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FOOD RETAILING

by Gordon W. Zahn H. E. Butt Grocery Company Corpus Christi, Texas

In February of this year Dr. John J. McKetta, E. P. Schoch Professor of Chemical Engineering, at the University of Texas, gave a speech in Houston to the Electrical Trades Industry's Show, and in that speech he said he was told by the master of ceremonies that he could tell one joke - the joke he told went like this: "The Federal Government will solve your energy problem." I do not repeat this out of disrespect for Mr. Rappaport and his Department in the Federal Energy Administration, but it does relate to some of the things that have been said earlier today.

Because of the high cost of energy in all walks of life today and in the future, conservation practices are most frequently initiated by economics, and for economics, rather than a genuine "cause for concern" over shortages of fuels.

Many of us face extremely high operating costs and product cost increases due to the rapidly increasing need for energy to meet requirements for the production of goods and the operations of business and industry. Our best efforts at the present time, will be used largely in maintaining our present level of expenditure for energy consumption rather than achieving a reduction in dollars. Electric utility rates in our operating area have increased 13% since October of last year, and our rate of savings, in our efforts to reduce KWH consumption, have not produced a consistant percentage reduction equal to that figure. The reduction of dollars spent will have to come from achieving KWH savings in excess of the average rate increases. This is true because of the diminishing rate structure used by the utility companies. Our cost of KWH in the higher consumption brackets is approximately 60% of our average cost. This means savings are realized at the same 60% - unless we can affect the rate bracket by reducing consumption significantly.

All of the figures quoted include fuel cost pass through and electric consumption charges.

I thought I would show you something about H.E.B. first - for those of you not familiar with our operations - and then go into some of the conservation endeavors we are undertaking.

H. E. Butt Grocery Company operates 143 supermarkets in Texas (and only in Texas). At 10:00 tomorrow morning, we are opening our 33rd store here in San Antonio on Lockhill - Selma and 77 W. Military Drive.

We operate bread and pastry bakeries in San Antonio and Corpus Christi, a Park Products Manufacturing Plant in Corpus Christi, packing 30 products under such labels as H.E.B., Royal Maid, Park Manor, Village Park and Silvex. This plant also packs about 75 jumbo cars of oil for Saudi Arabia - cooking oil that is.

Our ice cream plant also in Corpus Christi, packs some 50 flavors and grades of ice cream and frozen desserts.

We have just opened an ultra modern milk and dairy products processing plant here in San Antonio. This plant has at this time the distinction of being the most modern plant of its kind in the nation. It is fully automated from unloading at the receiving area to the selection of cases for loading on our delivery trucks.

A modern meat processing plant is planned for completion in 1978 and will be located at the site of the milk plant in San Antonio.

H.E.B. operates it's own warehouses and distribution centers - a 480,000 sq. ft. center in San Antonio, plus 34,000 sq. ft. for storage of frozen food and 47,000 sq. ft. for distribution and storage of produce for the stores. This facility also includes a 30,000 sq. ft. perishables distribution center for deli meat items and cheese. Corpus Christi is the site of a 142,000 sq. ft. dry storage warehouse and Harlingen has 50,000 sq. ft. of dry grocery storage.

H.E.B. operates the H.E.B. Construction Company and other support groups such as garages, fixture and equipment shops, our refrigeration and maintenance divisions and the H.E.B. Properties Company. The landlord for several company owned shopping centers and commercial buildings.

Energy conservation programs at H.E.B. pass through two different committees before final approval from the corporate operating committee. A brief review of some of the things we are doing and then I'll let Paul Adams say a few words about how energy is used in supermarkets.

The Energy Awareness Program involves people - it is the promotion of energy conservation at the people level and is a reminder campaign. We use graphics in all stores, warehouses, plants, offices, and support group facilities to help remind people of their responsibility to energy conservation. Our employee magazine supports this program on a quarterly basis and employee suggestions are encouraged and printed in the publication. Awards and other incentives are planned to add greater emphases to this campaign.

In December of last year we installed our IBM System/7 computer in the San Antonio Distribution Center. We later added one store to the program and are now in the process of planning to add 4 to 6 stores per year.

We are using the IBM software program for power management called Rich's I.U.P. for Department Stores. We could not utilize the potential of the System/7, however, without customizing the software to fit our particular needs - we did some things in the first store we will not do in the additional stores, and we will hopefully improve our results and reduce our costs per store for installation.

Our plans at this time are to change support hardware on our future installations. The IBM Power Management II program is a program developed for supermarkets and it will still be customized to our requirements - making it a far more superior program than what we now have. Support hardware will be changed - pending final approval from F&M Systems Equipment to the Dorado equipment - thereby reducing our costs and increasing our program capabilities. The System/7 is controlling devices in both our warehouse and our stores such as: refrigeration compressors and motors, air conditioning compressors, air handler units, forced air gas heaters, radiant heaters, parking lot lighting and perimeter lighting, outside signs, interior lighting during night stocking hours. The "Seven" is also monitoring demand defrost conditions in low temperature cases, doing other duty cycling and is controlling peak demand KW by pre-set target.

The System/7 provides a printout every 15 minutes of the KWH consumption for each location and prints other data as designated by the programs. We have not attempted to control interior store lighting in the sales area of stores during daytime hours due to some opinion differences among management. We are attempting now to establish foot-candle levels we think everyone will agree with and proceed from there.

Mel Anstine has initiated and installed a program for demand defrost in all of our stores using open display frozen food cases. The Altech Senzor used in these cases is shown here and it operates on the density of frost on the coil. It is 100% solid state, easy to install, and is completely independent in its operation. The number of defrosts recommended by the manufacturer have been reduced by up to 75% in some San Antonio stores. The cases on which these units are installed use a booster heater for fast defrosting. The KW of this heater is about 1.32 or slightly over 13,000 watts. You can tell from this, that as defrosts are eliminated, KWH is saved. We have projected savings in excess of \$200.00 per month from these units.
