



OAPS

UNITED STATES GENERAL ACCOUNTING OFFICE  
REGIONAL OFFICE

SUITE 300-D, 2420 W. 26TH AVENUE  
DENVER, COLORADO 80211

SEP 28 1975

~~089653~~  
089653

Mr. Frank Pence  
Acting Area Director  
Bureau of Indian Affairs  
P.O. Box 8327  
Albuquerque, New Mexico 87103

Dear Mr. Pence:

As part of a nationwide review of energy conservation measures at selected departments and agencies, we reviewed the energy reduction efforts of the Bureau of Indian Affairs (BIA) Albuquerque Area. In June 1973, the President directed all Federal agencies to reduce their energy consumption by 7 percent in fiscal year 1974, and subsequently directed that additional actions be taken to reduce energy consumption even further. In October 1974 the President directed the agencies to reduce their energy consumption by 15 percent in fiscal year 1975 under that consumed in fiscal year 1973.

The purpose of our review was to determine the results achieved by the BIA Albuquerque Area energy conservation program and to identify any area where additional energy conservation may be practicable.

The three BIA schools reviewed by us in the Albuquerque Area reported reduced usage of electricity and natural gas by 15 and 19 percent respectively in fiscal year 1974 and by 17 and 28 percent during the first half of fiscal year 1975.

The reported vehicle utilization at the two schools where utilization data was available showed that the energy conservation goals were not being met. However, our tests of supporting documentation disclosed significant errors in reporting, and we do not believe that these reports can be used to determine whether the goals are being met. In our opinion the Area Director should establish a more effective system of reporting vehicle utilization data, and institute a more aggressive program to reduce vehicle utilization.

Our review was conducted in Albuquerque and Isleta, New Mexico, and included work at the Bureau of Indian Affairs Area Office, the Albuquerque Indian School (AIS), the Southwestern Indian Polytechnic Institute (SIPI), and the Isleta Day School (IDS).

~~909303~~

089653

## ENERGY CONSERVATION STATISTICS

### Electricity and natural gas

The following table shows reported consumption of electricity and natural gas at AIS, SIPI, and IDS for fiscal years 1973, 1974, and the first half of 1975.

<u>Fiscal quarter</u>	<u>Type of fuel (note a)</u>	<u>FY 1973</u>	<u>FY 1974</u>	<u>Percent reduction/increase</u>	<u>FY 1975</u>	<u>Percent reduction/increase</u>
1	Electricity	1,981,506	1,326,138	-33	1,608,118	-19
	Natural gas	23,582	15,221	-35	14,973	-37
2	Electricity	1,905,974	1,774,830	- 7	1,619,201	-15
	Natural gas	40,398	41,823	+ 4	30,797	-24
3	Electricity	1,783,226	1,591,455	-11		
	Natural gas	45,160	33,927	-25		
4	Electricity	1,858,992	1,678,353	-10		
	Natural gas	28,058	20,430	-27		
Totals	Electricity	7,529,698	6,370,776	-15		
	Natural gas	137,198	111,401	-19		
For 1/2 year	Electricity	3,887,480			3,227,319	-17
	Natural gas	63,980			45,770	-28

<sup>a</sup>Electricity is expressed in kilowatt hours and natural gas is expressed in thousand cubic feet.

### Vehicles

We did not verify the mileage data of IDS vehicles because the data was included in a consolidated report of the Southern Pueblos Agency. The following table shows the combined totals of the reported mileage by SIPI and AIS for fiscal years 1973, 1974, and the first half of 1975.

<u>Fiscal quarter</u>	<u>FY 1973 mileage</u>	<u>FY 1974 mileage</u>	<u>Percent reduction/increase</u>	<u>FY 1975 mileage</u>	<u>Percent reduction/increase</u>
1	46,241	24,559	-47	35,528	-23
2	52,769	67,735	+28	66,693	+26
3	54,802	52,223	- 5		
4	<u>43,585</u>	<u>46,318</u>	+ 6		
Year total	<u>197,397</u>	<u>190,835</u>	- 3		
1/2 year total	<u>99,010</u>			<u>102,221</u>	+ 3

A test of source documents revealed that the reported second quarter data for all 3 fiscal years were inaccurate. The second quarter data for the three fiscal years calculated by us from source documents are:

	<u>FY 1973 mileage</u>	<u>FY 1974 mileage</u>	<u>Percent increase</u>	<u>FY 1975 mileage</u>	<u>Percent increase</u>
Reported	52,769	67,735	+28	66,693	+26
Vehicle use records	<u>48,325</u>	<u>65,037</u>	+35	<u>49,889</u>	+ 3
Mileage reported in excess of mileage on available records	<u>4,444</u>	<u>2,698</u>		<u>16,804</u>	
Percent of reported mileage not supported by vehicle use records		8	4	25	

#### Energy-use information system

The BIA schools and agencies report their energy usage quarterly to the Energy Conservation Coordinator in the Area Office. He then compiles the data into an Energy Conservation Performance Report which he reviews for obvious errors. He forwards the report to the Albuquerque Central Office, which compiles performance reports of its area offices and forwards the consolidated report to BIA's Washington Office.

#### MANAGEMENT OF CONSERVATION PROGRAM

Although the Area Office had no formal conservation plan, the Acting Area Director said that the agencies have made significant improvements for the conservation of energy, and they are planning some significant

projects to conserve energy. The Area Office reviews reports received from the various agencies and questions discrepancies and lack of progress.

The Area Office has an Area Energy Conservation Coordinator and coordinators located at four schools, and seven agencies. The Area Coordinator told us he spends about 2.5 percent of his time on energy related matters. He also told us he reviews energy conservation directives and instructions received from BIA's Washington Office. He also reviews information received from agencies and schools prior to forwarding it to Washington. Although he told us he disseminates directives to agencies and schools, we observed that he had not distributed a GSA Bulletin on driving techniques to conserve fuel.

#### Energy conservation projects

The Area Office has included in its budget six projects that could result in long-term savings of energy. These projects include changes to some existing heating systems, installation of storm windows, and construction of powerlines to permit removal of generators at two locations. The Coordinator said that he expects these projects to be funded in fiscal year 1976. The estimated cost for the projects is \$445,000.

Other projects accomplished, in progress, or proposed to conserve energy, are listed below.

SIPI has

- reduced classroom corridor lights.
- installed individual controls to permit turning lights off in unoccupied areas.
- proposed to install a day-night control in the central control system which will automatically reduce temperature in buildings or building areas not in use at night.

The Southern Pueblos Agency has installed individual thermostatically controlled radiator valves on its heating system.

The Jicarilla Agency has installed storm windows on residences, and as of April 1, 1975, was installing pitched roofs on quarters to reduce heat loss.

The Mescalero Agency has insulated all noninsulated attics.

The Institute of American Indian Arts has

--installed individual radiator thermostats.

--delayed installation of outdoor lighting previously approved.

--shut down individual boilers during the warm part of the day for the fall and spring seasons.

The projects listed above indicate that BIA, both at the Area Office and in Washington, is committed to energy conservation.

#### Energy conservation training for coordinators

In March 1974, the BIA coordinators attended a 3-day course developed by management and educational consultants entitled "Energy Conservation Management Seminar." This course was directed at teaching the coordinators how to sell themselves and the energy conservation program.

The coordinators attended a BIA energy coordinator conference in Albuquerque, New Mexico, on September 10, 11, and 12, 1974. Representatives of the Federal Energy Administration, Department of the Interior, Atomic Energy Commission, Public Service Company of New Mexico, and the Southern Union Gas Company, also attended the conference.

The purpose of the conference was to acquaint the energy coordinators with the

--energy conservation techniques being practiced throughout the BIA,

--development of new sources of energy, and

--development of programs for the fiscal year 1975 Energy Conservation Program.

#### Audits by other agencies

Two of the Area's schools and an agency were audited by representatives of the Federal Executive Board, GSA, and the Federal Energy Administration, but the Area Office had not been advised of the results.

#### CONTROLS TO REDUCE VEHICLE MILEAGE

We reviewed actions to reduce vehicle mileage at the Area Office and SIPI.

Area Office officials said that

- they attempt to coordinate trips.
- with the exception of Federal directives, they leave changes in vehicle operation to the discretion of the superintendents of the various BIA facilities.
- the Area Office has only one compact vehicle and they accept any vehicle GSA issues.
- mileage reductions have been chiefly a result of budget cuts, and not energy conservation.
- the Area Office occupies space in a bank building, and BIA has no control over where employees park; consequently, they cannot assign parking spaces to encourage carpools.

SIPI officials told us that

- they have turned in vehicles because of mileage restrictions.
- they have consolidated trips.
- the department head must personally request the dispatch of a vehicle.
- they have made no effort to assign parking spaces to encourage carpooling since there are ample parking facilities.
- they have contracted a charter bus company to provide service from SIPI to downtown Albuquerque.

CONTROLS TO REDUCE ENERGY  
CONSUMED IN BUILDINGS AND  
OTHER FACILITIES

The BIA Albuquerque Area has many different types of schools. We visited three schools which we believe represent a cross section of the Area's schools. The first school visited was AIS. This school dates from the last century and has a mixture of old brick and relatively new temporary, single classroom metal buildings. Some of the brick buildings are not used, and are scheduled to be torn down. The utilities to these buildings have been turned off. Some of the new buildings have no thermostats, and, consequently, the heat cannot be automatically regulated.

It appears that it is very difficult to regulate the heat in this school because of the age of some of its buildings and the temporary nature of the others.

The coordinator at SIPI told us that the buildings were constructed in 1969, but were not designed to conserve energy. As an example, all the lights in each building must be turned on if lights in only one room are needed.

There are six schools in the Southern Pueblos Agency, and one energy coordinator for the six schools. The coordinator said that this job is a subfunction for him, and that he does not make special trips to the schools to ascertain that energy conservation measures are followed. He also said that the principals and teachers need more training to improve energy conservation.

We visited IDS and observed that most thermostats were set at 68° F. Some of the new buildings were individually heated but the older, main buildings had recently been converted to central heating.

IMPACT OF ENERGY CONSUMPTION  
ON MISSION AND TRAINING OPERATIONS

We were told that mission and training operations at the BIA Albuquerque Area have not been modified to conserve energy; however, there is better planning because of travel restrictions. There have been no formal studies to determine if the mission can be reduced without adverse effects, but there have been discussions related to contracting part of the mission functions.

The Acting Director told us that there are social and political considerations that may well take precedence over those matters which he might consider energy conservation measures. The Area Coordinator provided an example of a management attempt to consolidate certain education functions. He told us the attempt was not successful because of social and political pressures.

- - - -

We appreciate the cooperation received from your staff. We will be glad to discuss the results of our work with you or your staff if you desire.

Sincerely yours,

IRWIN M. D'ADDARIO

Irwin M. D'Addario  
Regional Manager