

# **SUNSET AUDIT REPORT**

**Kansas Energy Office**

**A Report to the Legislative Post Audit Committee  
By the Legislative Division of Post Audit  
State of Kansas  
March 1982**

82-47

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Through its audit work, the Division provides the Legislature with information for evaluating the work of State agencies. This information helps the Legislature decide what should be done to bring high-quality services to Kansans in the most effective and economical manner.

Legislative Post Audit performs its work in the following ways:

1. By law, the Division reviews the financial affairs and operations of each State agency at least once every three years, including appropriate agency controls, receipts, expenditures, and other records and systems. The Division also reviews other aspects of an agency's operations to determine whether State laws, policies, and programs are being carried out effectively, efficiently, and economically.
2. At the direction of the Legislative Post Audit Committee, the Division reviews and assesses particular State programs to determine how effectively and efficiently a program is meeting its goals and whether legislative intent is being fulfilled.
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4. At the direction of the Legislative Post Audit Committee, the Division conducts audits of special topic areas. Under the Committee's rules, these special audits are reviews of particular problems and are to take no more than 40 hours of staff time.

The Legislative Post Audit Act directs the Division to conduct its audit work according to accepted auditing standards. As its professional guidelines, the Division uses the publication, *Standards for Audit of Governmental Organizations, Programs, Activities, and Functions*, issued by the Comptroller General of the United States in consultation with state and local finance officials and such related professional organizations as the American Institute of Certified Public Accountants.

Legislative Post Audit presents its findings in four kinds of reports—financial and compliance audit reports, performance audit reports, sunset audit reports, and special audit reports. The reports often contain recommendations that range from relatively small adjustments in agency operations to full-scale revampings of major programs. These recommendations are referred to the Legislative Post Audit Committee for consideration. Through the independence given to the Division by the Committee and by the provisions of law, and through the independent and rigorous nature of its audit and review procedures, Legislative Post Audit strives to produce findings and recommendations that are impartial, objective, and useful to the Legislature and the people of Kansas.

## LEGISLATIVE DIVISION OF POST AUDIT

Richard E. Brown, Legislative Post Auditor  
Meredith C. Williams, Deputy Legislative Post Auditor

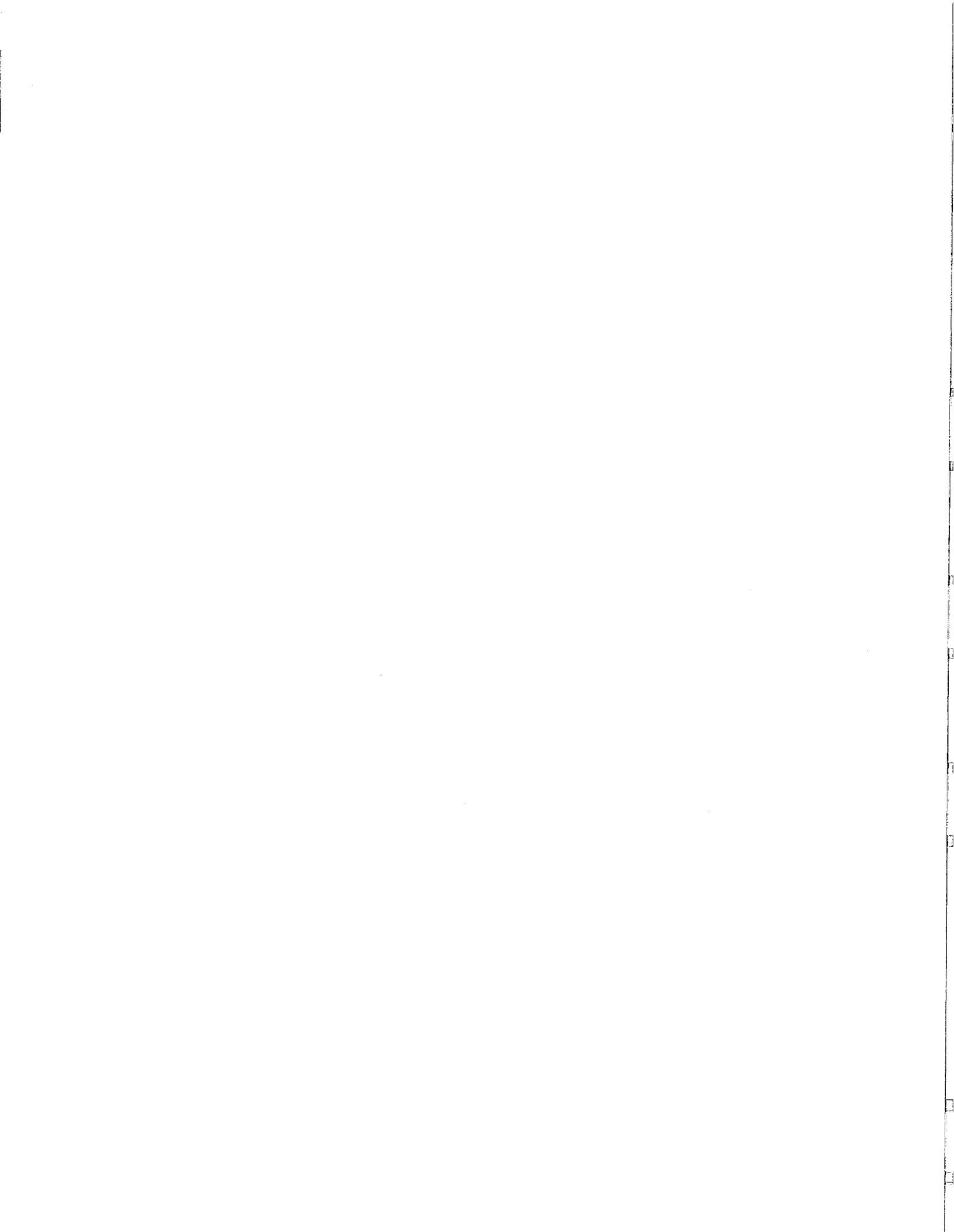
Suite 301, Mills Building  
Topeka, Kansas 66612  
(913) 296-3792

SUNSET AUDIT REPORT

KANSAS ENERGY OFFICE

March 3, 1982

Legislative Division of Post Audit  
State of Kansas  
Topeka



## FOREWORD

The Energy Office and the Energy Advisory Council were established in 1975 within the Governor's Office. They were created in response to the nationwide energy crisis of 1973 and 1974, which pointed out the country's diminished energy supplies, increasing dependence on foreign imports, and resultant increases in energy costs. In fiscal year 1979, the Energy Office was created as an independent agency. Since then, the Office has undergone considerable change. By fiscal year 1981, its expenditures had increased to \$1.4 million--an increase of 199 percent from 1979 when it spent \$474,116. The federal government, however, has signaled its intention to substantially cut aid for state energy programs beginning in fiscal year 1983. This aid was the Office's major source of funding (74 percent). Partly as a result of this cutback, the Legislature included the Energy Office in the Kansas Sunset Law and scheduled it for abolition on July 1, 1982, so that the State's energy programs could be studied and decisions made before funding cuts were implemented. As part of the legislative review under the sunset process, the Legislative Post Audit Committee directed that a performance audit be conducted of the Energy Office. This report presents the results of that performance audit.

The audit showed that Kansas needs State energy programs to promote energy conservation and develop plans for energy emergencies, and to disburse federal and State funds for cost-effective conservation programs. The nation's dependence on foreign oil has increased and indications are that fuel consumption is again rising. Also, the federal authority to curtail energy use in times of shortage has been withdrawn, so the State no longer has a federal energy emergency plan to fall back on.

The audit also showed that the energy programs administered by the Energy Office have not been very effective. The energy information and emergency preparedness programs are inadequate; they do not establish a priority system for allocating available energy resources in the event of an emergency. Most of the conservation programs have not been evaluated to determine which ones are cost-beneficial. At the same time, the Energy Office has apparently taken credit for the energy savings achieved in a number of programs that it does not operate. It appears that the Energy Office is also running too many programs--another reason why its operations are ineffective. A strong indication of this is that the auditors found certain problems or inadequacies with all of the Energy Office's programs that they reviewed.

The report includes recommendations in each area to improve the operation of energy conservation and energy-emergency planning programs.

The audit's key recommendations call for abolishing the Energy Office and transferring responsibility of administering, planning, and budgeting the State's energy programs to the Department of Administration at reduced staffing levels. The auditors concluded that these recommendations should be made because of the Energy Office's ineffectiveness, as disclosed in the audit. Also, in making these recommendations, the auditors considered five criteria that they determined are crucial to the overall effectiveness of an energy program--expertise, evaluation, coordination, visibility, and independence. Regarding the Energy Advisory Council, the audit recommends that if the Legislature acts to re-establish the Council, it should report to the Governor regarding programs with the highest priorities and the greatest benefits.

In general, the Energy Office's response to the draft report disagreed with most of the report's findings, conclusions, and recommendations, and in some instances questioned the report's accuracy. Legislative Post Audit carefully reviewed all areas of disagreement. This review showed that no changes were needed within the report text because of the agency's response. Thus, the report's conclusions and recommendations remain the same. The Energy Office also concluded in its response that other organizational arrangements are worthy of consideration. Legislative Post Audit points out that the audit report considers two other alternatives and that although the recommended option was preferred, the other two options may merit consideration. Also, the Legislature has been considering other alternatives including the Governor's Reorganization Order to abolish the Energy Office and replace it with a new Division of Energy Analysis within the Department of Administration, and the Senate Energy and Natural Resources Committee's resolution to extend the life of the Energy Office for another year and further study organizational alternatives. Regardless of where these programs continue, though, the recommended actions for improving energy conservation and emergency planning programs need to be taken to ensure that these programs serve and protect the public.

The audit supervisor for this audit was Mark Levy and he was assisted by team members Rosemarie Baker, Robin Hunn, and Elliott Lefkowitz. Assistance was also provided by other members of the staff. Throughout the audit, officials of the Energy Office have been cooperative and courteous. Their assistance during the audit is appreciated.

  
RICHARD E. BROWN  
Legislative Post Auditor

## **Summary of Matters for Legislative Attention**

### **Audit Findings and Conclusions**

The Kansas Sunset Law abolishes the Kansas Energy Office and the Energy Advisory Council on July 1, 1982, unless they are continued by an act of the Legislature. As part of the legislative review under the sunset process, the Legislative Post Audit Committee directed that a performance audit be conducted of the Kansas Energy Office. This report presents the results of that performance audit.

This sunset audit addresses four main questions:

1. Is there a need for State energy programs?
2. Do State energy programs effectively conserve energy and prepare for emergencies?
3. Are the State's energy programs worth their costs?
4. Are there alternatives for administering Kansas' energy programs?

The audit showed that Kansas needs a State energy program to develop plans for energy emergencies, and could benefit from cost-effective energy conservation programs. The audit also showed that some of the energy programs administered by the Energy Office have not been very effective, while most others have not been evaluated to determine if they are cost-effective. Given the need for and the problems with the State's energy programs as operated by the Energy Office, the auditors questioned whether Kansas' energy program should be continued in the Energy Office, or whether there are alternative methods for meeting the State's needs. These conclusions were based on the following:

#### **Kansas Needs State Energy Programs to Promote Energy Conservation and Develop Plans for Energy Emergencies**

United States dependence on foreign oil increased from 35 percent of the total consumed in 1973 to 50 percent in 1979. There are also indications that fuel consumption in the United States is again rising. The rise in dependence on foreign oil increases the possibility that energy shortages could occur in the future. Given these factors, the State should selectively fill the gap created by reductions in federal programs. The

federal government has terminated federal acts governing fuel allocation and planning for energy emergencies. So, states no longer have a federal plan to fall back on to handle such an emergency. Therefore, a State plan to allocate fuel to critical sectors of the economy and curtail other uses would appear even more necessary than before. Moreover, despite federal spending cuts for energy conservation programs, a perception still exists that they are worthwhile because conservation is one way dependence on foreign oil can be reduced quickly.

A report by the U.S. General Accounting Office stated that conservation programs have significant potential for conserving energy, but it stressed the importance of evaluating those programs. The report also stated, however, that the U.S. Department of Energy had performed only limited evaluations of its conservation programs, and it questioned the procedures used in the few evaluations that were done. Nonetheless, the General Accounting Office found that stopping all federally funded conservation programs would "preclude the timely realization of selected energy conservation opportunities." It also noted that the federal government has a role to play in assuring that consumers have the knowledge they need to implement conservation measures.

In this audit, Legislative Post Audit also found that the Kansas Energy Office has to date completed few evaluations of its own programs. However, the few programs that have been evaluated show encouraging results. Although energy conservation programs of the type administered by the Energy Office show potential for promoting energy conservation, they should be retained only if they effectively reduce energy consumption. It is important that these programs are reviewed to determine how useful they are in conserving energy, and that they be continuously monitored to determine the degree to which they are still needed.

### **Federal Budget Cuts Will Affect Energy Programs Operated in Kansas**

The Energy Office has experienced significant increases in federal funding, but those funds will be cut substantially beginning in fiscal year 1983. Most of the Office's available funds have come from the federal government. As a result, the Office will either have to reduce its operations accordingly, or will need more State money to continue operating programs at the same level.

In fiscal year 1983, the funds that Kansas receives from the federal government for energy programs will be cut 42 percent from \$902,902 at the fiscal year 1982 level to \$530,520 for fiscal year 1983. The auditors determined, however, that for fiscal year 1983 Kansas will be able to maintain its energy programs at the same level as its fiscal year 1982 level because of large carry-over balances (federal funds that were not spent during previous fiscal years). These carry-over balances (approximately \$709,520) will be available for expenditures during fiscal year 1983 in

addition to the new federal moneys (\$530,520). By fiscal year 1984, however, the federal carry-over balances will decrease from the \$709,502 fiscal year 1983 level to \$66,225. (This assumes expenditures in fiscal year 1983 will be at the level proposed by the Governor.) The State will then either have to provide additional funds if it chooses to run programs at the same level as the previous year, or programs will have to be cut even further.

Without the influx of additional State moneys, such cutbacks will have a significant impact on the number and type of energy programs operated in Kansas. Fewer programs would be run at reduced staff levels. But no matter how the State's energy programs are organized, and at whatever level of funding, it is important that the State's energy needs are prioritized, that any energy conservation efforts are focused on the most cost-beneficial programs, and that an adequate emergency preparedness system be in place to handle energy emergencies.

#### **Energy Programs Administered by the Energy Office Have Not Been Very Effective**

Because of the large number of programs administered by the Energy Office (39 in fiscal year 1981), the auditors reviewed a sample of 16 of the programs for which the largest expenditures were made. Altogether, 60 percent of the Office's fiscal year 1981 expenditures were made for the 16 programs selected for review. The auditors' review showed that the Energy Office currently runs too many programs to be effective. A strong indication of this is that the auditors found certain problems or inadequacies with all of the Energy Office's programs they reviewed in each of the Office's three Divisions. The auditors' findings are summarized below.

**The Planning and Fuel Allocation Division.** The auditors examined three of the five programs administered by the Planning and Fuel Allocation Division--the Kansas Energy Information System, the Energy-Emergency Plan, and the Biennial Report--representing \$66,186 of the \$75,766 (87 percent) spent by the Division during fiscal year 1981. Programs in this Division--which are geared toward gathering information concerning available energy resources and preparing for energy emergencies--were found to be inadequate. In an energy shortage, the Planning and Fuel Allocation Division's emergency plan could not adequately allocate fuel to critical sectors of the economy and curtail other uses as needed. Because the federal acts that would have superseded an inadequate State plan have expired, it is more important than ever that the State upgrade its current plan. Contributing to this and other problems noted in the Division is an inadequate Kansas Energy Information System. Without comprehensive information on energy supplies and consumption trends, the State cannot effectively determine the best allocation of fuel during an emergency.

**The Conservation and Solar Applications Division.** The auditors examined six types of programs, representing 12 of the 26 programs

administered by the Conservation and Solar Applications Division. These six types of programs--residential conservation, government conservation, transportation, small business and commercial conservation, government procurement, and energy curriculum programs--accounted for \$768,931 of the \$1,185,685 (65 percent) spent by the Division during fiscal year 1981. The auditors found that this Division does not adequately evaluate and estimate actual energy savings for its programs, even though it has made a commitment to the U.S. Department of Energy to do so. Furthermore, the claims of savings resulting from these programs are overstated in the Energy Office's annual reports to that federal agency. That is, actual savings resulting from some of these programs may have been significantly lower than the Energy Office's estimates, and some of the energy savings cited by the Office were actually savings from programs in which the Energy Office had little or no involvement.

The auditors were able to determine that some programs are more successful than others. Several programs, such as transportation programs, have shown that benefits have far outweighed costs. Other programs, such as energy-efficient government procurement practices, have failed because of problems in getting other State agencies to implement them. However, all programs need to be evaluated to determine which of the conservation programs produce the greatest benefits and should be continued. Given the sheer number of the Division's programs--26--it would seem that evaluation of each program would be difficult. Also, only 10 of the Division's 26 programs are required by federal law. The rest are optional. The Energy Office should be more selective about the optional programs it chooses to administer and should run only those programs it determines to be most effective.

**The Research and Development Division.** Finally, the auditors reviewed the grain fuels research program, one of eight research projects that the Research and Resource Development Division was involved in during fiscal year 1981. This project represented \$50,975 of the \$164,128 (31 percent) spent by the Division that year. The auditors found that the research administered by this Division in this area has apparently been useful, but the Division has not developed formal priorities in written form for distributing research moneys. This has apparently led to at least one disagreement over how the moneys should be spent. Furthermore, written priorities could document compliance with the State law that requires the Energy Office to establish research priorities.

#### **The Cost-Effectiveness of the State's Energy Programs Could Not Be Determined**

To assess whether the benefits of the Energy Office's energy programs justify their costs, the auditors attempted to review the programs' effectiveness by determining the dollar value of actual energy savings derived from these programs. In general, they could not determine how

effective these programs are because the Energy Office does not follow up on them. Further, Legislative Post Audit could not evaluate these programs because of the limited time allowed for audit fieldwork.

The auditors were able to determine the expenditures and quantifiable dollar benefits for only five programs, all of which appeared to be cost-effective. Nonetheless, these five programs represent only a few of the Office's 39 programs, and other programs have proven ineffective. This was evidenced by the failure of one program (government procurement) and the problems in starting another program (energy curriculum).

Because some programs are more beneficial than others, all programs need to be evaluated to determine which ones produce the greatest benefits and should be continued. Further, given the impending federal budget cuts, it is even more vital that programs be carefully selected; funding cuts would result in fewer programs being run, at reduced staff levels.

### **There Are Several Options for Administering Kansas' Energy Programs**

In examining the alternatives for administering the State's energy programs, the auditors reviewed the energy programs or projects being operated by other State agencies and reviewed the organization of energy offices nationwide. No one organizational structure emerged as best; in fact, energy offices across the country have been organized and reorganized in a number of ways. The auditors examined three options for administering Kansas' energy program: retaining the current Energy Office; abolishing the Energy Office and eliminating the administrative, fiscal, and planning functions it provides; and abolishing the Energy Office but moving the overall fiscal and planning functions to the Department of Administration. In examining these options, the auditors considered five criteria that they determined are crucial to the overall effectiveness of an energy program--expertise, evaluation, coordination, visibility, and independence. In considering these criteria, the auditors determined that the third option--abolishing the Energy Office and moving certain functions to the Department of Administration--was preferable.

**Retaining the Energy Office.** If the Energy Office is retained and if federal funds are cut as expected, programs operated by all three divisions --Conservation and Solar Applications, Planning and Fuel Allocation, and Research and Development--will have to be severely curtailed without additional State funding. Even if State funds are added to replace the federal funds, the Office could operate more effectively with fewer programs and with fewer staff.

As an independent agency, the Energy Office is more likely to be identified by Kansans as the primary source for energy information. Further, because the Office's only charges are to promote energy conserva-

tion and prepare for energy emergencies, it is less likely that the Office would narrow its efforts to one section of energy users than an agency whose primary purpose is to serve a particular sector of energy users, such as utilities or small businesses. If anything, the Office could be accused of having too broad a focus because it operates, oversees, or administers 39 energy-related programs or projects.

The major drawback to re-establishing the Energy Office is that it has not done an effective job of developing an energy-emergency plan or of evaluating its programs. Legislative Post Audit concluded that if the Energy Office is re-established, the following changes would need to be implemented immediately:

- evaluating each conservation program to determine the actual energy savings that result from the program, and discontinuing funding for those programs which are not cost-beneficial
- upgrading the State's energy emergency plan
- studying the need for and the feasibility of a comprehensive State Energy Information System
- developing research priorities that clarify conservation research goals

**Abolishing the Energy Office and eliminating its fiscal and planning functions.** If the Office is abolished and its fiscal and planning functions eliminated, State programs promoting energy conservation and emergency preparedness could nonetheless continue. The programs in these two areas could be carried out by a number of existing agencies. For example, energy-emergency planning could be shifted entirely to the Adjutant General's Division of Emergency Preparedness, which is already responsible for implementing the State's Emergency Preparedness Plan. Also, if additional State funding is provided to supplement the loss of federal funds, the conservation programs now being contracted to the Energy Extension Service at Kansas State University could be continued past fiscal year 1983. With its established public information mechanism, the Extension Service could provide the public visibility that is important for a successful State energy effort. Also, the Extension Service already possesses a certain amount of technical expertise in the area of energy conservation.

This option has a number of drawbacks. While the other agencies involved in energy-related projects appear to have the expertise to administer the energy emergency preparedness plan and to promote energy conservation, no central State agency would be designated to evaluate programs and set priorities, to administer programs if federal funding is continued, and to provide a centralized budget control function for distributing federal or State funds. Further, the current problem of

insufficient program evaluations could be expected to worsen as each agency developed its own energy agenda.

**Abolishing the Energy Office and transferring its fiscal and planning functions to the Department of Administration.** This option appears to be preferable. The Department can receive funds, set priorities for spending those funds, evaluate and coordinate conservation programs, provide administrative services, and help ensure that programs are successfully implemented. As an agency that already has channels of communication open to all agencies for budget and other purposes, the Department of Administration appears to be well-placed for such a function. The Department does not possess technical expertise, but other State agencies, such as the Energy Extension Service, can implement energy conservation programs through contracts or grants from the Department. If federal funds are cut or eventually eliminated, the Department's coordinating and planning roles as they relate to federally funded energy program would be correspondingly reduced. But it would still be responsible for administering State moneys for energy programs. Also under this option, the Energy Advisory Council could be retained as an advisory body on State energy plans and priorities. The Council should report to the Governor, who can then ensure that the programs with the highest priorities or the greatest benefits are being operated. If the Legislature decides not to re-establish the Council, the responsibility for establishing energy priorities in Kansas should be placed with the Governor.

### Audit Recommendations and Agency Response

The draft audit report was sent to the Energy Office for review and comment. This procedure is followed in the preparation of all audit reports, giving the audited agencies an opportunity to point out any errors of fact, to provide additional relevant information, and to respond to the recommendations. The Energy Office's response can be found in Appendix B. The following is a list of the recommendations and a summary of the Office's responses to them.

#### **Evaluating Energy Conservation Programs**

The following actions should be taken to improve the operation of energy conservation and energy-emergency planning programs:

1. To ensure the best use of funds for conservation programs, the agency charged with coordinating the State's energy programs should evaluate the actual energy savings that result from each program. This information should be

used to determine which programs to continue and which to terminate.

**Agency response.** The Energy Office responded that it has already developed the position of Administrative Coordinator to improve the Office's evaluation capability. Legislative Post Audit points out, however, that delays in beginning meaningful evaluations (this position was not filled until the fall of 1981 and the position is now vacant) have resulted in a lack of clear information about which of the Office's 26 conservation programs are worth continuing, and which are not.

The Energy Office also said that many programs cannot be evaluated or are not designed to produce immediate energy savings. Citing examples, the Office said that energy savings cannot be determined for the energy curriculum development and for the questionnaire energy audits (noting that anonymity is promised to questionnaire audit participants).

Legislative Post Audit points out that, even though benefits cannot be quantified for certain programs, evaluations can still be made. The curriculum development program can be evaluated to determine how many teachers use the curriculum. The questionnaire energy audits within the residential conservation program can be evaluated by selecting a sample of recipients who would not be promised anonymity. Those recipients could later be contacted to determine what energy conservation measures they had implemented as a result of the audit. The dollar benefits could then be quantified and generalized to all questionnaire audit participants.

#### **Ensuring an Adequate Energy Information System**

2. To ensure the State has the information it needs to determine the amount of fuel available and to effectively deal with energy emergencies, the Legislature should require the agency responsible for administering the State's energy programs to provide it with information on the needs, options, and feasibility of implementing a comprehensive State Energy Information System. This may entail appropriating additional funds.
3. To ensure the State is adequately prepared for energy emergencies, the agency charged with energy-emergency planning should upgrade the State's plan to include:
  - a. A definition of an emergency.
  - b. Current information on energy supplies (which would be based on a comprehensive State Energy Information System).
  - c. Specific conservation measures and the means for implementing those measures, as authorized and required by statutes.

- d. A provision for enlisting the support of utilities and State agencies to use their influence to reduce energy consumption.
- 4. To ensure compliance with State law, the agency or agencies charged with administering the State's energy information and research programs should:
  - a. Complete and submit to the Governor and Legislature a biennial report on the State's energy programs.

**Agency response.** The Energy Office said it agrees that improvement in the collection, storage, and retrieval of comprehensive and accurate energy data are important. It also agreed that preparation of a comprehensive emergency plan is essential and that the Biennial Report should be completed. It noted that each of these deficiencies "begins and ends with the same circular logic" and that those deficiencies cannot be resolved without the proper data. It further stated that, had the Energy Office been given the fiscal resources to develop the Energy Information System and if those resources had been allowed "to mature in a political environment conducive to attracting and keeping qualified, competent, analytical personnel, the criticisms would not have been possible." Legislative Post Audit agrees that staff and fiscal limitations contributed to problems in developing the Energy Information System. However, these limitations do not explain why an energy emergency plan has not been developed that at least identifies certain essential elements, such as conservation measures to be used in an emergency. Also, the Energy Office could and should have issued energy emergency curtailment regulations to enforce conservation measures as required by law.

#### **Developing Written Research Priorities**

- b. Develop written research priorities that clarify conservation research goals.

**Agency response.** The Energy Office disagreed with this recommendation, stating that a "rigid, written set of priorities" would limit the Legislature's and the agency's flexibility in reacting to energy problems and opportunities. In addition, the Office said that written priorities can cause friction among special interest groups and that an informal set (unwritten) of research priorities would be in the best interest of the State. Legislative Post Audit points out that it does not suggest that a rigid set of research priorities be developed. Rather, research priorities, like the research funds, should be focused on ways to best serve the State's needs. Also, Legislative Post Audit does not agree that written priorities will cause friction among groups. Rather, a written set of priorities would help

avoid confusion and controversy that could be sparked by informal and unwritten priorities.

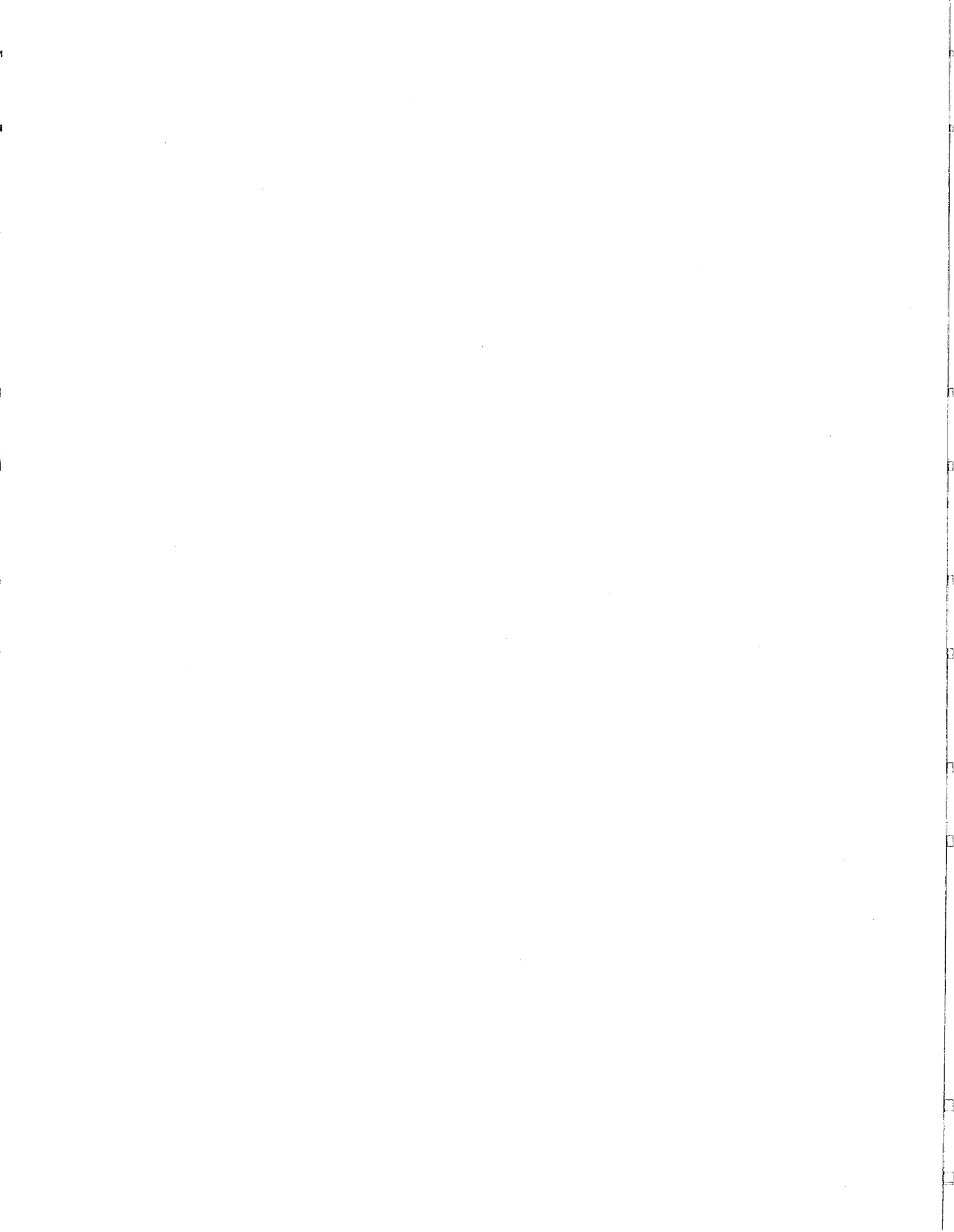
**Abolishing the Energy Office and Transferring Its Fiscal and Planning Functions to the Department of Administration**

1. The Legislature should not act to re-establish the Kansas Energy Office and its responsibilities over the State's energy programs.
2. The Legislature should transfer the responsibility of administering, planning, and budgeting the State's energy programs to the Department of Administration at reduced staffing levels. In doing so, the Legislature should ensure that the Department implements the other recommendations made in this report for improving the programs' effectiveness. These include upgrading the State's energy emergency plan, evaluating each conservation program to determine actual energy savings resulting from that program, discontinuing funding for programs that are not cost-beneficial, implementing a comprehensive State Energy Information System, and establishing research priorities.
3. If the Legislature acts to re-establish the Energy Advisory Council, it should direct the Council to report to the Governor regarding programs with the highest priorities or the greatest cost benefits. The Governor can then direct the Department of Administration to follow the priorities established. If the Legislature acts to abolish the Energy Advisory Council, the responsibility for establishing energy conservation and emergency planning priorities in Kansas should be placed with the Governor.

**Agency response.** The Energy Office stated that other organizational arrangements are worthy of consideration. It noted that the Senate Energy and Natural Resources Committee, looking at the same issues, recommended an independent agency for fiscal year 1983 and a further study of organizational alternatives. Legislative Post Audit points out that analysis of organizational options were measured against five criteria (discussed on page 44 of the report) that the auditors determined were essential for successful energy programs. In terms of those criteria, the option to move the State's energy program to the Department of Administration was clearly most preferable. Nonetheless, the final decision on these options and on any other options being considered in the legislative process rests with the Legislature.

## Matters Remaining for Legislative Consideration

The Energy Office generally disagreed with most of the report's recommendations. However the Office did agree in principle with the recommendations on implementing a comprehensive State Energy Information System, upgrading the State's energy emergency plan, and completing its Biennial Report. However, it did not specify the actions it will take to implement these recommendations. The Office indicated disagreement with the report's key recommendations to abolish the Office and transfer its fiscal and planning functions to the Department of Administration. Noting that the Senate Energy and Natural Resources Committee has recommended that the life of the Office be extended for another year, the Office said that other organizational arrangements are worthy of consideration. Legislative Post Audit acknowledges that other alternatives are being considered by the Legislature, including the Senate Committee's resolution and the Governor's Reorganization Order to abolish the Energy Office and replace it with a new Division of Energy Analysis within the Department of Administration. Furthermore, the audit report considers two other alternatives and, although the recommended option is preferred, the report's other two options may also merit legislative consideration. Regardless of whether these programs continue under the Energy Office's direction, certain actions need to be taken at once to ensure that the State's energy programs serve and protect the public. These changes include upgrading the State's energy emergency plan, evaluating each conservation program to determine actual energy savings resulting from that program, discontinuing funding for programs that are not cost-beneficial, implementing a comprehensive Energy Information System, and establishing research priorities. Given the impending federal budget cuts, it is even more vital that programs be carefully selected. Even under the Energy Office's direction, funding cuts would result in fewer programs being run at reduced staff levels.



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## CHAPTER I

### INTRODUCTION

The Kansas Sunset Law abolishes the Kansas Energy Office and the Energy Advisory Council on July 1, 1982 unless they are continued by an act of the Legislature. As part of the legislative review under the sunset process, the Legislative Post Audit Committee directed that a performance audit be conducted of the Kansas Energy Office. This report presents the results of that performance audit.

#### Audit Methods

The Sunset Law authorizes the Legislative Post Audit Committee to determine the factors to be considered in each audit. The factors considered in this audit are somewhat different from those included in most other sunset audits released previously by the Legislative Division of Post Audit. The Energy Office, which is primarily an administrative agency, was evaluated under the following sunset factors:

- Determining the Legislature's intent in creating the program and the functions that should be performed in accordance with that intent.
- Determining whether the functions performed as a part of that program are in accordance with legislative intent.
- Determining whether there is a continuing need for that program or the functions performed in accordance with it.
- Determining whether the program and its functions have been performed efficiently and effectively without duplication or overlap.
- Determining whether the benefits of the program outweigh its costs.
- Determining the level at which the program will be able to operate given federal budget cuts.
- Determining whether the program or its functions could be operated more effectively with a different organizational structure.

In conducting the audit of the Energy Office, the auditors reviewed the statutes and administrative regulations under which it operates. Also, they analyzed the Energy Office's financial and program reports to

determine the costs and benefits of its programs, and interviewed officials in other State agencies to determine what energy-related work those agencies were doing and whether it was coordinated with the Energy Office's program. Finally, the auditors interviewed energy officials in surrounding states to determine how those states' energy programs are operated.

Chapter II summarizes the Legislature's intent in creating the program and establishing the Energy Office, the legislative history of that Office, its current operations, and financing. Chapter III examines whether there is a continued need for the program, whether the program is being operated efficiently and effectively, and whether the program's benefits outweigh its costs. Chapter IV examines whether the program could be operated more efficiently and effectively as part of another agency rather than as a separate organization.

## CHAPTER II

### DEVELOPMENT AND ORGANIZATION OF THE KANSAS ENERGY PROGRAM

The Kansas Energy Office has undergone considerable change during the last four years. In fiscal year 1979, its first year as an independent agency, the Energy Office spent \$474,116. By fiscal year 1981, its expenditures had increased by 199 percent to \$1,416,176. During fiscal year 1981, however, the federal government signaled its intention to substantially cut aid for state energy programs. This aid was the Office's major source of funding (74 percent). Partly as a result, the Legislature included the Energy Office in the Kansas Sunset Law and scheduled it for abolition on July 1, 1982, so that the State's energy programs could be studied and decisions made before funding cuts were implemented. The Governor proposed in Executive Reorganization Order 19, dated January 21, 1982, that the Energy Office be abolished and replaced with a new Division of Energy Analysis within the Department of Administration. The proposed division would be substantially smaller than its predecessor with its staff reduced from the 23 positions authorized for fiscal year 1982 to 10 positions for fiscal year 1983. The Reorganization Order will take effect on July 1, 1982, unless it is rejected by at least one house of the Legislature within 60 days after its introduction.

#### History and Legislative Intent

The Energy Office and the Energy Advisory Council were established in 1975 within the Governor's Office. They were created in response to the nationwide energy crisis of 1973 and 1974, which pointed out the country's diminished energy supplies, increasing dependence on foreign imports, and resultant increases in energy costs.

The Energy Office was established as the successor to the State Fuel Allocation Office, which had been established in November 1973 to administer mandatory federal fuel allocation programs. The Energy Office had several purposes:

- to provide a mechanism for monitoring and forecasting the energy resource supply and demand situation in Kansas and for allocating energy resources and curtailing consumption during designated periods of severe energy shortage.

--to develop and promote educational programs for energy conservation.

--to coordinate programs and funding between the federal government and all other State agencies, local governments, private businesses, and the general public.

In 1978, the Legislature made the Energy Office an independent agency and expanded its authority. The new authority included a designation as the sole State agency for receiving and distributing State and federal funds for energy research projects, except for funds designated by the federal government to be received directly by the State's educational institutions. The Office was also given specific authority to establish energy research and development priorities for the State, to develop a State energy conservation plan, and to develop and implement programs in energy conservation and research. The Legislature directed the agency to establish an energy information center and to assist the State Board of Education in developing a Statewide energy conservation curriculum. Finally, the Office was directed to review, study, and monitor the efficiency of energy use by State agencies.

At the same time, the Legislature reorganized the Energy Advisory Council by designating its membership. Previously, the members had been chosen by the Governor without legislative direction. Members of the Council were designated to include a consumer, a public utility representative, an energy producer, and an environmentalist, all appointed by the Governor. Also included on the Council were the Chairman of the Corporation Commission, the Executive Director of the Kansas Geological Survey, two members appointed by the President of the Senate, and two members appointed by the Speaker of the House.

In 1979, the Legislature required the Energy Office to adopt rules and regulations governing lighting standards for public buildings. The 1979 Legislature also eliminated the Office's authority to allocate and curtail consumption of natural gas, coal, and electrical energy during an energy emergency. The authority was transferred to the Corporation Commission because the Commission had the standing jurisdiction over most of the utilities providing natural gas and electricity. Authority to allocate and curtail the consumption of other fuels remained with the Energy Office.

In 1981, the Legislature made the Energy Office subject to the Sunset Law. As a result, the Office was to be abolished on July 1, 1982, unless continued by an act of the Legislature. In January 1982, the Governor issued Executive Reorganization Order 19, as stated earlier. This order also retains the Energy Advisory Council and attaches it to the Department of Administration.

## **Federal Laws Affecting Energy Office Operations**

Although the Energy Office's statutory direction is embodied in State law, most of its responsibilities have been established in response to federal legislation and most of its funding (74 percent) is federal. The following federal laws have affected the Energy Office's operations.

**The Emergency Petroleum Allocation Act of 1973.** This Act granted the President authority to deal with shortages of certain petroleum products. With this authority, a program was established to set aside on a monthly basis a percentage of petroleum available for emergency use. It was with this Act that Kansas established the State Fuel Allocation Office as part of the Department of Economic Development to administer this law at the State level. This Act expired in 1981.

**The Energy Policy and Conservation Act of 1975.** This Act provides federal aid for developing and implementing state energy conservation plans. Participating states agree to promulgate in law and regulation energy conservation measures including mandatory lighting efficiency standards, carpool and vanpool programs, thermal efficiency and insulation standards for new buildings, mandatory energy-efficient State procurement practices, and a law allowing right turns at red lights. The law also authorizes funding for a variety of optional consumption programs. The law's goal was to try to reduce energy consumption five percent by the end of 1980.

**The Energy Conservation and Production Act of 1976.** This Act provides federal aid for developing plans for energy audits, public education in energy, and intergovernmental coordination. To qualify for federal funds authorized by the Energy Policy and Conservation Act of 1975 and the Energy Conservation and Production Act of 1976, the Energy Office prepared the State Conservation Plan. This Plan includes a series of plans to implement five programs required by the 1975 Act (illumination standards, carpools, procurement practices, thermal standards, and right-turn-on-red), and 10 optional conservation programs (transportation and commercial conservation, for example). The State Plan also includes plans to implement three other conservation programs authorized by the 1976 Act. The three are public education (including the energy curriculum), home energy audits, and intergovernmental coordination. For each program, the State Plan describes the program's intent and a schedule for implementation. These and other programs are discussed in Chapter III.

**The Energy Extension Service Act of 1977.** This Act authorized the establishment of an outreach program to provide small energy users with

practical information on energy conservation techniques and renewable energy systems.

**The National Energy Conservation Policy Act of 1978.** This Act provides energy conservation programs for schools, hospitals, public care institutions, and local governments. The programs include energy audits, technical assistance, and grants for energy saving capital improvements. All of these programs are administered by the Energy Office. The Act also created the Residential Conservation Services Program which requires certain utilities to provide energy conservation services to their customers. This program is primarily administered by the Corporation Commission.

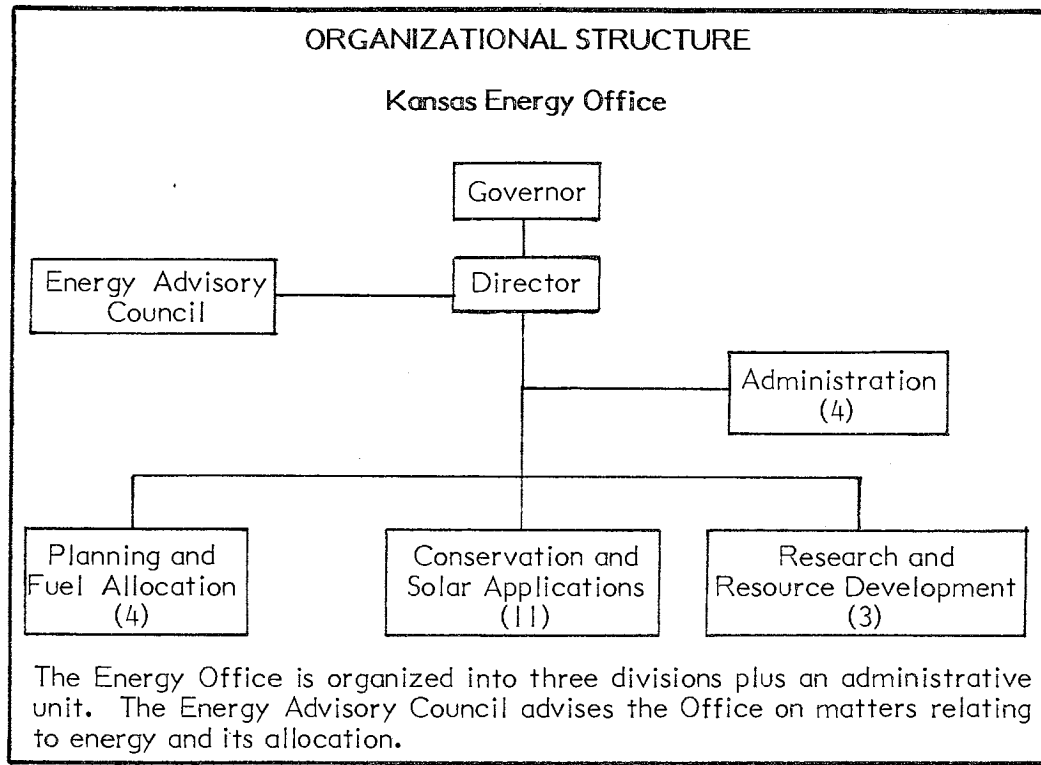
**The Emergency Energy Conservation Act of 1979.** This Act authorized the President to develop a stand-by gasoline rationing plan. In addition, it allowed states to develop energy emergency plans that would meet monthly conservation targets set by the federal government in an emergency. Like the Energy Petroleum Allocation Act, this Act expired in 1981.

Funding for these federal programs has been substantially reduced. The Congress cut federal aid available through these energy programs nationally from the \$336 million authorized in 1981 to \$225.6 million in 1982. Since 74 percent of the Energy Office's funds are federal, its ability to fund State-level energy programs has also been substantially reduced.

### **Agency Operations**

The Kansas Energy Office is an independent State agency with a director appointed by the Governor with the advice and consent of the Senate. The Director is assisted by the Energy Advisory Council and a staff of 22. The Energy Advisory Council comprises 10 members including a consumer, a public utility representative, an energy producer representative, an environmentalist, the Chairman of the Corporation Commission, the Executive Director of the Kansas Geological Survey, two members appointed by the President of the Senate, and two members appointed by the Speaker of the House. The Council advises the Energy Office on all matters relating to energy and its allocation.

The Office is organized into three divisions--Planning and Fuel Allocation (four employees), Conservation and Solar Applications (11 employees), and Research and Resource Development (three employees). Each division is headed by an Assistant Director. Additionally, there is an administrative unit with four employees. Seventeen of the 23 positions (74 percent) were filled at the time of the audit. The Office's organizational structure is shown on the next page.



### **Planning and Fuel Allocation Division**

The Planning and Fuel Allocation Division administers K.S.A. 74-6806 which authorizes the Governor, when the situation warrants, to proclaim an energy emergency in the State. It is this Division's responsibility to maintain data on the production and consumption of fuels in Kansas and make monthly forecasts of fuel use to allow for an orderly allocation of fuels if the need arises. The Division is developing the Kansas Energy Information System, which will be used to prepare long-range forecasts of fuel supplies in Kansas. The Division is also responsible for preparing a legislatively mandated biennial report on energy trends and forecasts in Kansas.

### **Conservation and Solar Applications Division**

The Conservation and Solar Applications Division develops and implements programs to conserve energy and to market proven renewable energy resource technologies. As shown in the figure on page 11, this Division receives more funding and administers more programs than the other two Divisions. During 1981, it conducted or funded a number of energy conservation projects, including product evaluation for energy-saving characteristics in purchase decisions by governments. Another major

project examined thermal and lighting standards for new and renovated buildings. The Division also provided home energy conservation workshops and energy audits to Kansans directly and through the Energy Extension Service operated by Kansas State University. Other programs included boiler efficiency workshops for business and industry, ridesharing programs in Wichita and Kansas City, driver energy conservation awareness training for State employees, a resource recycling program, and energy management and conservation programs for eight municipalities. Finally, the Division also operates a program that provides energy audits and grants for energy saving capital improvements at State agencies and other public and private non-profit buildings including schools, hospitals, local government units, and public care facilities.

The Division's program to commercialize renewable energy resources includes workshops on solar technology and passive solar design, and technical assistance to communities for assessing their solar potential. The assistance covers zoning ordinances, building siting and orientation, and the types of heating and lighting systems available.

#### **Research and Resource Development Division**

This Division's chief responsibilities are to establish energy research priorities for Kansas, to assist other State and local agencies in applying for federal research grants, to conduct and contract for energy research, and to act as a liaison between the federal government and all public and private parties with respect to energy research in the State. The Division also reports annually on the results of all such research done in the State.

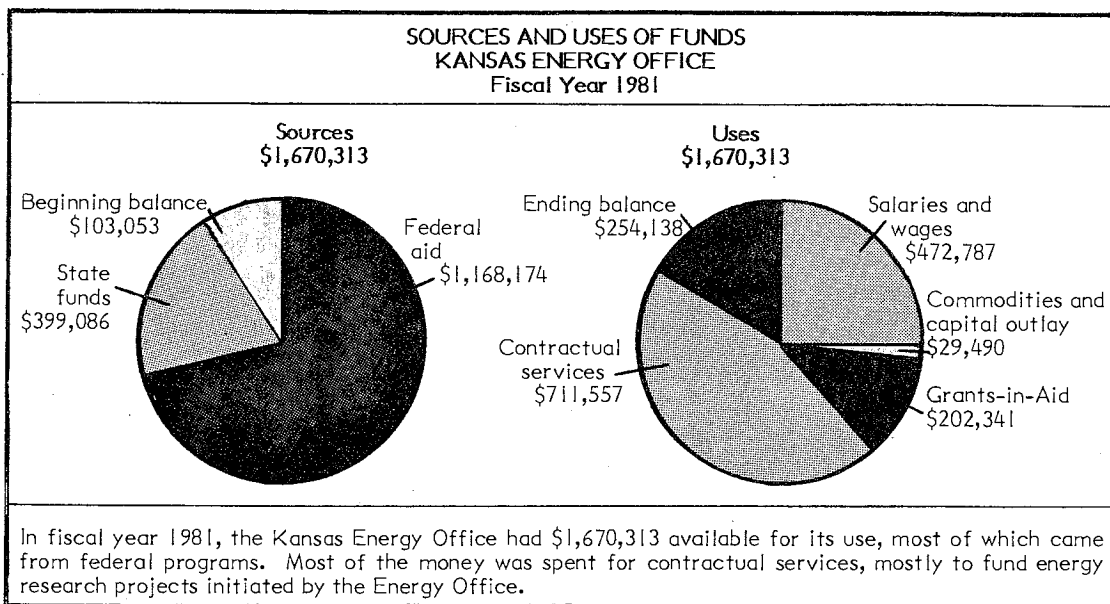
Technical assistance by the Division includes one-on-one consultations, participation in meetings, speaking engagements, and publication of technical monographs of projects undertaken by other agencies. Topics of reports recently published include spoil bank reclamation, alcohol by-product (stillage) feeding trials, utilizing waste heat to dry grain, and an oil shale survey. Further, the Division has commissioned and funded a number of projects, including studies of possible sources of hydroelectric power in Kansas, a butanol-acetone recovery system, cogeneration assessment methodology, and cellulose conversion to simple sugars.

#### **Sources and Uses of Funds**

In fiscal year 1981, the Energy Office had a total of \$1,670,313 in available funds, including a beginning balance of \$103,053, \$1,168,174 in federal aid, and \$399,086 in State funds. Most of the State funds (\$347,586) came from the General Fund while the remainder (\$51,500) came from special State funds such as fuel alcohol funds. During the same year, expenditures totaled \$1,416,175. Of that amount, \$472,786 was for salaries and wages, \$711,556 was for contractual services (mostly to fund energy conservation projects), \$202,341 was for grants-in-aid to other

agencies, and the remainder was for commodities and capital outlay. The ending balance was \$254,138.

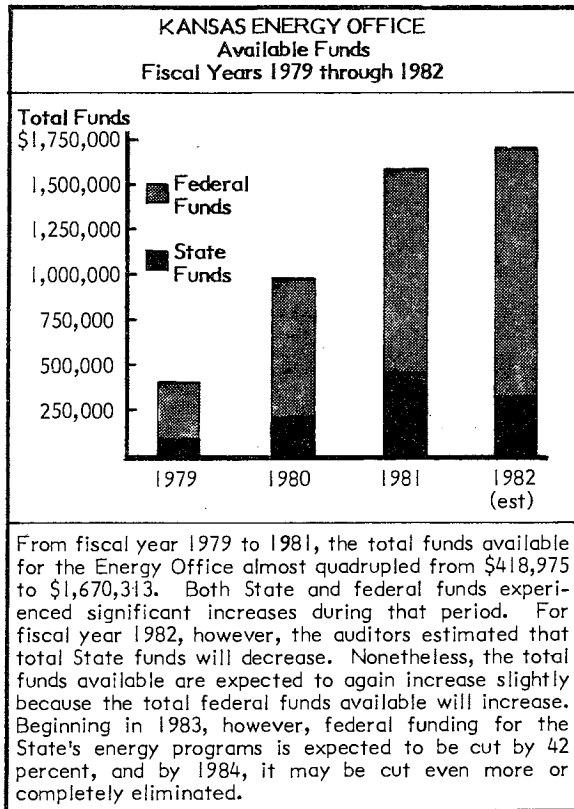
The low ending balance is deceiving. It is caused by the way the federal government transfers revenues to the State for energy programs. The revenues are not transferred until they are committed to and spent on specific projects. At the end of fiscal year 1981, the Office had \$1,190,041 in federal funds authorized but not spent during fiscal years 1979 and 1980 that were not included in the ending balance and were available to be spent during fiscal year 1982.



### Impact of Federal Funding on Energy Office Operations

The Energy Office has experienced significant increases in federal funding, but those funds will be cut substantially beginning in fiscal year 1983. Most of the Office's available funds have come from the federal government. As a result, the Office will either have to reduce its operations accordingly, or will need more State money to continue operating programs at the same level.

**Earlier funding trends.** From fiscal year 1979--when the Energy Office began as an independent agency--to fiscal year 1981, the total funds available almost quadrupled, from \$418,975 to \$1,670,313. This increase mostly reflects a growth in federal funds coinciding with a growth in conservation program expenditures (nearly all the federal funds are intend-



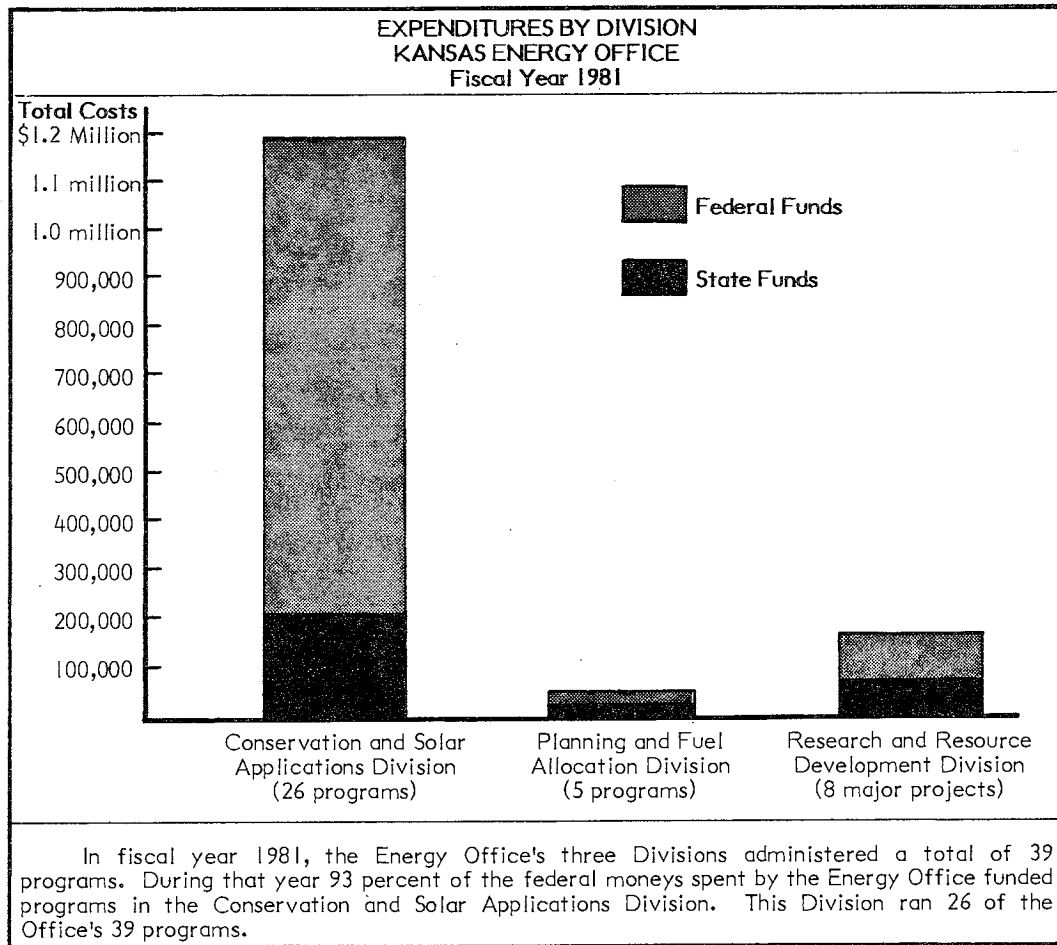
ed for that purpose). However, State funding for energy programs also increased significantly during that period. While federal funds rose from \$303,507 in 1979 to \$1,227,211 in 1981, State funds experienced similar increases, from \$115,468 in 1979 to \$443,102.

**Federal funding cuts.** Despite the rapid increases in federal funding over the past several years, federal funds will be substantially reduced beginning in fiscal year 1983. In Kansas that amount will be cut 42 percent from \$902,902 at the fiscal year 1982 level to \$530,520 for fiscal year 1983. The auditors determined, however, that for fiscal year 1983 Kansas will be able to maintain its energy programs at the same level as its fiscal year 1982 level because of large carry-over balances (federal funds that were

not spent during previous fiscal years). These carry-over balances (approximately \$709,502) will be available for expenditures during fiscal year 1983 in addition to the new federal moneys (\$530,520). By fiscal year 1984, however, the federal carry-over balances will decrease from the \$709,502 fiscal year 1983 level to \$66,225. (This assumes expenditures in fiscal year 1983 will be at the level proposed by the Governor.) The State will then either have to provide additional funds if it chooses to run programs at the same level as the previous year, or programs will have to be cut even further. If new federal funds remain the same in fiscal year 1984, about \$600,000 of additional State funds would be required that year to maintain the spending level set by the Governor in fiscal year 1983. However, it is anticipated that federal funding for fiscal year 1984 may be further reduced or even eliminated.

Federal funding cuts will have more impact on some Energy Office programs than on others. As the figure on the next page shows, programs in the Conservation and Solar Applications Division receive almost all of their funds from the federal government. The other two divisions' programs receive a large portion of their money from the State but still receive some federal funds. Therefore, the funding cuts will affect

programs in all three divisions, but will have the greatest impact on the Conservation and Solar Applications Division.



### Other State Agencies With Energy Programs

Some of the federal laws and funds are administered in part by other State agencies. The Corporation Commission, for example, was designated by the Governor to administer the Residential Conservation Services Program. The Corporation Commission has also developed thermal standards and plans to allocate electricity, coal, and natural gas, and to curtail their use during energy emergencies. The Commission administers these responsibilities through its Special Projects and Utilities Divisions.

Other State agencies involved in energy research and conservation programs or other energy-related programs either because of State or federal mandates are as follows: the Kansas Geological Survey, the Department of Transportation, the Department of Social and Rehabilita-

tion Services, the Department of Economic Development, the Department of Administration, the Adjutant General's Office, the Department of Revenue, and the Department of Education.

In addition, the Regents' institutions have done research into energy conservation at their own institutions, and they conduct research in energy resource development and use. The Kansas State University Energy Extension Service is under contract to the Energy Office to provide conservation services, such as energy audits to residences, local governments, and commercial and industrial enterprises. It has sub-contracted some of this work to the University of Kansas and Wichita State University. These and the other Regents' institutions are involved in research in the areas of energy conservation at their own institutions, and energy resource development and use.

## CHAPTER III

### **SUNSET ANALYSIS OF THE KANSAS ENERGY OFFICE: THE NEED FOR AND THE EFFECTIVENESS OF STATE ENERGY PROGRAMS**

The Kansas Sunset Law as it relates to the Kansas Energy Office has five basic purposes--to evaluate the need for the Energy Office's energy programs, to determine whether or not programs are needed or useful in protecting and serving the public, to determine how effectively the State's energy programs meet the goal of protecting and serving the public, to determine if there are alternative methods of administering energy programs, and finally to determine if reorganization of the Kansas Energy Office can improve the effectiveness of the State's energy programs. Legislative Post Audit designed its review to address these purposes. Its findings on the need for energy programs and their effectiveness are reported in this chapter. Chapter IV presents alternatives for administering the State's energy programs.

#### **Is There a Need for State Energy Programs?**

In the early 1970s, lawmakers and the public perceived a need for energy conservation after the United States had become vulnerable to disruptions in oil supplies from foreign sources. In 1973, the United States imported 35 percent of the oil it used, and consumed 33 percent of the world's oil output. The nation's dependence on foreign oil resulted in well-publicized disruptions in the economy during the 1973 oil embargo.

These problems prompted the creation of national emergency fuel allocation programs and energy conservation programs. Out of these national programs came state energy programs, which were established to administer mandatory fuel allocation programs, develop and promote educational programs for energy conservation, establish energy research and development priorities for states, and develop state energy-emergency conservation plans. By December 1973, 32 governors had issued orders establishing state energy conservation programs. From January through mid-July of 1975, more than 200 bills dealing with energy issues were passed by state legislatures.

In Kansas, the public and legislative perceptions of the importance of energy conservation are reflected in the increases in funds to the Energy Office since 1979, its first year as an independent agency. Since then, both State and federal funds almost quadrupled. By fiscal year 1981, the Energy Office was operating 39 conservation, planning, and research programs.

The auditors reviewed these programs to determine whether they were authorized by law and found that all were authorized by law. Appendix A lists these programs, describes each, and shows the amount spent on each program from federal and State funds.

Although funding and programs have increased rapidly over the last several years, the federal government is now signaling its intention to cut back on those programs. It has done this by terminating federal acts governing fuel allocation and planning for energy emergencies. It has also cut back aid to conservation programs. Aid to Kansas will drop by 42 percent in 1983.

Termination of the federal fuel allocation and energy emergency planning legislation does not necessarily mean that energy planning and conservation programs are no longer needed. United States dependence on foreign oil increased from 35 percent of the total consumed in 1973 to 50 percent in 1979. There are also indications that fuel consumption in the United States is again rising (gasoline consumption in Kansas increased by two percent from 1980 to 1981), and the Iranian crisis in 1979 demonstrated again the fragile nature of the United States' foreign oil supply. Further, rapidly increasing utility costs will spark citizen interest in making energy conserving improvements.

Given these factors, one question remains: Should the State fill the gap created by reductions in the federal programs? The answer would appear to be "yes" if the programs can be effective in reducing energy consumption and in protecting Kansans during energy shortages. The rise in dependence on foreign oil increases the possibility that energy shortages could occur in the future. Because states would no longer have a federal plan to fall back on to handle such an emergency, a State plan would appear even more necessary. Moreover, despite federal spending cuts for energy conservation programs, a perception still exists that they are worthwhile because conservation is one way dependence on foreign oil can be reduced quickly.

There is some evidence that government programs to reduce energy use through conservation can be effective. A report by the U.S. General Accounting Office stated that conservation programs have significant potential for conserving energy, but it stressed the importance of evaluating those programs. The report also stated, however, that the U.S. Department of Energy had performed only limited evaluations of its conservation programs, and it questioned the procedures used in the few evaluations that were done. Nonetheless, the General Accounting Office found that stopping all federally funded conservation programs would "preclude the timely realization of selected energy conservation opportunities." It also noted that the federal government has a role to play in assuring that residential customers have the knowledge they need to implement conservation measures. More specifically, the Office cited a

Department of Energy conclusion that 50 percent of the energy consumed in residential sectors could be saved through cost-effective programs. For example, the Office found that 75 percent of the people who received conservation suggestions from an energy auditor visiting their residence could be expected to purchase all needed conservation measures that would pay for themselves within six years. Also, an evaluation of energy audits of 3,300 schools found that savings of 20 percent were possible as a result of audits that focused on maintenance and operations procedures. Program costs of about \$1.6 million yielded estimated savings of \$6.9 million in these schools.

In this audit, Legislative Post Audit also found that the Kansas Energy Office has to date completed few evaluations of its own programs. However, the few programs that have been evaluated show encouraging results. For example, 70 percent of those who attended a residential conservation workshop in Wichita said in a survey response that they had used some of the workshop's suggestions. Also, a vanpooling program in Kansas City partially funded by the Energy Office was estimated to have saved \$290,000 worth of gasoline in calendar year 1981. According to Energy Office officials, the Office's contributions to this program were \$30,000 in fiscal year 1981 and \$33,000 in fiscal year 1982.

In sum, the auditors found that the Energy Office's conservation programs show potential for promoting energy conservation. Furthermore, the problems that led to these programs--increasing dependence on foreign oil and increasing fuel consumption--still exist. However, energy conservation programs of the type administered by the Kansas Energy Office should be retained only if they effectively reduce energy consumption. It is important that these programs are reviewed to determine how useful they are in conserving energy. It is also important that they be continuously monitored to determine the degree to which they are still needed.

### **Energy Advisory Council**

The Energy Advisory Council, which is composed of consumer, utility, State agency, and legislative representatives, has met an average of twice a year since the Energy Office was created as an independent agency in 1978. In the past three years, the Council has met on energy-emergency planning, energy research activities, energy efficiency standards for new and existing buildings, and other related topics.

The Council's current membership structure and recent meeting topics appear to fulfill the function intended by the Legislature--to advise the Energy Office on all matters relating to energy and its allocation. Such an advisory body, therefore, would also fulfill a need as long as energy-emergency planning and conservation programs continue to exist in the State.

## **Do State Energy Programs Effectively Conserve Energy and Prepare for Emergencies?**

The major part of this sunset analysis of the Kansas Energy Office involved analyzing selected programs in each of the Office's three Divisions--Planning and Fuel Allocation, Conservation and Solar Applications, and Research and Resource Development--to determine whether they are effective in serving the public. Because of the large number of programs administered by the Energy Office (39 in fiscal year 1981), the auditors selected a sample of programs administered by each Division, focusing on those programs for which the largest expenditures were made in fiscal year 1981 and which were specifically authorized by statute. Altogether, 60 percent of the Office's fiscal year 1981 expenditures were made for the 16 programs selected by the auditors for review.

Programs in the Planning and Fuel Allocation Division--which are geared toward gathering information concerning available energy resources and preparing for energy emergencies--were analyzed to determine whether they would protect the public safety in the event of such emergencies. Programs in the Conservation and Solar Applications Division were reviewed for their effectiveness in promoting energy conservation. Finally, the Research and Resource Development Division operations were reviewed to determine whether research priorities were established and whether research programs provided useful information.

Overall, the auditors found certain problems or inadequacies with programs in each Division:

- The Planning and Fuel Allocation Division's energy information and emergency preparedness programs were found inadequate to establish a priority system for allocating available energy resources and curtailing consumption of those resources in the event of an emergency.
- The Conservation and Solar Applications Division programs were difficult to evaluate because little follow-up work had been done to estimate actual energy savings resulting from the programs.
- The Research and Resource Development Division's research has apparently been useful, but the Division has not developed formal priorities for distributing research moneys, even though such priorities are required by law. This has apparently led to at least one serious dispute over how the moneys should be spent.

These and other problems found with the Office's administration of the State's energy programs are discussed in detail in the following sections.

## **Programs Administered by the Planning and Fuel Allocation Division**

The auditors examined three of the five programs administered by the Planning and Allocation Division--the Kansas Energy Information System, the Energy-Emergency Plan, and the Biennial Report. These programs represented \$66,186 of the \$75,766 (87 percent) spent by the Division during fiscal year 1981. Of that amount, about \$56,000 was spent for the Kansas Energy Information System and the Biennial Report, and about \$10,000 was spent for the energy-emergency plan.

During their review, the auditors found that neither the emergency plan nor the Energy Information System were adequate to meet the statutory requirements. In addition, the latest Biennial Report was not completed by the deadline set by statute. All of these problems were, in part, related to the lack of easy access to complete energy information.

**Improving the Kansas Energy Information System.** The Energy Office is required by statute (K.S.A. 74-6804f) to serve as the central repository within State government for the collection, maintenance, and analysis of data and information regarding all forms of energy supplies, demand, and consumption. To fulfill this requirement, the Office has developed the Kansas Energy Information System, which consists of a set of files containing information gathered by the U.S. Department of Energy, the Kansas Geological Survey, the Kansas Corporation Commission, and the Energy Office itself.

The Kansas Energy Information System has four main objectives:

- To provide information about energy supplies and consumption trends in planning for emergencies. This objective recognizes that the State cannot effectively determine the best allocation of fuel during such an emergency without knowing how much fuel is available and how much fuel is needed to ensure that critical sectors of the economy (such as hospitals) can continue to operate.
- To provide a comprehensive picture of residential consumption patterns. This information is intended to be useful for local planning agencies in comparing consumption trends and in evaluating the need for conservation.
- To publish fuel pricing surveys to assist entities in trying to budget the cost of their fuel usage. These surveys show gas, diesel, and propane prices at 70 service stations throughout Kansas. The results are released to the press on a monthly basis.
- To provide miscellaneous information to individuals who contact the Energy Office. For example, an investment banking group that visited Kansas recently to determine investment potential in new energy technology was given information on research and resource development projects currently underway in Kansas.

Through their discussions with Energy Office officials and review of the minutes of hearings of the Special Committee on Energy and Natural Resources from the Fall of 1981, the auditors identified the following problems that have arisen in trying to develop a complete information system:

- The information system was expected to be computerized to allow quick access to information, but according to Energy Office officials funding has not been sufficient to purchase a mini-computer.
- The Energy Office has had problems in reconciling differences in figures for the same statistics from different sources.
- The Office has problems in obtaining current information.
- Several agencies (the Kansas Geological Survey, the Kansas Corporation Commission, the Department of Revenue, the Department of Health and Environment, and the Kansas Water Office) compile energy data and not all the information they compile is included in the information system.

After considering these problems, the Special Committee on Energy and Natural Resources recommended that the Legislative Coordinating Council hire a consultant to improve the information system. It has been estimated that \$100,000 would be needed for hiring a consultant to study the system. (According to the Energy Office, \$11,000-\$15,000 has been available in any one year to budget for computer time.) At the time this audit report was written, a resolution was pending in the 1982 Legislature (House Concurrent Resolution No. 5031), which would direct the Legislative Coordinating Council to contract with a consultant to advise the Legislature and affected agencies of the needs, options, and feasibility of implementing an energy information system.

**Complying with energy emergency planning statutes.** The Kansas Energy Office is required by statute (K.S.A. 74-6804d) to "prepare an energy emergency preparedness plan for adoption during any energy emergency as proclaimed by the governor." The document actually prepared under this law outlines the following steps to be taken during such an emergency:

- Energy Office staff would contact federal officials and officials in other states to determine the extent of an energy emergency.
- The Office would prepare a report for the Governor on the extent of the energy shortage in Kansas and the nature of public and press reaction to the problem.
- The Office would provide public information on the nature of the shortage and assist in determining the extent and seriousness of specific emergencies caused by the shortage.

In reviewing the Energy Emergency Plan, the auditors found that although this document--which is three pages long--meets the broad

statutory requirement for a plan, it lacks several elements that are essential to ensure public safety during an actual energy emergency. Further, the Energy Office apparently has not met requirements of another statute, which requires it to issue regulations on implementing energy curtailment during an energy emergency. The auditors found the following deficiencies in the Plan:

- The Plan has not been developed sufficiently to provide current information on energy supplies (due, in part, to the inadequate Energy Information System).
- The Plan does not identify any mechanism for ensuring that fuel reaches priority users.
- It does not identify specific measures that could be used to conserve energy during an emergency.
- It has no provision for enlisting the support of utilities and State agencies to use their influence to reduce energy consumption.
- The Plan does not attempt to specify the definition of an emergency.

In July of 1980, the Energy Office issued a draft emergency energy conservation plan for public comment. The plan included specific conservation measures such as restricting travel by State employees and requiring vehicle inspections. A public hearing on the plan was held in September of 1980 at which two members of the public testified. About 20 written comments were also received. The Energy Office dropped the plan at this point without completing it. The reasons given by the Energy Office for dropping the plan prior to its completion were the perceived lack of any specific authority in State law for enforcing conservation or allocation measures during an energy emergency, and the repeal of two federal acts which gave the Office such authority. The auditors determined however, that the Energy Office does have that authority from existing State law.

State fuel allocation responsibilities were established initially in response to the federal Emergency Petroleum Allocation Act of 1973, which allowed states to set aside petroleum products on a monthly basis to have available for emergency use. In 1975 and 1978, the Legislature independently expanded the Energy Office's authority to curtail energy use during declared emergencies and to plan for such emergencies. The 1975 law establishing the Energy Office gave the Governor authority to declare energy emergencies, and directed the Energy Office to establish rules and regulations governing priorities for energy use and curtailment of use during declared emergencies. In 1978, when the Legislature made the Energy Office an independent agency, it also directed the Office to prepare and maintain an energy-emergency preparedness plan for use during declared energy emergencies.

It was not until the federal Energy Conservation Act was passed in 1979 that the federal government provided the federal money to do what

the State had independently authorized earlier. This Act required the federal government to impose its own conservation plan on states during an emergency if a State's plan does not substantially meet conservation goals after a reasonable period of time. The Energy Office merged its State and federal responsibilities to develop the current three-page plan.

The auditors also noted that although the federal laws have expired, the State statutes still require the Energy Office to issue regulations to implement the curtailment of the use of certain fuels. The auditors found that the Energy Office has not issued regulations to implement curtailment of these fuels during an energy emergency; it only issued regulations to set priorities for energy use (K.A.R. 27-1-1). In contrast, the Kansas Corporation Commission--which has statutory responsibility to issue curtailment regulations for natural gas, coal, and electricity--issued its plan (a curtailment order) in 1977 and maintains the information necessary to implement it. The Energy Office has similar statutory responsibility for issuing curtailment regulations for other fuels. The auditors concluded that regulations to implement curtailment should be issued by the Energy Office, and that the allocation measures and the other elements that the auditors found lacking in the current emergency plan should be included in an upgraded plan.

**Preparing the Biennial Report on a timely basis.** State law (K.S.A. 74-6808) requires the Kansas Energy Office to submit to the Governor and the Legislature a biennial report beginning on December 1, 1979. The first biennial report had three volumes. The first volume described the Office's conservation and research programs. The second and third volumes detailed the information gathered for the Kansas Energy Information System concerning energy supplies and consumption.

The auditors found that the second biennial report, which by statute was required to be completed by December 1981, was not completed at the time the audit report was written (February 1982). This was due, in part, to problems with the availability of complete energy information, as noted earlier. Energy Office officials also told the auditors that insufficient staff was another cause for the delay. At the time of the audit, no definite completion date had been determined.

#### **Conclusion**

In an energy shortage, the Planning and Fuel Allocation Division's emergency plan could not adequately allocate fuel to critical sectors of the economy and curtail other uses as needed. Because the federal acts that would have superceded an inadequate State plan have expired, it is more important than ever that the State upgrade its current plan. Contributing to this and other problems noted in the Division is the inadequate Kansas Energy Information System. Without comprehen-

sive information on energy supplies and consumption trends, the State cannot effectively determine the best allocation of fuel during an emergency.

**Programs Administered by the Conservation and Solar Applications Division**

The auditors examined six types of programs, representing 12 of the 26 programs administered by the Conservation and Solar Applications Division. These six types of programs--residential conservation, government conservation, transportation, small business and commercial conservation, government procurement, and energy curriculum programs--accounted for \$768,931 of the \$1,185,685 (65 percent) spent by the Division during fiscal year 1981. The table below shows the total funds spent for the types of programs examined in the auditors' sample.

<u>Fiscal Year 1981 Programs and Expenditures</u>	<u>Federal</u>	<u>State</u>
Residential Conservation Programs	\$159,409	\$ -0-
Public Building Conservation	244,673	89,376
Small Business and Commercial Conservation	105,435	-0-
Transportation Conservation	138,827	-0-
Government Procurement	31,211	-0-
Energy Curriculum Development	38,254	-0-
Total	\$679,555(a)	\$89,376

(a) Total does not include the \$38,254 spent for Energy Curriculum Development. These funds were actually spent in fiscal year 1982, but services were provided in 1981.

The programs were reviewed to determine their effectiveness in promoting energy conservation. Overall, the auditors could not determine how effective these programs are because the Energy Office does not follow up on most of them. Further, the auditors could not evaluate these programs themselves because of the limited time allowed for audit fieldwork. However, the Office's records and the limited amount of evaluation it did conduct indicated success in some programs and failure in others.

The lack of evaluation and related problems were characteristic of all six types of programs reviewed by the auditors. The following sections summarize the six types of programs, including the total participants and money spent on each. Immediately after these discussions, the section on "Ineffectiveness of Conservation Programs" discusses the problems found by the auditors.

**Residential Conservation Programs.** These programs, which are funded through the 1975 and 1976 federal energy conservation acts and the 1977 Federal Energy Extension Service Act, promote conservation through the reduction of energy use in homes. Conservation information is provided to consumers in four ways:

**Questionnaires** (the Project Conserve Program) are designed to provide specific information to homeowners on the least expensive ways to save energy through insulation. Since 1978, nearly 500,000 homeowners have received questionnaires that solicit information about the structure of their homes and the types of insulation currently installed. Almost 44,000 participants have returned these questionnaires, which are then processed by computers. These participants, in return, have received a printout listing the most cost-effective conservation measures for their homes. The box on this page presents an example of the information shown on these printouts.

TYPICAL PROJECT CONSERVE ENERGY-SAVING SUGGESTIONS					
Conservation Measure	Annual Dollar Savings (Current Prices)	Volume Fuel Saved		Cost Estimates Based on Do-it-Yourself	Years to Recover Investment
		Winter (CUFT)	Summer (KWHR)		
Install 10 Storm Windows	\$105-\$125	50,500-62,300	430-530	\$195-\$390	3.1
Install 7-9 inches insulation in ceiling	\$45-\$55	12,800-15,800	530-660	\$240-\$260	4.9

Above is an example of a typical Project Conserve computer printout, which recommends conservation measures to a homeowner.

**Workshops** train people on home energy conservation techniques. Twenty communities received grants ranging from \$630 to \$23,203 to conduct workshops during the winter of 1980-1981. Attendance at the workshops totaled 7,469 (3,850 of those attendees represented contacts at booths at fairs), ranging from four in Oswego to 2,518 in Wichita. Energy Office employees trained representatives of the 20 communities to conduct the workshops.

The Energy Extension Service at Kansas State University, which is under contract with the Energy Office, also conducts workshops. Its workshops are presented to homeowners, county extension agents, and businesses that influence homeowners, such as homebuilders and architects.

**Energy audits** are on-site energy audits of homes conducted by the Energy Extension Service at homeowners' requests. In fiscal year 1981, it

conducted 13 such audits. The Corporation Commission is developing a program to have utilities conduct on-site energy audits separate from the Energy Office's programs.

**Information is provided by phone or mail** to homeowners requesting it. The Energy Office and the Extension Service provided information to 15,154 persons and to 142 persons, respectively, during fiscal year 1981.

Residential Conservation Programs			
<u>Total Participants in Fiscal Year 1981</u>		<u>Cost for Fiscal Year 1981</u>	
Questionnaires	44,000(a)	<u>Federal</u>	<u>State</u>
Workshops and fair exhibits	7,884	\$159,409	\$ -0-
Energy Audits	13		
Information by Phone or Mail	15,296		
(a) Total includes all questionnaires completed since 1978.			

**Public Building Conservation Programs.** These programs, which are funded through the 1978 National Energy Conservation Policy Act and the State Conservation Plan, are designed to conserve energy in public buildings, including State and local government buildings, schools, hospitals, and public care institutions. These programs promote energy conservation by providing information and funding through one or more of the following methods:

**Questionnaires** serve as preliminary energy audits that determine the energy consumption characteristics of buildings for a 12-month period and identify the major energy-using systems of the buildings. Approximately 3,000 buildings received computer analyses resulting from the questionnaires. The Energy Office has contracted with Kansas, Kansas State, and Wichita State Universities to perform the computer analyses of these preliminary audits and to have students at these universities perform the energy audits discussed below.

**Energy audits** are brief on-site surveys and analyses of a building that follow the preliminary questionnaire. The purpose of an energy audit is to determine the appropriate energy conservation operating and maintenance procedures and to indicate the need for energy conservation measures that will require capital outlays. Energy audits have been completed on 2,165 buildings since 1979.

**Technical assistance audits** are conducted once an energy audit in those buildings indicates the need for energy-conserving capital improvements. These audits are performed by a licensed architect or engineer who has attended a technical assistance workshop sponsored by the Energy Office. This technical assistance analyst then prepares a report that

determines the cost, savings, and payback period for each conservation measure. Since 1979, about 361 buildings at 86 institutions have received technical audits (78 of the 86 institutions were schools and hospitals).

**Capital expenditure grants** are provided for installing capital improvements that can pay for themselves within 15 years. Only schools and hospitals can receive National Energy Conservation Policy Act funds for capital improvements. Since 1979, 161 schools and hospitals have received such grants. (The box on this page presents an example of how this grant money is being used by the Wichita school district.)

**PUBLIC BUILDING CONSERVATION PROGRAM:  
WICHITA SCHOOL DISTRICT'S INVOLVEMENT**

In 1979, after contacting the Kansas Energy Office, the Wichita school district submitted a preliminary energy audit survey form to the Energy Office for one of its elementary school buildings. This form listed the buildings' major structural and energy characteristics. Using this information, a Wichita State University graduate student conducted an on-site energy audit late that year. The audit resulted in a series of recommendations that could be performed by school district personnel without capital purchases (for example lowering temperature on the hot water heater, reducing lighting in hallways, stairways, and auditoriums). Other recommendations for conserving energy were made that would require capital expenditures (for example, installing fluorescent fixtures in place of the existing fixtures). Total cost for the audit was about \$415. Half of this amount was paid by the district and half was federal moneys used to pay the University for conducting the audit.

In July 1980 the school district submitted an application to the Energy Office for technical assistance funding. The request was approved for funding by the Regional Energy Office in late September. Technical assistance costs totaled \$3,000, one half to be paid by the federal government and the other half to be paid by the district. By February 1981, the architect performing the audit laid out the potential payback and savings for 12 energy conservation measures. Five of these were recommended for installation.

The school district applied for federal funding for four energy conservation measures in April 1981. These measures include installing energy-efficient light fixtures, installing desk lamps at instructor's desks, removing radiant heaters from vestibules and interior corridors, and weatherstripping all exterior doors. These measures would cost \$14,330, and the estimated savings once installed is \$1,660 annually. Thus, the measures are expected to pay for themselves in 8.6 years. By September 1981, the federal Regional Energy Office agreed to fund half the project, and the district would fund the other half. At the time of the audit, the school district was in the process of preparing these measures.

**Grants for State buildings** are provided through the State Conservation Plan to study certain capital improvements, such as automatic timers and controls for heating systems. The Energy Office contributed \$63,000 to several studies that resulted in plans to modify heating systems in five State buildings in Topeka. The studies also resulted in a recommendation to build two energy-efficient steam generation plants to replace steam now provided by the local electric company.

**Grants for local governments** are provided through the State Conservation Plan to help implement energy conservation measures. This program, which did not begin until fiscal year 1982, has so far awarded grants to eight local government entities--Harvey County, the City of Ottawa, Reno County, Riley County, the Shawnee County Commission, Wabaunsee County, the City of Wichita, and the City of Lawrence. The sizes of the grants ranged from \$516 in Shawnee County to help

with its driver conservation program to \$25,000 in Wichita and Ottawa to study energy use and waste heat recovery possibilities. (The box on this page presents an example of how this grant money is being used.)

**Workshops** are conducted by the Extension Service and Wichita State University, which are under contract with the Energy Office. In fiscal year 1981, 533 local government officials attend these workshops.

GRANTS FOR LOCAL GOVERNMENTS CITY OF OTTAWA	
The City of Ottawa received a grant of \$25,000 from the Energy Office and \$10,000 in local funds for fiscal year 1982 to conduct a study of the availability of waste-heat potentially recoverable from the City's two 6,000 kilowatt engine generator units. These potential applications under study for this heat include ethanol production from agricultural products, grain and lumber drying, and dairy product processing. To date, the City has conducted surveys of industries throughout the county to determine the economic and technical feasibility of various types of applications. Thirty possible applications have been identified; two will probably be selected as being feasible for Ottawa's specific conditions. The rest, however, could be applicable to other Kansas communities.	

**Information by phone or mail** is provided to local governments through the Extension Service. In fiscal year 1981, 49 officials received information.

Public Building Conservation Programs			
<u>Total Participants in Fiscal Year 1981</u>		<u>Cost for Fiscal Year 1981</u>	
Questionnaires	3,000(a) (b)	<u>Federal</u>	<u>State</u>
Energy Audits	2,165(a) (b)		
Technical Assistance		\$244,673(c)	\$89,376(c)
Audits	361(b)		
Capital Expenditure			
Grants	161(b)		
Grants for Local Governments	8		
Grant for State Buildings	7		
Workshops	533		
Information by Phone or Mail	49		
		<u>Total</u>	
			\$334,049(a)

(a) Number is approximate due to discrepancies in totals reported.  
 (b) Total includes all buildings audited since the spring of 1979.  
 (c) These amounts do not include funds that went directly to local governments from the federal government, or amounts spent from the local governments' own funds for the questionnaires, energy audits, technical audits, and capital expenditures. Those expenditures totaled \$10.7 million from the spring of 1979 through the fall of 1981.

**Small Business and Commercial Conservation Programs.** These programs are designed to make businesses aware of what they can do to conserve energy, and the economic advantages in doing so. Business energy conservation programs are promoted in four ways:

**Slide presentations** provided by the federal government are available through the Energy Office for teaching conservation techniques to small businesses that request them in the areas of restaurants and food service, laundry, and food processing.

**Workshops** are conducted by the Energy Extension Service with funds provided by the Energy Office on improving the efficiency of boilers, conserving energy in nursing homes, and conserving energy in general. In fiscal year 1981, 556 persons attended these workshops.

**Energy audits**, which are conducted on-site by the Energy Extension Service, suggest certain operational and structural improvements for conserving energy. The auditors contacted nine business audited during 1981 and found that eight of them had implemented suggestions that required little or no capital costs. One of the eight contracted for a \$35,000 capital improvement to conserve energy.

**Information is provided by phone or mail** to businesses requesting it. In fiscal year 1981, the Energy Extension Service provided information for 46 requests.

Small Business and Commercial Conservation Programs			
<u>Total Participants in Fiscal Year 1981</u>		<u>Cost for Fiscal Year 1981</u>	
Slide Presentations	14(a)	<u>Federal</u>	<u>State</u>
Workshops	556	\$105,435	\$ -0-
Energy Audits	9		
Information by Phone or Mail	46		
(a) Total includes number of presentations; the number of individuals attending the presentations was not available.			

**Transportation Conservation Programs.** These programs are designed to save motor vehicle fuel and promote such measures as ridesharing and proper vehicle operation and maintenance. Funding or information is provided in the following ways:

**Funding or technical assistance is provided to local governments and private companies** for supporting or developing ridesharing programs. Such programs provide information on ridesharing and assist employers in setting up vanpool programs. Kansas City, Wichita, and Rice County have received grants for setting up ridesharing programs.

**Driving conservation training** is provided to State employees. The full course consists of lectures on vehicle maintenance, driving techniques, trip planning, and vehicle purchasing. It also includes on-the-road practices using a meter to gauge gasoline use.

**Technical assistance is provided to local governments** for synchronizing traffic lights to improve traffic flow and avoid wasting gas because of unnecessary stops. The Transportation Center in the Engineering School at the University of Kansas receives funds for this project through the Energy Extension Service. Local governments receiving this assistance have included Leavenworth, Olathe, Overland Park, and Lawrence.

**Technical assistance is provided to schools** for improving bus routes and thus decreasing gasoline use. The Transportation Center conducted two workshops attended by a total of 51 school officials during fiscal year 1981.

**Information on fuel-saving techniques is provided to farmers** by the Transportation Center through funds provided by the Energy Extension Service. In fiscal year 1981, about 2,000 farmers received this information from booths at agricultural fairs.

**Information by phone or mail** is provided to social service agencies and individuals seeking to develop small bus and van programs. The Transportation Center, through funds received from the Energy Extension Service, provided this information to 75 individuals or agencies during fiscal year 1981.

Transportation Conservation Programs			
Total Participants in Fiscal Year 1981		Cost for Fiscal Year 1981	
		Federal	State
Funding Provided to Local Governments	3(a)		
Driving Conservation Training	280(b)	\$138,827	-0-
Technical Assistance to Local Governments	4(a)		
Technical Assistance to School Officials	51		
Information Provided to Farmers	2,000		
Information by Phone or Mail	75		

(a) Total includes number of government entities participating.  
 (b) An additional 500 persons received driver conservation training as part of a defensive driving course offered to certain Department of Transportation employees.

**Government Procurement Program.** This program is designed to conserve energy through the purchase of energy-efficient goods and services at the State and local levels. Standards are developed based on

energy efficient procurement standards and are then applied through purchasing procedures. Purchases have not yet been made under this program, and it was discontinued during the planning stages due to a project manager's resignation.

**Energy Curriculum Development.** The Energy Office is required by State law to develop a Statewide energy curriculum for schools in cooperation with the State Board of Education. Curricula were developed using materials from the U.S. Department of Energy and from the State of Iowa. A private educational organization is training selected educators who will then conduct workshops in their own communities to implement the curricula.

### **Ineffectiveness of the Energy Office's Conservation Programs**

The auditors examined Energy Office records to determine whether the 26 programs in the Conservation and Solar Applications Division are cost-effective. They found in the State Conservation Plan and its annual updates--reports to the federal Department of Energy on progress in implementing those programs--that the Energy Office had made a commitment to evaluating those programs, and was claiming that considerable energy savings had resulted from those programs to date. The auditors also found, however, that the Energy Office had only partially fulfilled its commitment to evaluate its programs. Furthermore, claims of savings resulting from these programs appeared to be overstated. Nonetheless, the auditors' review indicated that some programs are more beneficial than others, but that all programs need to be evaluated to determine which ones produce the greatest benefits and should therefore be continued. Finally, the auditors' review indicated that the Energy Office runs too many programs to operate effectively and that it should be more selective about the programs it chooses to administer.

**Inadequate program evaluation.** The Energy Office maintains records on the cost of each of its programs and on the number of persons or entities participating in them. The auditors found that, except in limited instances, the Office has not evaluated those programs even though the State Conservation Plan indicates that most of them were to be evaluated during the latter half of fiscal year 1981 and the first half of fiscal year 1982. Only five of the 26 programs have been evaluated at least partially to determine their cost-effectiveness. As a result, the auditors were not able to determine which of the Division's programs are the most cost-effective. Such information could be vital in determining which, if any, of the programs should be continued if federal funding is eliminated.

The lack of evaluation is a problem that is not unique to Kansas. A February 11, 1981, report by the U.S. General Accounting Office concluded that the federal Department of Energy had done too little evaluation of its programs.

**Overstatements of energy savings.** The lack of evaluation in Kansas led the auditors to question the annual energy savings claimed by the Energy Office in its reports to the federal government. They examined those reports and determined that most of the annual energy savings claimed by the Energy Office are based on estimates of what savings would occur if all persons and other entities served by the program actually implemented the suggestions received. Further, they found evidence that actual savings resulting from some of these programs may have been significantly lower than the Energy Office's estimates. Therefore, the auditors concluded that the Energy Office has probably overstated its claims of energy savings resulting from its programs. (An example of such overstatements, which also indicates successes and failures within the same program, is presented in the box on this page.)

The auditors also determined that some of the energy savings cited by the Office were actually savings from programs in which the Energy Office had little or no involvement. For example, the Energy Office reports annual savings resulting from the State's purchase of compact cars and it reports annual savings from an industrial vanpool program. The Energy Office's only role in setting up the vanpool program was to help change State law to exempt such vanpools from regulation by the Corporation

#### RESIDENTIAL ENERGY CONSERVATION PROGRAMS: SUCCESSSES, FAILURES, AND OVERSTATEMENTS

Much of the Energy Office's program to conserve energy in residences has been devoted to Project Conserve (energy audits conducted through questionnaires) and a series of workshops for homeowners on how to make energy conserving improvements to their homes. The Office has also funded some on-site energy audits done by trained energy auditors, although most on-site audits for residences are expected to be done through the Corporation Commission.

The Energy Office has claimed in its annual reports to the U.S. Department of Energy that both the questionnaires and the workshops have resulted in considerable savings, although it had not thoroughly evaluated either program (the workshops were being evaluated at the time the audit report was released, however). There are indications that at least some of the estimates of savings are inaccurate. The Office estimates, for example, that 50 percent of those who participate in Project Conserve will reduce their energy consumption by a specified amount. The estimate was based on a survey conducted by the City of Topeka and Shawnee County, which showed that 51 percent of the persons surveyed who had participated in Project Conserve said they had or would implement the project's recommendations. Using this assumption and the assumption that those who implement the project's suggestions would implement 40 percent of the measures suggested, the Energy Office estimated that Project Conserve could save almost \$3 million annually. The auditors question the 51 percent figure because a U.S. Department of Energy evaluation of Project Conserve in Minnesota indicated that only four percent of those who participated reduced their energy consumption as expected. (The Energy Office apparently scheduled a review and reassessment of this program for late 1981, but it had not yet been conducted at the time of the audit).

There are other indications that some parts of the residential conservation program may be successful while others are not. For example, three of the 20 communities that participated in the Energy Saver Workshop Program surveyed the persons who attended their workshops to determine what conservation measures had been taken as a result. In response, 70 to 90 percent of those surveyed said they used information acquired at the workshops to conserve energy in their homes. However, no estimate of the energy actually saved was determined. The auditors also noted that a number of communities experienced poor attendance at their workshops, indicating that this method may not always be cost-effective in promoting energy conservation. One community received a grant of \$4,909 to put on a workshop, but only four people attended.

The question of the effectiveness of the workshops may soon be partially resolved. The Energy Office has conducted a survey of Kansans, including a sample of those who participated in a workshop and a sample of those who did not participate to determine whether the workshops were successful at encouraging conservation measures that would not otherwise have been taken.

Commission. Another example: the Energy Office reports savings from the Department of Social and Rehabilitation Services' Weatherization Program in its annual report to the U.S. Department of Energy, even though the Weatherization Program is operated independently of the Energy Office.

The auditors' findings concerning the savings cited by the Energy Office paralleled the findings of a General Accounting Office study, which examined reports of savings submitted by states for 1978. The study concluded that the claims were "overstated and unsupported."

**Varying success of programs.** The General Accounting Office has also noted that the benefits among different types of conservation programs vary considerably. It reported that research studies have shown there is little evidence that mass media campaigns will lead to actual energy conservation behavior. It also stated that on-site energy audits have resulted in more energy savings than other types of audits (such as the Project Conserve questionnaire audits).

**ENERGY CURRICULUM DEVELOPMENT--  
A PROGRAM WITH A HISTORY OF PROBLEMS**

The Energy Office is required by State law to develop a Statewide energy curriculum for schools, in cooperation with the State Department of Education. However, the Energy Office has had problems in getting this information developed and disseminated. According to Energy Office officials, the Office initially negotiated with the Department to develop the curricula, but the Department was unable to hire the energy education specialist required to run the program. So, the Energy Office contracted with the Energy Adventure Center of the Wichita School District to develop one of the curricula (for kindergarten through sixth grade), and to disseminate the curriculum to the State's school districts and help them implement it.

The contract began in fiscal year 1981. The Kansas Energy Adventure Center was expected to develop the curriculum to provide energy education resources to be sent to schools requesting information, conduct 50 workshops for teachers on energy awareness, conduct six workshops for continuing education certification for teachers, and make energy awareness presentations to civic groups. Quarterly progress reports revealed that the contractor had been quite late in finishing the curriculum, and had fallen considerably behind schedule on the number of presentations to be made. The contract was cancelled in May 1981.

In August 1981, another contract was awarded to a private educational organization. This firm completed development of a curriculum for grades seven through 12 and is training selected educators in the use of both curricula. The educators will then conduct workshops in their own communities. Auditors examined the first quarterly report from this organization and found that the number of presentations being made is meeting the schedule. Nonetheless, in fiscal year 1981--before this new contract was awarded--\$38,254 was spent on a program that was not meeting the schedule.

The evaluations that the Energy Office has completed so far and the auditors' findings, likewise, indicate that some of the State's programs are more successful than others. The auditors were able to determine that some programs have failed because of problems in getting other State agencies to implement them. One such example is the Energy Curriculum Development Program, which is described in the box on this page. Another program, the Government Procurement Program, was actually discontinued due to problems in implementation. Although discontinuing an unsuccessful program would seem warranted, implementation of this program was required to receive federal funding.

While some failures have been noted, successes have been indicated as well among the programs for which evaluations have been conducted. The box on this page summarizes all evaluations of Energy Office programs that were conducted as of February 1982, except for the evaluation of Project Conserve discussed on page 29.

## ENERGY PROGRAM BENEFITS MEASURED TO DATE BY THE ENERGY OFFICE

### Transportation Programs

**Kansas City's ridesharing program.** The Kansas Energy Office spent \$74,744 in fiscal year 1981 to support ridesharing programs in three areas of the State. One contract provided part of the funds for a vanpool program in the metropolitan Kansas City area operated by the Mid-America Regional Council. The Kansas City program is publicized through the mass media, and residents call or mail in information on where they commute, which is used for computer-matching to other individuals who live and work in the same area. The program also provides technical assistance to the private companies in developing employer-sponsored ridesharing programs.

The City of Kansas City, Missouri, performed an initial evaluation of the program. Through surveys of corporations sponsoring vanpools and commuters forming carpools, the City estimated that approximately \$290,000 in gas was saved by participants in Johnson, Leavenworth, and Wyandotte counties in calendar year 1981.

The two other ridesharing programs supported in fiscal year 1981 were in Rice County and Wichita. The Rice County project apparently failed to get started, and Wichita has begun making contacts with employers and employees.

### State Building Conservation Programs

**Fuel savings in State buildings.** The Energy Office contributed \$63,000 to two studies of energy efficiency in State buildings. One result of the studies was a plan to spend \$100,000 on automatic timers and controls for five State buildings in Topeka. Fuel savings are projected by the Department of Administration's Division of Architectural Services to be \$100,000 annually.

### Public Building Conservation Programs

**Technical assistance audits.** Since 1979, nearly \$1.3 million of federal and local funds has been spent for technical assistance audits administered by the

Energy Office. For these audits, licensed architects or engineers identified cost-effective operation and maintenance improvements for a total of 361 buildings. They estimated that \$47,000 a year could be saved if such improvements were made in just 69 of the 361 buildings. This amount represents only a small portion of the potential savings of this program because other energy-saving measures that were identified for these and the remaining 361 buildings were not calculated. Further, the audits served as the bases for approving capital improvements at schools and hospitals.

**Capital improvements at schools and hospitals.** Approximately \$8.5 million of federal and local funds was spent to install capital improvements to 161 buildings at 86 schools and hospitals. Licensed engineers and architects, who studied each building before funding for the capital improvements was approved, estimated that energy resulting from the improvements would amount to \$1.7 million annually.

### Solar Conservation Programs

Solar and wind conservation programs were not among the six types of energy conservation programs examined in detail by the auditors. However, at the request of Legislative Post Audit, the Energy Office evaluated two of its solar programs to determine actual benefits.

**Solar hot water systems.** The Energy Office funded five workshops in 1981, at which homeowners built a total of 34 solar hot water systems. Because the participants made a \$1,000 investment to build the systems at the workshops, an assumption was made that all the systems were installed. The workshops cost the Energy Office about \$6,800, and the Office estimated that the total fuel savings of the 34 systems would be \$15,616 annually.

**Energy-saving construction techniques.** The Energy Office also funded two workshops in 1981 to teach participants how to build shutters and shades to conserve energy. Follow-up phone calls showed that 84 shutters and shades had been installed by the participants. The program, which cost about \$6,000, is expected to save \$1,306 in fuel each year.

Because some programs are more beneficial than others, all programs need to be evaluated to determine which ones produce the greatest benefits and should therefore be continued. Such evaluations are even more important now that the federal funds, which finance the largest portion of these programs, are being cut.

**Attempting to administer too many programs.** Given the sheer number of the Conservation and Soil Applications Division's programs--26--it would seem that evaluation of each program would be difficult. Further, because several agencies run the same types of programs, there is considerable overlap. For example, the Energy Office, the Extension Service at Kansas State University, and the Corporation Commission all conduct community energy workshops. Also, both the Corporation Commission and the Extension Service conduct on-site home energy audits. The auditors did note, however, that although there was an overlap there appeared to be little or no duplication of effort because different individuals used the services. Nonetheless, overlap does increase the number of programs that the State has to administer and the possibility that duplication will occur.

In reviewing the number of programs administered by the Division, the auditors noted that only 10 of the Division's 26 programs are required by federal law. The rest are optional. To improve efficiency and effectiveness, the Energy Office should be more selective about the optional programs it chooses to administer and should run only those programs it determines to be most effective. Being more selective presupposes that fewer programs would be run and that fewer staff would be needed to run them. In addition, along with federal funding cuts, certain programs that the Energy Office now must offer in order to receive federal funding may no longer be required. These programs could also be reviewed for further reductions in programs administered.

#### **Conclusion**

The Conservation and Solar Applications Division does not adequately evaluate and estimate actual energy savings for its programs, even though it has made a commitment to the U.S. Department of Energy to do so. Furthermore, the claims of savings resulting from these programs are overstated in the Energy Office's annual reports to that federal agency. The auditors were able to determine that some programs were beneficial while others failed or had problems in being implemented, but all programs need to be evaluated to determine which of the conservation programs produce the greatest benefits and should be continued. Given the sheer number of the Division's programs--26--it would seem that evaluation of each program would be difficult. Also, only 10 of the Division's 26 programs are required by federal law. The rest are optional. The Energy Office should be more selective about the optional

programs it chooses to administer and should run only those programs it determines to be most effective. The impending federal budget cuts indicate that fewer programs would be run at reduced staff levels.

### **Programs Administered by the Research and Resource Development Division**

The auditors reviewed the grain fuels research program, one of eight research projects that the Research and Resource Development Division was involved in during fiscal year 1981. This project represented \$50,975 of the \$164,128 (31 percent) spent by the Division that year. Grain fuels was the only research done by the Energy Office that used substantial amounts of State moneys. The auditors found that the research yielded a study showing that the economic feasibility of grain fuels was questionable. They also found that a controversy arose regarding this study, indicating that the Division needs to establish written research priorities as required by law. The study and the auditors' findings are discussed in more detail below.

**Grain fuels research.** In fiscal year 1980, the Energy Office had \$50,000 available for a study and analysis of alcohol fuels (\$16,050 was State funds). A portion of the funds was used to finance an economic feasibility study by a private research firm. Different plant sizes and sites were analyzed and it was determined that the economic break-even costs per gallon for grain fuels would be \$1.11 to \$1.46. As of April 1980, it was projected that only 30 percent of the various plant types and sizes analyzed would break even at a cost of less than \$1.25 per gallon. These relatively high break-even costs indicated uncertainties about the economic feasibility of producing grain fuels in Kansas.

In fiscal year 1981, the wording of the appropriation regarding this program was changed to require that expenditures receive the majority vote of a committee made up of the director of the Energy Office and representatives of three State Grain Commissions. According to the Energy Office, construction of a fuel alcohol plant was considered originally, but the Grain Commissioners determined the money could be better used on the study of the use of wet stillage residue from alcohol plants as cattle feed. This project was contracted to Kansas State University and was still in progress at the time of the audit.

Although the auditors reviewed only one research project in depth, they were able to determine that the Division's work has yielded some useful information. According to the Energy Office, some individuals utilized the grain fuel study as a basis for feasibility studies sent to the federal government, and a few received funding for fuels production. In addition, banks used the study in determining whether to make loans for grain fuel projects.

**Documenting research priorities.** The auditors found that controversy has arisen over how State energy research dollars should be used. According to the Energy Office, some grain fuel groups believed that the Energy Office should have used the fiscal year 1980 allocation to develop an actual plant facility. However, the Energy Office said the amount of funding was far less than the amount that would be required to build a plant.

A disagreement also developed over the 1981 appropriation when the three State Grain Commissioners, who were cooperating with the Energy Office in the study, determined that the available moneys could best be spent to study the use of alcohol fuel by-products as cattle feed. The Energy Office disagreed, stating that the money could have been better utilized in other types of energy research. The cattle feed study was conducted anyway because the Grain Commissioners carried the majority vote.

Such controversies could be avoided if the Energy Office had specific written research priorities clarifying energy research goals. K.S.A. 74-6804 requires the Kansas Energy Office to "establish research and development priorities for the State." The Energy Office told the auditors that it has an informal policy but no written policy. A written set of research priorities would help ensure that research money is given to the projects most likely to yield the information for promoting the development of alternative energy sources and energy conservation. The lack of a formal policy can create confusion over what energy research programs are best for Kansas. Furthermore, to document compliance with State law, the research priorities should be in written form.

#### **Conclusion**

The Research and Resource Development Division's work has yielded some useful information, but the Division has not maintained its research priorities in written form to document compliance with State law. Written priorities could help avoid disputes over the funds awarded for research projects.

#### **Are the State's Energy Programs Worth Their Costs?**

To assess whether the benefits of the Energy Office's energy programs justify their costs, the auditors attempted to review the programs' effectiveness by determining the dollar value of actual energy savings derived from these programs. In general, they could not determine how effective these programs are because the Energy Office does not follow up on them. Further, Legislative Post Audit could not evaluate these programs because of the limited time allowed for audit fieldwork.

The auditors were able to determine the expenditures and quantifiable dollar benefits for only five programs--Kansas City's ridesharing program, Fuel Savings in State Buildings, Solar Hot Water Systems (a program that was not among the sample of programs studied in-depth by the auditors), Energy-Saving Construction Techniques, and Capital Improvements at Schools and Hospitals. The table below shows the total costs for these programs and annual savings in fuel costs that can be derived from these programs.

<u>Program</u>	<u>Cost in Fiscal Year 1981</u>	<u>Annual Benefits</u>
Kansas City Ridesharing	\$ 30,000	\$ 290,000
Public Building Conservation	163,000(a)	100,000
Solar Hot Water	6,800(b)	15,616
Energy-Saving Construction Techniques	6,000(c)	1,306
Capital Improvements at Schools and Hospitals	\$8.5 million (since 1979)	\$1.7 million

(a) Includes \$63,000 contributed by the Energy Office to study the need for conservation measures and \$100,000 in capital costs for implementing one of the study's recommendations.

(b) Includes only the Energy Office's cost for conducting the workshops. Workshop participants also spent approximately \$1,000 each to construct the solar hot water systems.

(c) Includes only the Energy Office's cost for conducting the workshops. Workshop participants also spent an undetermined amount to construct shutters and shades.

As the table shows, the benefits of the first four programs, which were determined to be a total of \$406,992 annually, far outweighed the costs for these programs during fiscal year 1981 (\$205,800). The costs, with the exception of ridesharing, are one-time expenditures. The fifth program--Capital Improvements at Schools and Hospitals--has cost \$8.5 million since 1979, but yields \$1.7 million in benefits annually, indicating that it also is cost-effective.

While these five programs represent only a few of the Office's programs, it is apparent that at least some of the State's energy programs are cost-beneficial. Other programs have proven ineffective. This was evidenced by the failure of the Government Procurement Program and the problems in starting the Energy Curriculum Program.

Because some programs are more beneficial than others, all programs need to be evaluated to determine which ones produce the greatest benefits and should be continued. The sheer number of the Office's

programs--39--indicates that efficiency could be improved by running only those programs it determines to be the most effective.

### **Conclusion**

The State's energy programs show potential for promoting energy conservation, although some are apparently more cost-beneficial than others. State programs to prepare for energy emergencies and gather energy information are still needed, given the increasing dependence on foreign oil and the withdrawal of federal authority to curtail energy use in times of shortage. However, the Energy Office currently runs too many programs to be effective. A strong indication of this is that the auditors found certain problems or inadequacies concerning all of the Energy Office's programs that they reviewed. Regardless of whether these programs continue under the Energy Office's direction, certain actions need to be taken to ensure that the State's energy programs serve and protect the public. Further, given the impending federal budget cuts, it is even more vital that programs be carefully selected; funding cuts would result in fewer programs being run, at reduced staff levels.

### **Recommendations**

The following actions should be taken to improve the operation of energy conservation and energy-emergency planning programs:

1. To ensure the best use of funds for conservation programs, the agency charged with coordinating the State's energy programs should evaluate the actual energy savings that result from each program. This information should be used to determine which programs to continue and which to terminate.
2. To ensure the State has the information it needs to determine the amount of fuel available and to effectively deal with energy emergencies, the Legislature should require the agency responsible for administering the State's energy programs to provide it with information on the needs, options, and feasibility of implementing a comprehensive State Energy Information System. This may entail appropriating additional funds.
3. To ensure the State is adequately prepared for energy emergencies, the agency charged with energy-emergency planning should upgrade the State's plan to include:

- a. A definition of an emergency.
  - b. Current information on energy supplies (which would be based on a comprehensive State Energy Information System).
  - c. Specific conservation measures and the means for implementing those measures, as authorized and required by statutes.
  - d. A provision for enlisting the support of utilities and State agencies to use their influence to reduce energy consumption.
4. To ensure compliance with State law, the agency or agencies charged with administering the State's energy information and research programs should:
- a. Complete and submit to the Governor and Legislature a biennial report on the State's energy programs.
  - b. Develop written research priorities that clarify conservation research goals.

## CHAPTER IV

### ALTERNATIVES FOR ADMINISTERING KANSAS' ENERGY PROGRAMS

The previous chapter showed that there was a need for an energy program in Kansas because of increasing dependence on foreign oil, rising consumption of fuel, and the withdrawal of federal authority to curtail energy use in times of shortage. Given this need, the auditors questioned whether Kansas' energy program should be continued in the Energy Office, or whether there are alternative methods for achieving these goals.

The energy programs administered by the Energy Office have not been very effective. The energy information and emergency preparedness programs are inadequate; they do not establish a priority system for allocating available energy resources in the event of an emergency. Most of the conservation programs have not been evaluated to determine which ones are cost-beneficial. At the same time, the Energy Office has apparently taken credit for the energy savings achieved in a number of programs that it does not operate. It appears that the Energy Office is also running too many programs--another reason why its operations are ineffective. All programs need to be evaluated to determine which ones produce the greatest benefits and should therefore be continued.

Beginning in fiscal year 1983, federal funding for Kansas' Energy Office is expected to be cut by 42 percent, and by 1984 it may be cut even more or completely eliminated. Without the influx of additional State moneys, such cutbacks will obviously have a significant impact on the number and type of energy programs operated in Kansas. Fewer programs would be run at significantly reduced staff levels. But no matter how the State's energy programs are organized, and at whatever level of funding, it is important that the State's energy needs are prioritized, that any energy conservation efforts are focused on the most cost-beneficial programs, and that an adequate emergency preparedness system be in place to handle energy emergencies.

Before examining the alternatives for administering the State's energy programs, it is helpful to review the energy programs or projects being operated by other State agencies. It is also helpful to review the organization of energy offices nationwide.

#### **Other State Agencies Involved in Energy-Related Programs**

The energy programs in Kansas have always been fairly decentralized. The auditors interviewed representatives of 10 other State agencies

that administer energy-related programs. Some operate independently of the Energy Office, while others are dependent on the Office for funding or expertise. The Energy Office's chief function is to administer programs and research projects, while many of the other State agencies involved actually implement those programs under contract with the Office. Each of the 10 agencies and their energy programs or projects is discussed in more detail below:

**The Kansas Corporation Commission** operates several energy-related programs. It is in the process of developing a program to require utility companies to offer low-cost residential energy audits to residential customers. The Commission also presents workshops on energy conservation, provides public information, contracts for energy conservation studies, sets thermal efficiency standards, and collects data on energy uses. In addition, the Commission is responsible for adopting rules and regulations governing the allocation of natural gas, coal, and electrical energy, and for curtailing the use of these resources during energy emergencies declared by the Governor.

**The Energy Extension Service at Kansas State University** receives funds through a contract with the Energy Office to implement energy conservation programs in five areas--residential conservation, conserving energy in transportation, conserving energy in business and industry, conserving energy in local units of government, and working with energy influencers (architects, engineers, and the like) to encourage energy conserving practices. These programs are implemented through energy conservation workshops, technical assistance on energy conservation methods, on-site energy audits of buildings, and publications of material on energy issues. Also, the Extension Service has subcontracted with the University of Kansas and Wichita State University to conduct on-site energy audits. The Energy Extension Service uses the facilities and personnel of Kansas State University's Cooperative Extension Service and its system of extension agents in the State's 105 counties to help provide the services it offers.

**The University of Kansas** has several research facilities that are involved in energy programs. The **Kansas Geological Survey** works independently of the Energy Office to develop computerized information sources on oil and gas resources and forecasting as part of its geological research. (The Energy Office currently relies on the Geological Survey for oil and gas forecasting information.) The **Transportation Center**, which is part of the University's Engineering School, provides assistance through a contract with the Energy Extension Service to local governments for energy-saving measures, such as traffic light synchronization and school bus routing. The **Kansas Energy Research Center** conducts research in solar and renewable energy, presents workshops on energy-related topics, and works with the Energy Office to jointly fund research projects. Finally, the **Energy Analysis and Diagnostic Center** receives

funds from the U.S. Department of Energy to conduct energy audits for small- and medium-size businesses within a 50-mile radius of Lawrence. The Center provides detailed analysis of the economic feasibility of conservation alternatives.

**The Adjutant General's Division of Emergency Preparedness** works with the Energy Office to develop contingency plans for energy emergencies. The Energy Office is required by law to develop rules establishing priorities for the allocation and curtailment of available energy resources during any energy emergency. The Division of Emergency Preparedness, which has a staff of seven planners and coordinators, is responsible for coordinating State, federal, and local agencies during a declared disaster. It has also prepared and maintains the State Emergency Preparedness Plan. Thus, the Division is the vehicle the Governor would use to implement the Energy Office's emergency plan.

**The Department of Transportation** has worked with the Energy Office on programs to teach energy-conserving driving techniques to Kansans. The Energy Office began the program, but the Department of Transportation now has the expertise to continue on its own to offer these courses.

**The Department of Social and Rehabilitation Services** works independently of the Energy Office to provide insulation supplies, labor, and direct financial assistance to low-income Kansans to help weatherize their homes and pay energy bills.

**The Department of Education** works with the Energy Office in an advisory role to contract for the development of an energy education curriculum for Kansas schools.

**The Department of Revenue** processes forms for solar tax credits (Kansas taxpayers can claim a tax credit of 30 percent, or up to \$1,500, of the cost of a solar energy system). The Energy Office assists the Department by developing the qualifying criteria, assisting in evaluating applications, and explaining forms to applicants.

**The Department of Economic Development** is involved in two energy projects. First, the Department gives awards to communities that have exemplary energy conservation programs as part of the Project Pride program. Energy Office developed the standards and makes the field visits that result in the energy award. Second, the Energy Office provides information and makes presentations when potential investors inquire at the Department of Economic Development about energy availability in Kansas.

**The Department of Administration's Division of Purchases** was funded by the Energy Office in fiscal year 1981 to develop a plan to procure

energy efficient goods and services for State and local governments. The Energy Office worked with the Division of Purchases to modify State procurement practices and facilitate the adoption of these energy conserving practices by local governments. As discussed in Chapter III, this program was not successfully implemented.

### **Energy Offices in Other States**

The auditors also examined information gathered by the Legislative Research Department and interviewed energy officials in four surrounding states to determine how other states have chosen to organize their energy programs. Currently there are four major types of organizational arrangements for state energy offices. In 15 states, including Kansas, the energy office has cabinet level status as a separate department or operates as an independent agency with a separate budget. In 16 states, the energy office is a division under the direction of a cabinet-level department. Another 14 states place the energy office under the governor as a functional unit of the executive office. Finally, five states operate either a commission or council as the state energy office, with an executive director carrying out the governing body's policies.

According to the Legislative Research Department, at least 16 states have changed the organization of their state energy offices since fiscal year 1979. Six states abolished state energy offices and placed certain energy functions in commerce or economic development agencies (Alaska, Arkansas, Hawaii, and Indiana), in an administrative department (Wisconsin), or in a civil defense agency and a corporation commission (Oklahoma). Five states created new offices to which energy functions were transferred (Alabama, Illinois, Minnesota, Nebraska, and Utah). In these states energy was combined with functions such as water resources, natural resources, and planning and development. Two states reorganized existing transportation and natural resources agencies to include energy as a new major component (Idaho and Mississippi). And three states reorganized their offices as part of the governor's office. (Arizona, Colorado and North Dakota)

There seems to be little pattern in these changes. Energy offices have become part of or are combined with at least eight different types of agencies as well as remaining or becoming independent. Some energy agencies became more independent while others became less independent. To get a clearer idea of the benefits of various organizational structures, the auditors contacted energy officials in surrounding states to get their views.

### **Organization of Energy Offices in Surrounding States**

The Missouri Division of Energy has been within the Department of Natural Resources since 1977, and has a staff of 55 employees. The

Division works with the Department of Natural Resources to coordinate various aspects of production and conservation of energy, and to obtain advice on natural resource information. The Director of the Missouri Division of Energy told the auditors that the Division does not have the authority to require other agencies or departments to implement energy conservation measures. He indicated that this lack of authority was a major barrier to promoting energy conservation in Missouri, and that an energy office could be more effective if placed in a centralized office, such as a Department of Administration, which has Statewide authority.

In Colorado, the Office of Energy is within the Department of Regulatory Agencies, which is part of the Governor's Office. It has a staff of 25. The Director told the auditors that the Office's main function was to implement energy conservation programs. The Office works closely with the public utility regulatory agency, which is also part of the Department of Regulatory Agencies. According to the Director, the Office was placed in the Department of Regulatory Agencies to ensure that conservation measures were not overshadowed by agencies whose goal was to promote energy development.

The Oklahoma Department of Energy was abolished in October 1981. Its energy conservation programs were taken over by the Corporation Commission and allocation and emergency preparedness functions were placed in the Civil Defense Department. The former Director of the Department of Energy told auditors he believes the Corporation Commission and the Civil Defense Department are better equipped to administer the energy programs than was the Department of Energy. He explained that staff time had been poorly organized under the previous arrangement, and that the present set-up allows staff to work in areas other than energy during slack times.

Finally, the Nebraska Energy Office is an independent agency similar to the Kansas Energy Office. The Director of the Nebraska Energy Office told the auditors that a single independent state authority in charge of energy functions is necessary to provide the leadership role required to accomplish energy conservation. An energy office within another state agency, he said, may not understand the comprehensive nature of energy conservation. The Director told the auditors a centralized energy planning function was needed to achieve adequate planning for a state's energy needs.

Again, no clear organizational pattern emerges, and energy officials in the four surrounding states disagree as to the most effective organizational structure for administering a State energy program.

### **Alternatives for Administering Kansas' Energy Program**

The auditors examined three options for administering Kansas' energy program: retaining the current Energy Office; abolishing the Energy Office and eliminating the administrative, fiscal, and planning functions it

provides; and abolishing the Energy Office but moving the overall fiscal and planning functions to the Department of Administration.

In reviewing these options, the auditors weighed the benefits of each alternative against a set of criteria they had developed after interviewing officials in other states and by observing the Energy Office's current programs. These criteria are as follows:

**Expertise.** Energy programs appear to be more effective when the agency administering the programs has the appropriate technical expertise.

**Evaluation.** The overall energy conservation and energy-emergency preparedness effort is most effective if the agency responsible for the programs has the ability to evaluate the effectiveness of each energy program and place resources in the most effective programs.

**Coordination.** The overall energy program is more likely to succeed if the agency in charge of the program is in a position to ensure that other state agencies coordinate their efforts and implement the state's energy conservation policies.

**Visibility.** Successful energy conservation programs depend in part on public awareness that is fostered by an agency that can be easily identified as the focal point of the state's energy effort.

**Independence.** The overall energy program is more likely to succeed if the programs are not placed in an agency that has a narrow focus and could neglect sectors of energy users because they are not related to the agency's normal clientele.

When considering the type of organizational structure for the State's energy program, the auditors had concluded that these five criteria seemed crucial to the overall effectiveness of an energy program. A discussion of each option evaluated by the auditors is presented below.

### **Re-Establishing the Kansas Energy Office**

The auditors examined the possibility of retaining the Energy Office in its current form. If federal funds are cut as expected, programs operated by all three of the Office's Divisions--Conservation and Solar Applications, Planning and Fuel Allocation, and Research and Development--will have to be severely curtailed without additional State funding. Even if State funds are infused, the Office could operate more effectively with fewer programs and with fewer staff.

As an independent agency, the Energy Office is more likely to be identified by Kansans as the primary source for energy information. Further, because the Office's only charges are to promote energy conserva-

tion and prepare for energy emergencies, it is less likely that the Office would narrow its efforts to one section of energy users than an agency whose primary purpose is to serve a particular sector of energy users, such as utilities or small businesses. If anything, the Office could be accused of having too broad a focus; it operates, oversees, or administers 39 energy-related programs or projects.

Despite some apparent advantages of having a separate Energy Office, the auditors determined that the Office has not done an effective job of developing an energy-emergency plan or of evaluating its programs. They also determined that the Energy Office has had difficulty in getting other State agencies to implement its programs (the Government Procurement and Energy Curriculum Programs discussed in Chapter III)--a problem with independent energy agencies that was noted by several agencies in other states that the auditors contacted.

If the Energy Office is re-established, Legislative Post Audit concluded that the changes recommended for improving the Office's administration of the energy programs be implemented at once. These changes would include the following:

- evaluating each conservation program to determine the actual energy savings that result from the program, and discontinuing funding for those programs which are not cost-beneficial
- upgrading the State's energy emergency plan
- implementing a comprehensive State Energy Information System
- developing research priorities that clarify conservation research goals

#### **Abolishing the Energy Office and Eliminating Its Fiscal and Planning Functions**

If the Energy Office were abolished and its fiscal and planning functions eliminated, State programs promoting energy conservation and emergency preparedness could nonetheless continue. This option is quite similar to "Alternative 6" in Organizational Alternatives for the Kansas Energy Office, released by the Department of Administration's Budget Division in January 1982. The Energy Office's programs in these two areas could be carried out by a number of existing agencies. Its responsibility for energy-emergency planning would be shifted entirely to the Adjutant General's Division of Emergency Preparedness, which is already responsible for implementing the State's Emergency Preparedness Plan. Illumination and thermal efficiency standards are set by the Corporation Commission and could become mandatory by law. The Commission is already responsible for providing on-site energy audits conducted by utility companies. In addition, the Department of Administration's Division of Architectural Services could administer all State building conservation programs, while the Division of Purchases could be required to develop and implement

energy-efficient State government purchasing practices. The study proposed by House Concurrent Resolution No. 5031 would determine the responsibility for the Kansas Energy Information System.

These and other agencies involved in energy-related projects also provide conservation workshops, conduct research, and disseminate information about energy issues and conservation measures. If additional State funding is provided to supplement the loss of federal funds, the conservation programs now being contracted to the Energy Extension Service at Kansas State University could be continued past fiscal year 1983. With its established public information mechanism, the Extension Service could provide the public visibility that the auditors noted as an important criterion for a successful State energy effort. The Extension Service could also provide expertise to other State agencies, such as the Departments of Revenue and Economic Development.

Evaluating this option in light of the criteria for an effective energy program, the auditors determined that the option has a number of drawbacks. While the other agencies involved in energy-related projects appear to have the expertise to administer the energy emergency preparedness plan and to promote energy conservation, no central State agency would be designated to evaluate programs and set priorities, to administer programs if federal funding is continued, and to provide a centralized budget control function for distributing federal or State funds. Further, the current problem of insufficient program evaluations could be expected to worsen as each agency developed its own energy agenda. In other words, these agencies, which specialize in areas other than energy, may not implement a well-balanced and coordinated energy program.

#### **Abolishing the Energy Office and Transferring Its Fiscal and Planning Functions to the Department of Administration**

The final option analyzed by the auditors was to abolish the Energy Office and transfer its responsibilities for emergency planning, disbursing federal funds, administering contracts, setting energy research priorities, evaluating energy programs, and conserving energy in State buildings to the Department of Administration. The implementation of conservation measures would be carried out by agencies already administering energy-related programs in the same way as described in the previous options. However, the Department of Administration would retain control over all federal energy funds and would contract with other agencies to implement conservation programs.

The Department of Administration would receive federal and State funds for these programs, set priorities for energy spending, and provide administrative services to these agencies to assist with required federal reports. The Department has several organizational advantages as the central coordinator of energy programs. First, the Budget Division

currently has responsibility for evaluating State programs and setting budget priorities. Seldom does a single program area (energy) involve so many agencies and so many separate programs. The Department of Administration would appear to have an advantage in evaluating program effectiveness across these agencies and proposing budget priorities based on that analysis.

Second, the Department of Administration would seem to have an advantage in handling the Kansas Energy Information System and the energy-emergency planning program because these functions require coordinating the efforts of several agencies that have needed information on energy resources and several other agencies whose cooperation is needed to implement an emergency plan. As an agency that already has channels of communication open to all agencies for budget and other purposes, the Department of Administration appears to be well-placed for such a function.

Despite these potential advantages in the areas of evaluation and coordination, the Department does not possess technical expertise in energy areas. For that reason, its role is best suited for planning, evaluation, coordination, and contract management. These are areas where the Department can be most effective, while other agencies (through contract or grants from the Department) can implement energy conservation programs. If federal funds are cut or eventually eliminated, the Department's coordinating and planning roles as they relate to federally funded energy programs would be correspondingly reduced. But it would still be responsible for administering State moneys for energy programs.

Finally, if administration of the State's energy program is transferred to the Department of Administration, the Energy Advisory Council could be retained as an advisory body on State energy plans and priorities. The Council should report to the Governor, who can then ensure that the programs with the highest priorities or the greatest cost benefits are being operated. If the Legislature decides not to re-establish the Council, the responsibility for establishing energy priorities in Kansas should be placed with the Governor.

#### **Conclusion**

Kansas needs State energy programs to promote energy conservation and develop plans for energy emergencies, and to disburse federal and State funds for cost-effective conservation programs. No one organizational structure has emerged as best; in fact, energy offices across the country have been organized and reorganized in a number of ways.

If the Kansas Energy Office is retained, the changes recommended in Chapter III should be implemented to ensure the program is operated more effectively. If the Office is abolished and its fiscal and planning functions eliminated, many other energy-related programs would continue, although some might be operated at a reduced level given the impending federal budget cuts. However, under this option no single agency would be responsible for coordinating programs, establishing and helping to meet priorities, and funneling federal and State moneys to those programs where they can do the most good. The third option--abolishing the Energy Office and transferring its fiscal and planning functions to the Department of Administration--appears to be preferable. The Department can receive funds, set priorities for spending those funds, evaluate and coordinate conservation programs, provide administrative services, and help ensure that programs are successfully implemented.

#### **Recommendations**

1. The Legislature should not act to re-establish the Kansas Energy Office and its responsibilities over the State's energy programs.
2. The Legislature should transfer the responsibility of administering, planning, and budgeting the State's energy programs to the Department of Administration at reduced staffing levels. In doing so, the Legislature should ensure that the Department implements the other recommendations made in this report for improving the programs' effectiveness. These include upgrading the State's energy emergency plan, evaluating each conservation program to determine actual energy savings resulting from that program, discontinuing funding for programs that are not cost-beneficial, implementing a comprehensive State Energy Information System, and establishing research priorities.
3. If the Legislature acts to re-establish the Energy Advisory Council, it should direct the Council to report to the Governor regarding programs with the highest priorities or the greatest cost benefits. The Governor can then direct the Department of Administration to follow the priorities established. If the Legislature acts to abolish the Energy Advisory Council, the responsibility for establishing energy conservation and emergency planning priorities in Kansas should be placed with the Governor.

APPENDIX A

PROGRAMS OPERATED BY  
THE KANSAS ENERGY OFFICE  
Fiscal Year 1981

<u>Program Name and Description</u>	Fiscal Year 1981	
	<u>Federal(a)</u>	<u>State(a)</u>
General Administration	\$ -0-	\$ 61,434
<b>Conservation and Solar Applications Division:</b>		
<b>Programs Required to Receive Federal Funds for State Conservation Plan</b>		
--Thermal Efficiency-Working with the Kansas Corporation Commission to develop thermal standards for new buildings	31,960	-0-
--Illumination Efficiency-Developing maximum lighting standards for new buildings.	8,496	-0-
--Ridesharing-Grants to local government for van pooling.	72,164	-0-
--Government Procurement-Developing procurement standards and procedures to improve energy efficiency of products purchased by the State in cooperation with the Department of Administration.	31,211	-0-
<b>Programs Required to Receive Federal Funds for Energy Extension Service-The Energy Office contracts with Kansas State University to provide technical assistance and education for energy conservation.</b>		
--Residential Conservation Programs-Workshops and responses to individual requests for information	33,095	-0-
--Small Business Programs-Workshops and energy audits	101,824	-0-

<u>Program Name and Description</u>	<u>Fiscal Year 1981</u>	
	<u>Federal(a)</u>	<u>State(a)</u>
<b>Conservation and Solar Applications Division (Cont.)</b>		
--Workshops for people who influence energy use (architects, engineers, etc.)	\$ 50,058	\$ -0-
<b>Optional Federally Funded Programs in the State Conservation Plan</b>		
--Residential Conservation-Programs to provide information to homeowners on energy-saving techniques through workshops and mailed questionnaires	126,314	-0-
--Industrial Conservation-Program to identify major industrial energy users and develop conservation programs for them	12,800	-0-
--Transportation-Develop, teach, and administer courses in energy-efficient driving techniques	29,967	-0-
--Agriculture-Development of a handbook on farm energy-saving techniques	3,993	-0-
--Utilities-Conferences, which are jointly sponsored with the Corporation Commission on cogeneration and power-pooling	4,686	-0-
--Government Operations-Contract for development of energy-saving improvements to State buildings and community grants	151,522	-0-
--Commercial and Small Business-Development and presentation of slide shows on energy-saving techniques for small businesses	3,611	-0-
--Recycling-Develop posters to encourage recycling of aluminum cans and other reusable products	\$ 7,821	\$ -0-
--Alternative Sources-Development and study of alternative energy sources	3,626	-0-

<u>Program Name and Description</u>	<u>Fiscal Year 1981</u>	
	<u>Federal(a)</u>	<u>State(a)</u>
<b>Conservation and Solar Applications Division (Cont.)</b>		
--Public Conservation Education-Energy information hotline, library, newsletter, and curriculum development	\$ 76,964	\$ -0-
--Intergovernmental Coordination-Provide information to local governments on methods of energy conservation	18,045	-0-
--Energy Building Temperature Restrictions-Encourage public buildings to reduce temperature settings	521	-0-
<b>Optional Federally Funded Programs for Kansas Energy Extension Service</b>		
--Transportation Programs-Technical assistance to improve synchronization of traffic lights and improve school bus routes	36,696	-0-
--Government Units Programs-Workshops and energy audits	45,834	-0-
--Technical Assistance	33,448	-0-
--Evaluating Program Benefits	10,256	-0-
--Kansas Energy Extension Service Management	53,645	-0-
<b>Other Conservation Programs</b>		
--Solar and Wind Programs-Programs include providing information to individuals and organizations on specific solar designs and economic benefit information, seeking funding for solar research programs, attending conferences, assisting in the solar tax credit program, and preparing solar workshops and instructional aids	49,795	50,640

<u>Program Name and Description</u>	<u>Fiscal Year 1981</u>	
	<u>Federal(a)</u>	<u>State(a)</u>
--Energy Audits of Schools, Hospitals, Local Government Buildings, and Public Care Facilities-		
Phase I - Preliminary Audits to identify possible conservation measures.		
Schools and Hospitals	\$ 11,845	\$ 5,564
Local Government/Public Care	16,527	7,684
Phase II - Technical Assistance to plan specific conservation measures and provide grants for capital improvements.		
Schools and Hospitals	18,823	76,128
Local Government/Public Care	122	-0-
<b>Research and Resource Development Division:</b>		
--General Administration	-0-	6,764
--Technical Assistance-Assist Other government units to get research grants	-0-	1,625
--Reporting-Report on all energy related studies in the public sector in Kansas	-0-	462
--Cellulose Conversion-Study on converting sawdust into petroleum substitutes	15,504	100
--Grain Fuels-Contract for a study of using wet alcohol stillage for food	-0-	50,975
--Butanal-Study of the potential use of butanal as fuel Oil Shale Fuels-Contract with the University of Kansas to study economic feasibility of oil shale extraction in Kansas	51,408	240
Hydro Power-Study to determine potential for using existing dams in Kansas for hydro-electric power		
--Miscellaneous Research Projects	-0-	74
--General salaries and wages	-0-	36,976

<u>Program Name and Description</u>	<u>Fiscal Year 1981</u>	
	<u>Federal(a)</u>	<u>State(a)</u>
<b>Planning and Fuel Allocation Division:</b>		
--Administration	-0-	5,442
--Policy Analysis-Analyze and monitor State and federal policy, and legislation, and study market conditions	-0-	1,510
--Kansas Energy Information System-- Compilation of Kansas Energy Statistics	-0-	321
--Fuels--Monthly fuel price/quantity study and set-aside	-0-	2,628
--Emergency Planning-Preparation of contingency plans for energy emergencies	10,004 (b)	-0-
--General Salaries and wages-	-0-	55,861

- (a) Includes expenditures and encumbrances. Totals are approximate because the Centralized Accounting System for Kansas did not provide enough detail in all situations to determine expenditures by individual program. Therefore these expenditures were computed using agency records.
- (b) Includes \$8,869 of funds from the State Conservation Plan which by federal regulation, could not be used for emergency planning after fiscal year 1981.

**APPENDIX B**

**AGENCY RESPONSE**

STATE OF KANSAS  
ENERGY OFFICE

214 W. 6TH, TOPEKA, KANSAS 66603

February 25, 1982

Legislative Division of Post Audit  
Mills Building  
Topeka, KS 66612

Attn: Mr. Richard E. Brown  
Legislative Post Auditor

Dear Mr. Brown:

Pursuant to your request, I am submitting my response to your Sunset Audit Report (Draft) dated 18 February 1982.

It is not my desire or intention to discredit the overall accuracy of your report. However, I am compelled to inform you that many errors, mistaken assumptions and misleading information are contained in your draft report. I do not pretend to understand the reason(s) for these inaccuracies; perhaps it was because your staff had only one communication with me prior to your "exit interview" on 3 February; perhaps it was general or specific confusion about how the various federal funds (and the programs they support) were administered to attain highest productivity with least duplication and waste. Whatever the reason(s), I am disappointed that these deficiencies had to appear in a document which undoubtedly is intended to be accurate, fair and responsible.

It is my intention to address the most conspicuous flaws and, where appropriate, to agree and/or emphasize the findings of your audit.

Planning and Fuel Allocation Division

**Item 1, (page 17-18): Improving the Kansas Energy Information System.** See general response following.

**Item 2, (page 18-20): Complying with energy emergency planning statutes.** See general response following.

**Item 3, (page 20): Preparing the Biennial Report on a timely basis.** See general response following.

**General Remarks:** Items 1, 2 and 3 are criticisms of the Agency's performance in compliance with statutory requirements. While several minor corrections in the text could be made, KEO cannot honestly disagree with the conclusions. KEO agrees that improvement in the collection, storage and retrieval of comprehensive and accurate energy data is important; we believe that final preparation of an appropriate Energy

Emergency Plan is essential; and we acknowledge the Biennial Report should be completed. Each of these deficiencies, however, begins and ends with the same circular logic...they could not have been completed in a meaningful, appropriate and accurate manner without meaningful, appropriate and accurate data. In our opinion, had the agency been given the fiscal resources to develop the Energy Information System and been allowed to mature in a political environment conducive to attracting and keeping qualified, competent, analytical personnel, the criticisms would not have been possible. The problems identified in developing KEIS, finalizing emergency preparedness (not the least of which is allocation capability...which assumes an accurate and timely data base) and completing the Biennial Report could have been significantly reduced or eliminated.

*Legislative Post Audit response.* Legislative Post Audit agrees that staff and fiscal limitations contributed to problems in developing the Energy Information System. However, these limitations do not explain why an energy emergency plan has not been developed that at least identifies conservation measures to be used in an emergency, provisions for enlisting the support of utilities and other State agencies to use their influence to reduce energy consumption, and a definition of an emergency. The Energy Office also did not issue energy emergency curtailment regulations to enforce conservation measures as required by State law.

#### Conservation and Solar Applications Division

**Item 1, (page 28): Inadequate program evaluation.** In our FY 83 Budget, KEO made the following remarks:

In recognizing that evaluation is the key to documenting and estimating performance, KEO has and is making a concerted effort to improve or expand upon its monitoring and evaluation capability. Toward this end, KEO developed the position of Administrative Coordinator to, among other responsibilities, "assist in the development and administration of contracts and grants..." and "program monitoring and evaluation to determine... compliance with established goals... energy savings attributable to KEO activities, cost effectiveness of operations and the impact on the behavior of targeted audiences."

Our recognition of the importance of program evaluation exceeds that suggested by the report. Furthermore, the report is totally inaccurate in stating that "only five of 26 programs have been evaluated." The KEO has made evaluations on no fewer than ten conservation programs; many of those which have not been evaluated either cannot be evaluated or are not designed to produce immediate energy savings. (For example, how does one go about evaluating the energy saved as a result of curriculum development for grades K-6; how can an agency that has promised anonymity to recipients of a Class C energy audit, follow up with a questionnaire about implementation of its recommendations?) KEO strongly disagrees with the statements in this Item.

*Legislative Post Audit response.* Legislative Post Audit was aware that the Energy Office recognized a need for more evaluation and that an employee was hired in the fall of 1981 to improve the Office's evaluation capability. The auditors' concern is that delays in beginning meaningful

evaluations resulted in a lack of clear information about which of the Office's 26 conservation programs are worth continuing, and which are not.

The difference between the Energy Office's and Legislative Post Audit's totals may lie in what is considered a "program". The Energy Office may have considered surveys of several **methods** used within one program as evaluations of separate **programs**. For example, the auditors considered homeowner workshops and questionnaire energy audits--which are methods used within the residential conservation program--as one program among the five that the audit report (page 28) said had at least been partially evaluated.

Nonetheless, the auditors' emphasis in this area is that more programs should have been evaluated to determine the dollar benefits and costs. The auditors expressed this concern to Energy Office officials during the audit and asked for more documentation of evaluations. This documentation was not available for most of the programs. Also, in some instances documentation was on hand, but benefits had not been analyzed or compiled from this documentation. For example, for one of the five programs for which the audit states evaluations have been conducted (solar and wind), the benefits had not been compiled by the Energy Office until the auditors asked for the information.

Legislative Post Audit also disagrees that programs cannot be evaluated even if benefits cannot be quantified. For example, the curriculum development program could be evaluated to determine how many teachers use the curriculum in their classes as a result of the Energy Office's program. Also, the questionnaire energy audit method in the residential conservation program can be evaluated by selecting a sample of recipients who would not be promised anonymity. Those recipients could later be contacted to determine what energy conservation measures they had implemented as a result of the audit. The dollar benefits could then be quantified and generalized to all questionnaire energy audit participants.

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**Item 2, (page 29-30): Overstatement of energy savings.** Criticism in this area reflects more of a lack of understanding by Legislative Post Audit than a serious flaw in the reporting of energy savings by KEO. In most instances, the KEO used reporting methodologies that were **required** by the Department of Energy. KEO is aware that some of these requirements result in "overstatements"; others result in understatements. Where KEO was given the latitude to use its own methodologies, they were developed with the full guidance, advise and consent of the DOE (this is particularly true of the examples cited). I can appreciate why a Post Audit report would join the chorus of those who sing loudly about "estimated energy savings"; unfortunately, this criticism is largely misdirected and generally over emphasized. For those who are truly interested, it is important to remember that **the process whereby energy savings are estimated contributes nothing to saving energy**. KEO has always attempted to abide by DOE requirements or, where appropriate, to provide estimates in a manner which DOE approved. Incidentally, Kansas has never been criticized by DOE or the GAO in this area.

**Legislative Post Audit response.** Legislative Post Audit's discussion was intended to point out that the reports to the U.S. Department of Energy contained questionable estimates of energy savings and cannot reasonably be used as documentation of the benefits of Energy Office programs. The U.S. General Accounting Office criticized all states in general for overstating benefits, and criticized the U.S. Department of Energy for inadequate evaluations of its programs. Legislative Post Audit's report points out the importance of determining the true benefits of energy conservation programs so that limited funds can be used most effectively. Distorted estimates of energy savings can contribute to placing money in ineffective programs and, consequently, lessen the ability of the overall program to save energy.

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**Item 3, (page 30-32): Varying success of programs.** The report is correct in its findings that KEO has had successes and failures. However, it is incredible that Post Audit would pick the two examples of "failure" mentioned: Energy Curriculum Development and Procurement Practices. In both instances, KEO should be commended for exercising good judgement in the administration of tax dollars. Difficult decisions had to be made in both instances.

I am pleased to report that every "benefit of doubt" was given to the State of Kansas. KEO acted responsibly by cancelling the competitively bid contract with the Energy Adventure Center (low bidder); some may look at it as a "failure", we look at it as sound "business" judgement to "minimize losses." In like fashion, KEO made a similar decision to terminate our involvement with the Division of Purchasing and to pursue another direction, accomplish the same goal and fulfill the state's responsibility for implementing a mandatory measure. If either of these are "failures", it might be more appropriate to examine the concept of "low bidder", the practice of requiring educators to "compete" for a contract or the reluctance of a State Agency to properly account for the performance of an Energy Conservation Procurement Specialist. It is inappropriate to use these as examples of failure by KEO.

**Legislative Post Audit response.** Legislative Post Audit agrees that it is better to discontinue programs that have failed rather than continuing to waste money. The Energy Office's action to cancel the curriculum program contract and to re-contract the program was probably the best course of action. However, the fact that the initial contract had to be canceled was why the auditors classified the program as a failure. The procurement program is another matter. The contract was canceled and no new contract replaced it, even though the program is required for receiving federal conservation funds.

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**Item 4, (page 32): Attempting to administer too many programs.** KEO generally agrees with the observation that too many programs are attempted. This would not be so if KEO had ever been able to reach and maintain its authorized level of 23 F.T.E. staff. KEO generally does not agree that overlap and duplication has resulted from activities performed by KEO, EES or KCC; the Post Audit support for this criticism is factually and substantively in error.

**Legislative Post Audit response.** Legislative Post Audit does not agree that the lack of staff would contribute to an agency's ineffectiveness in attempting to operate too many programs. Fewer programs need to be run at reduced staff levels. In terms of overlap and duplication, Legislative Post Audit did not find instances of two agencies providing the same service to the same people. The audit only points out that the Energy Office and several other agencies (The Energy Extension Service, in particular) run similar programs and that it may be more efficient to concentrate the same type of programs in one agency.

### Research and Resource Development Division

**Item 1, (page 34):** KEO strongly disagrees with the auditors report in several key areas, although agreeing with the overall findings that the Division's work has yielded useful information. The report implied only funding limited the building of a grain alcohol fuel plant by the KEO. In fact, Constitutional restrictions on capital improvements would have made it difficult, at best, to build a full scale commercial or demonstration facility by the State of Kansas.

Furthermore the report implies that disagreement existed between the Kansas Energy Office and the three State Grain Commissions in determining the availability of monies for the study of by-products of alcohol fuel production as a cattle feed. All parties agreed on the expenditure of funds in this fashion. Legislative restrictions limited the use of these funds and the KEO did not suggest that the money could have been better utilized in other types of energy research.

**Legislative Post Audit response.** The auditors interviewed an Energy Office official concerning the grain fuels program and sent a letter to that official summarizing the content of the interview. The official signed the letter indicating agreement with its contents. The letter said:

"While the KEO believes the economic feasibility study has been quite valuable, it is less supportive of the wet stillage program. In total, the KEO believes the money provided to the grain fuels program could have been better utilized in other types of energy research."

Insofar as written priorities are concerned, the KEO feels a rigid, written set of priorities would limit the flexibility of the legislature and the agency to react to energy problems and opportunities. Additionally, it can cause un-due friction between special interest groups (i.e., coal, nuclear, oil, gas, wind, etc.). KEO believes that providing an informal set of research priorities, while continuing a broad range of research is in the best interests of the state.

**Legislative Post Audit response.** The audit does not suggest that a rigid set of research priorities be developed, but suggests that research funds be focused on projects that best serve the State's needs. A set of clear priorities with these needs in mind should be developed to ensure that the money is spent on the most useful projects. Legislative Post Audit does not agree that an "informal" set of priorities would prevent "friction

*between special interest groups." "Informal" priorities may not be conveyed to or perceived by the various groups and individuals on a consistent basis. Documented priorities can help avoid confusion and controversy because, if nothing else, there would be no question among the various groups and individuals about what those priorities are.*

### Alternatives for Administering Kansas' Energy Programs

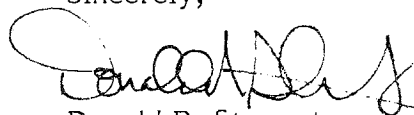
**General Remarks:** After reviewing four basic organizational arrangements possible for administering energy programs in Kansas, Legislative Post Audit recommended that: (1) the Energy Office should not be re-established; (2) the responsibility of state energy programs should be transferred to the Department of Administration; and (3) the Legislature should decide whether or not to re-establish the Energy Advisory Council. Apparently these recommendations were based on phone conversations to surrounding state energy offices and information provided by Legislative Research on the four organizational arrangements.

While Legislative Post Audit took great care to study different organizational arrangements, we believe the other organizational arrangements are worthy of consideration. For instance, the Senate Energy and Natural Resources Committee, looking at the same issues, recommended an independent agency for fiscal year 1983 and a further study of organizational alternatives.

**Legislative Post Audit response.** *The audit's recommendations were not based on the information it gathered about other states' organization of energy programs. That information was used to provide a broader perspective from which the five criteria for successful energy programs were developed. Analysis of organizational options measured against those criteria (discussed on page 44 of the report) led to the recommendation to move many of the Energy Office's functions to the Department of Administration. Given the Energy Office's ineffectiveness, this option is clearly preferable in terms of the five criteria.*

This response is made in the belief that fairness and accuracy are essential to determining an Agency's success or failure. I appreciate the opportunity to respond.

Sincerely,



Donald R. Stewart  
Acting Director

DRS/jr

**LEGISLATIVE DIVISION OF POST AUDIT  
PERFORMANCE AUDITS ISSUED**

**CONSTRUCTION**

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The Planning and Construction of New Facilities at the Board of Regents' Institutions  
(March 1977)

**COURTS**

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Analyzing the State Takeover of Salaries for District Court Personnel (February 1979)  
Court Unification in Kansas (September 1979)

**EDUCATION**

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Collecting Enrollment Fees at the Regents' Institutions (November 1977)  
The Kansas Community Junior College System:  
Part I: State Financing and Supervision (June 1978)  
Part II: The Transfer of Courses to Regents' Universities (January 1980)  
Off-Campus Education in Kansas (September 1980)  
School Districts:  
LeRoy-Gridley, Greeley County, Elwood (October 1981)  
Russell County, Spring Hill, Columbus (December 1981)  
Topeka, Wichita (January 1982)  
Summary Report—School District Performance Audits (March 1982)  
Doniphan County Education Cooperative (March 1982)

**FINANCIAL MANAGEMENT**

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Accounts Receivable Management: Establishing an Effective Credit Management  
System in Kansas (December 1976)  
Financial Regulatory Agencies and Financial Regulatory Boards (December 1979)

**HEALTH AND WELFARE**

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Selected Support Services at the University of Kansas Medical Center (January 1976)  
Controlling Medical Assistance Costs in Kansas:  
Part I: Improved Accountability Through Better Program Information and More  
Effective Budget Review (August 1977)  
Part II: Options for Containing Costs (December 1977)  
Part III: Improving Controls Over Fraud and Abuse (September 1980)  
Improving General Assistance in Kansas (January 1978)  
Physicians' Corporations at the University of Kansas Medical Center (September 1978)  
Food Service Regulatory Program (September 1979)  
Adult Care Home Regulatory Program (November 1979)  
Mental Health and Retardation Services:  
Part I: System-Wide Management (March 1981)  
Part II: Assessing Selected Aspects of Institutional Treatment (March 1982)

**ENERGY AND NATURAL RESOURCES**

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Regulating the Appropriation and Use of Water (December 1975)  
Management of Surplus State-Held Land (May 1976)  
Kansas Energy Office (March 1982)

**REGULATORY BOARDS AND COMMISSIONS**

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Boards and Commissions: Athletic, Mobile Home and Recreational Vehicle, Abstracters,  
Psychologists, Social Workers, Hearing Aid Fitters (November 1978)  
Boards and Commissions: Accountants, Barbers, Cosmetologists, Embalmers, Realtors,  
Technical Professions (Architects, Engineers, Landscape Architects), Civil Rights  
(September-December 1980)  
Kansas Corporation Commission: Office of the Securities Commissioner (August 1981); Motor  
Carrier Regulatory Program (October 1981); Mined-Land Regulatory Program (March  
1982)

**TRANSPORTATION**

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The Planning and Construction of the State Freeway System (September 1976)  
Assessing the Effectiveness of the Kansas Motor Carrier Inspection System (March 1978)  
Maintaining Kansas Highways (January 1979)