is the option of simply bringing everything to a grinding halt.

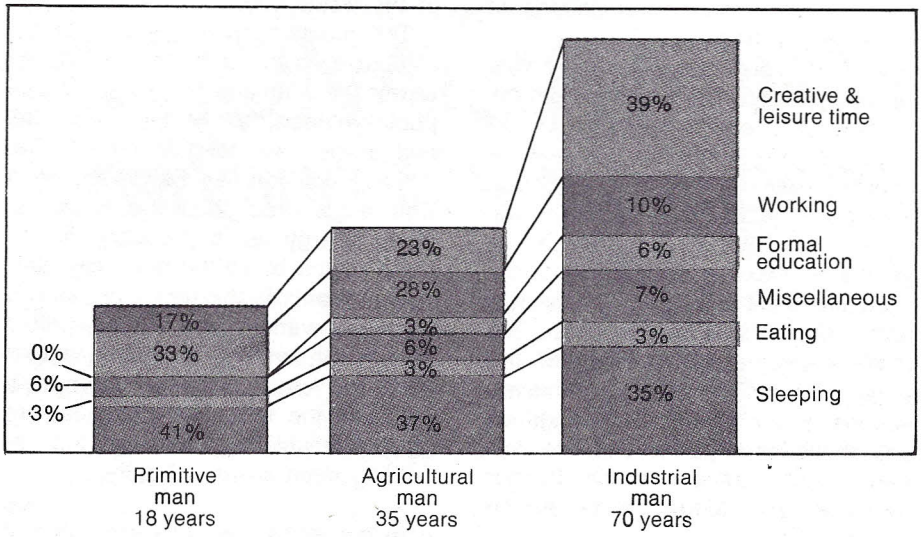
Of course, the option simply does not exist. The steady increase in world population will steadily increase the demand for energy, and somehow or other we must find a way to meet it.

It is essential for all the players in this enormous drama to have a clear understanding of their individual roles. The utility industry's part is relatively easy to state. It is simply to strive to meet consumer demand at the lowest possible cost and with acceptable environmental impact. It must share, with government and others, the task of seeing that people learn how to use electricity more efficiently.

The consumers' role is in many ways the most vital one. How well the transition goes between the fuel epochs will depend largely on their performance. Since they are the users of electricity, they are the only ones that can make the term "more efficient use" mean something. They must make it a way of life, and they must encourage their neighbors to do the same. They must support and encourage research and development that will lead to new and improved conversion technologies. But most importantly, they must take their position seriously—as seriously as they expect the government and the utility companies to take theirs.

Neither of these roles will be as easy in the performing as in the identification. What makes the roles worth the playing, however, is the promise at the drama's end: the discovery that things need not come to a grinding halt, and that a new, more abundant epoch will follow the old. The thrill will be in finding that there is indeed something beyond the high electric bills.

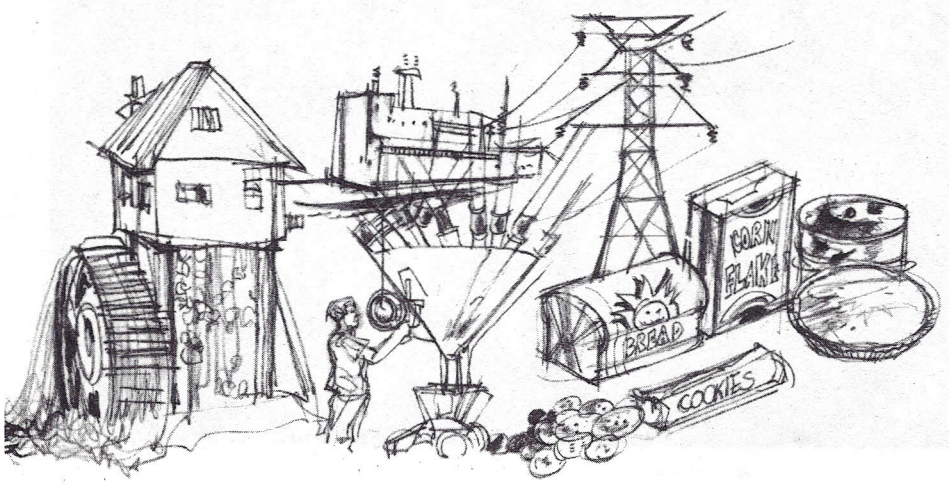
HOW MAN HAS SPENT HIS TIME



It may not be easy for consumers to accept something as abstruse as a "transitional storm" as the real cause of high electric bills. The storm doesn't send the bills, the utility companies do. And the logical inclination, therefore, is to look to this immediate source of the pain for relief.

But the utility companies can do only so much. Their essential function is to convert raw fuel into useful energy, and if the available fuels run low in supply or high in cost, their options become those of the people they serve.

The inescapable fact is that significant relief from high electric costs can be hoped for only when something is done about the storm itself. The encouraging thing, not yet fully perceived by the public, is that something *can* be done about the storm.



Energy in the new epoch

There are some things we already know about the transition to the new energy epoch. We know that we will move into it with increased dependence upon power generated from coal, the one fossil-fuel we have in relative abundance. By the most conservative estimates, coal reserves in the United States are sufficient to last another 250 or 300 years, a fact we must be grateful for.

We also know that with the conversion technology called fission, we can extract as much energy from one pound of uranium as we can from 15 carloads of coal. A new technology—the "fast breeder"—will make it possible to multiply that yield forty times.

And we are just beginning to learn about things like solar energy, geothermal energy and fusion. Fusion (which, as the name implies, is the opposite of fission) is the conversion technology that takes energy from deuterium. It has been estimated that there is enough deuterium in the world's oceans to meet all of mankind's energy needs at present rates of consumption for 500 *billion* years.

Interestingly, there is only one two-hundredths of an ounce of deuterium