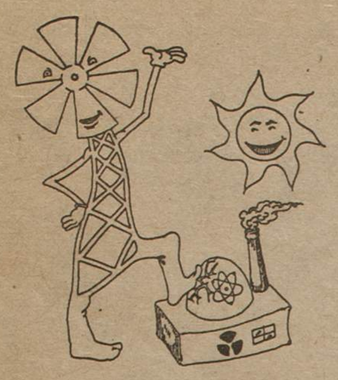
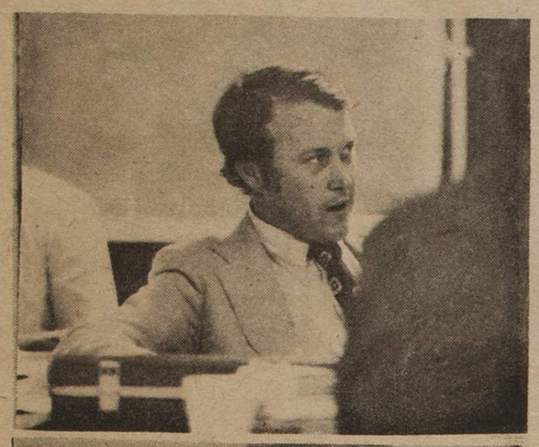


People's Energy Project

POWER FOR PEOPLE, NOT PROFIT!

VOLUME III, No. 8 DECEMBER, 1977



Rep. Don Mainey
Rep. Bob Miller
Sen. Arnold Berman
Ramon Powers, Leg. Research

BY PAUL JOHNSON

Kansas has an excellent chance to hold down electric rates by learning from the mistakes of other utilities and states. President Carter has wanted to mandate such electric rate reforms from the national level but the states, and especially the private utilities, have argued for their own autonomy. Well, it looks like the states will get their wish to keep deciding their own electric energy policy. With such continued freedom, Kansas can initiate reforms which will hold down costs, reestablish rates for our new energy era, and generally refine what levels of profit will be in sales of electricity.

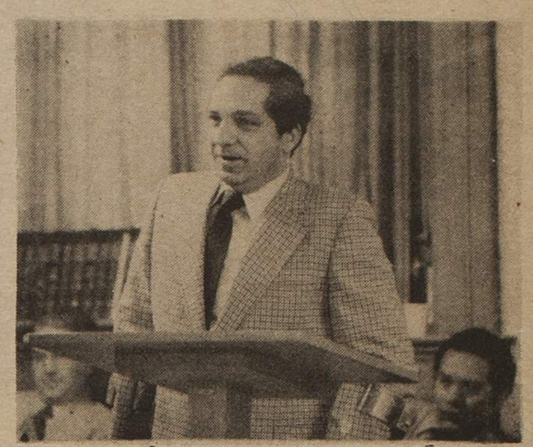
The accompanying photos are from the Kansas Legislative Interim Energy Committee hearing on rate reform held September 21 and 22. In that hearing, the conferees were told of inefficiencies that Kansas actually encourages in its rate making formula for utilities. These inefficiencies stem from an antiquated rate making formula not useful for our new energy era. The first major difficulty is the simple fact that the more a utilitiy spends in building power plants, the more profit they are allowed to make. The second major difficulty stems from the same pork barrel philosophy that our defense contractors used in their cost plus overrun agreements with Uncle Sam. The fact that our electric rates are based on paying off very cheap, older power plants without realizing the much higher costs to replace those plants with new ones. Today our new plants cost at least four times what the present plants did.

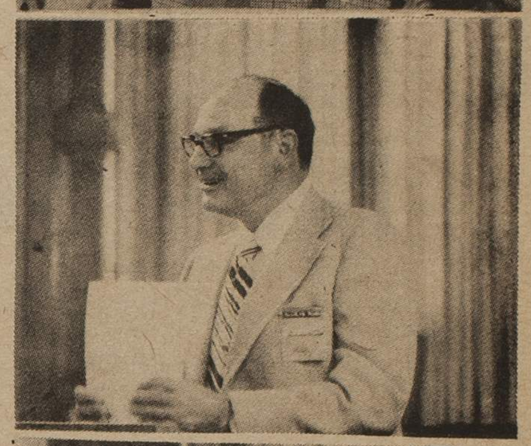
Utilities' revenue requirements and thus profit are figured as a fixed percentage of their hardware (power plants). The incentive is quite clear for them to add power plants as quickly as possible. Since no state agency has had any control over such expansion, the electric utility industry has had a blank check to grow.

The best speaker in that hearing, Professor John Nordine of Kansas State University, spoke of the need to get fuller use of the present plants. By doing this we could hold the line on expansion. He proposed doing this in a well researched presentation on "time-of use" pricing. This pricing scheme recognizes that power bought at times of maximum demand on the system is more expensive than power bought at times when the demand is low. This comes about for two reasons. First, at top demand, the utilities turn on special peaking turbines which use so much more fuel than their steam/turbine baseload plants like Lawrence. Secondly, utilities build expensive new plants to handle those rare occasions of peak demands while average day-to-day demand seldom requires full utilization of present plants. If power usage is shifted from the peak times, then the need to expand is slowed considerably. Since we have no control over more costly fuel contracts, the only real area of savings comes when we build fewer plants.

Wisconsin has initiated such rates for industrial and commercial customers so that for peak power the customer pays three times as much as off-peak power. With all the hoopla in Washington DC over such proposed rates, the electric utility industry is under pressure to consider such options.

As we use up old power plants and have to replace them, our electric rates should inform us of the higher costs. This then gives the public an opportunity to hold down their electrical needs if possible and thus slow down the expansion. No one likes higher energy bills but that is not the choice. Fuel and power plant construction costs are skyrocketing and there is little we can do about that economic fact. The question is one of paying the full bill now or waiting for the bombshell. Greater usage of the present plants via "time-of-use" pricing is really the only control we have over our electric bill.





G.T. Vanbebber,KCC
Charles Roth, Pres.-REC's
William Brown, KPL
Prof. John Nordine, KSU

WINTER VEGETABLES

BY JESS DEBOER
FROM FREE ENVIRONMENT NEWSBRIEFS

IOWA CITY--Lettuce, spinach and radishes will soon be growing in the solar greenhouse at the Senior Citizens Center, 538 S. Gilbert, according to Karl Scholten, a University of Iowa sociology student and coordinator of the project for the Iowa Public Interest Research Group.

It'll be mostly experimental this year, to see what works best, he said.

The $1,850 cost of the 12-foot by 16-foot greenhouse was paid by the Hawkeye Area Community Action Project and the University of Iowa School of Social Work.

The outside shell of the building was put up this summer by seven teenagers supervised by two adult carpenters, working for the Comprehensive Employment and Training Act (CETA.)

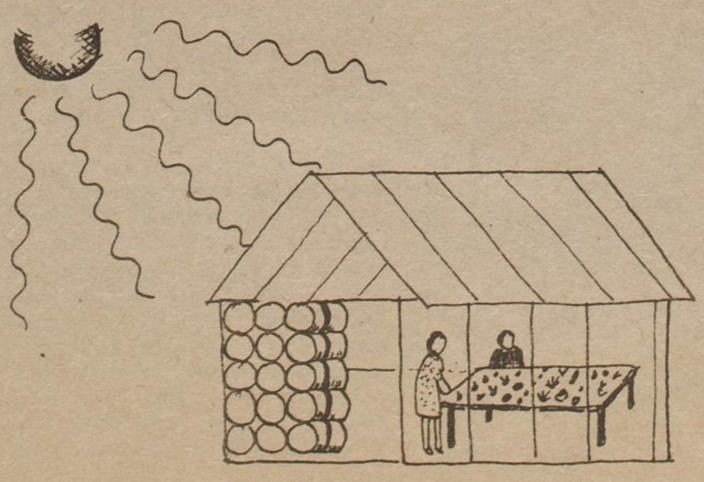
In the fall the Iowa Public Interest Research Group took over supervision of the project. IPERG became involved in the greenhouse to prove that practical use of solar energy is possible, Scholten said.

Sunlight through the 11-foot by 16-foot translucent roof and the 4-foot by 16-foot translucent wall will warm the greenhouse and the 18 55-gallon drums of water, said Bob Singerman, who also worked on the project.

The building is heavily insulated to hold the heat collected in the water barrels, Singerman said. Hinged, insulated panels are closed to cover the translucent wall area at night to prevent heat loss. Greenhouses with a similar design have been built in Colorado and Nebraska.

The greenhouse should stay at 55 degrees even with three consecutive cloudy days, Singerman said.

The greenhouse has to be opened promptly every morning and closed at night, Singerman said. Opening a couple of hours late during the winter might mean it would freeze the next night, because it didn't have time to store up enough heat.



"I think it's a lot of work," he said. "But if the greenhouse were close to where you lived it wouldn't be so bad,"

Passive solar collection systems, that operate without pumps or other mechanical aids, are the combination of hundreds of little things done right, Singerman said.

The depth of the foundation might make a difference, he said. This greenhouse has a foundation two feet deep and it might have been better to go four feet deep, well below the frost line, he said.

This greenhouse should operate 10 months a year and if everything works it could operate all year.

Several older persons will supervise the operation of the greenhouse and Scholten is trying to involve other people in the daily operation.

Food grown in the greenhouse will go to the congregate meals in the Senior Citizens Center and if production is large enough, some might be sold to make the project self-supporting, Singerman said.