed amount of electricity per month. The amount varies depending on whether the customer has an electric water heater or not. There is a space heating provision in the rate which is in effect from November through May. The rate is designed to benefit customers who use less than the specified amounts. Where customers use more than these amounts, they may pay more on the Senior Citizen Rate than they would if they were not on this rate. When the company initiated this rate they mailed brochures to 650,000 customers identified as residential electric accounts whose usage indicated they might benefit from the rate. As the brochures were returned, the company analyzed each reply to see if they might qualify and benefit, and then these customers were contacted. Since the rate was initiated all residential customers requesting service are made aware of this rate and existing Senior Citizen Rate customers are periodically analyzed to insure that they are receiving an economic benefit. The company sends promotional energy bill messages to customers as a reminder to contact the company if they qualify for this rate. The company reports the rate does provide economic relief for many low-use senior citizen customers, but those customers who are higher users cannot benefit from the rate and must rely on other means of relief, if available.

DETROIT EDISON COMPANY implemented a senior citizen rate in October of 1978. This rate is available to customers 65 years of age or older who are heads of households and where service is to a principal residence. Additionally, senior citizen monthly consumption must be below specified amounts depending on whether they have residential service alone, residential service plus electric water heating or space heating or both. Customers must apply for the rate. The customer must agree to permit Detroit Edison to interrupt the electric service to the central air conditioner, dishwasher and electric clothes dryer, if and when control equipment is implemented by the company. The customer must agree to remain on the rate for a minimum of 12 months providing he or she continues service at the residence listed on the application. Where there is an electric water heater, the customer must agree to have it served under on the company's controlled water heating rates. Detroit Edison reported that 113,000 customers are participating in this rate plan and they are averaging 20 percent monthly savings.

MASSACHUSETTS ELECTRIC COMPANY has a senior citizen rate available to customers who meet all of the following criteria: 65 years or older, head of household or principal wage earner and presently receiving social security income. The customer has the responsibility to certify annually continued compliance with the above qualifications on forms provided by the company.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE allows 10 percent reduction in the utility bill of customers who are 70 year or older where service is to a primary residence. This is not a rate, but a discount and was intended to offset the amount of the bill represented by the inclusion of Construction Work in Progress (CWIP). Since the discount was implemented, CWIP has been taken out of the rate base, but the company continues to offer the discount. The customer must apply for the discount by mail or in person and must submit proof of age.

TIME-OF-DAY OR LOAD MANAGEMENT RATES

KANSAS GAS AND ELECTRIC COMPANY implemented a load management rate in June of 1981. This plan is to be in effect for an initial period of 10 years. The program is aimed toward existing residential and general service customers with electric space heating and new installations utilizing electric heat pumps. The program is intended to reduce peak demand during the summer air conditioning months. The optional load management rider requires that customers agree to have a remote control device installed on the outdoor unit of a central air conditioning unit and/or heat pump. The remote control device will be installed where customers agree to pay for the device and its installation. Work will be done by company approved heating and cooling contractors. The device will shut off the condenser unit of the customer's equipment for approximately eight minutes not more than twice each hour. The company reports the program is in the early stages of implementation, but based on results of a previous test program they anticipate customers will respond affirmatively to this load management program and that the program will alleviate the need for construction of smaller peaking units in the early 1990's.

MONTANA-DAKOTA UTILITIES COMPANY implemented a time-of-day rate in 1979, which is available to single phase electric service in single family dwellings or mobile homes. The customer agrees to purchase the required special metering device and to remain on the service for one year. At the end of the year the customer can elect to return to the regular rate and the company agrees to repurchase the special metering equipment and to refund the customer any excess amounts billed where service under the optional time-of-day rate exceeded the cost of service under the regular residential rate. The company reports that time-of-day rates have not been too successful. They have been actively promoted, but few customers have elected the rate and even fewer have remained on the service for more than one year.

SMALL USE RATE

IOWA-ILLINOIS GAS & ELECTRIC COMPANY implemented a small use rate in December of 1978. It is available to customers who use 15 kwh per day or less during the two months of heaviest use during the billing period from June through September. The company reports approximately 30 percent (40,000) residential customers are on this rate and the savings for qualifying customers are about 15 percent.