



Energy Conservation

Utilizing Better Engineering . . .

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Despite incredible complexity, natural gas distributors are developing various ways to improve the present fuel supply imbalance. Unfortunately, the struggle to define the role of marketing in today's utility business is not receiving the same degree of awareness or concentration. As in all serious problems, there are many aspects to this situation.

The differences among service areas in the gas industry make a singular marketing posture extremely difficult if not impossible. In past utility parlance, marketing has been synonymous with selling, but in today's climate, selling is not number one on the average utility's priority list. In fact, gas industry marketing is being subjected to internal and external pressures while the marketplace itself is undergoing dramatic changes.

One such significant change is reflected in the gas industry's recommendations for conservation of its product—at first glance, apparently a complete contradiction of the vigorous sell-every-application efforts of the past. However, an enlightened insight into the short term energy supply fore-

cast will disclose the mutual benefits of the efficient use of gas.

Those gas industry managements who are determined to find the proper role for marketing in these changing times are discovering that there are ways to accommodate their own company plans, as well as the wants and needs of their customers and at the same time, pursue these goals within the constraints imposed by state regulatory bodies. Several gas companies have discovered that the Ecube energy analysis program supports present-day marketing efforts.

The Ecube program is a thorough, yet simplified, multi-part program for estimating the hour-by-hour energy requirements of a commercial or industrial structure. Ecube is also designed to find the resulting energy that would be consumed by each piece of equipment and to compare the economic attractiveness of various systems.

The estimate of hourly load requirements involves a newly-developed technique whereby the peak values of the thermal load components (internal,

solar, transmission, and fresh air) are supplied as inputs. The program uses characteristic behavior patterns for each component (typical operational profiles, solar percentage variation tables, and hourly ambient temperature variations) to distribute the peaks over the course of an entire year to calculate and total the hour-by-hour thermal loads.

The energy consumption of each piece of equipment in each system being considered is found by simulating equipment response to these hourly load requirements. The systems are then compared to each other to evaluate the relative economic merit of increased first cost versus reduced operating cost.

An agreement with CYBERNET Services of Control Data Corporation provides access to Ecube through any one of its national network of user terminals.

In 1965 the Group to Advance Total Energy developed the first computerized energy analysis program in the country. The Ecube program is the first

The practical utility of Ecube is illustrated in its capability to:

1. Perform an energy and financial service to the nation's energy users incorporating the best available techniques for evaluating the energy-use alternatives.
2. Serve as the gas industry resource base for information, education and technology in energy-use and financial analysis.
3. Demonstrate the gas industry's stewardship by assisting energy users to make decisions consistent with conservation and pollution objectives.

and utility bills. This fuel conservation alone, as a percentage of the nation's fuel consumption, may be almost insignificant.

However, add it to industrial conservation, to commercial conservation, and to a material reduction in the use of such fuels as gasoline and the savings become a real factor. At the very least they help make the shortage more manageable and buy time to stave off more unpalatable steps while new sources of energy are sought.

The public education effort which produces national awareness of the need to conserve fuels, therefore, is of twofold importance to the gas industry. It contributes to interim easing of the shortage, while developing a national awareness of the need for and acceptance of positive, long-term solutions.

There may still be some in the energy industries who fear that shortage-induced conservation of fuels will become a national habit and that we are compounding our marketing problems of the future. We now use more than twice the energy we did 22 years ago but only 60% as much as we will need a dozen years from now. Our energy consumption increases three times faster than our population growth. Considering these facts, one is prompted to ask whether there will ever be a time again when energy is a surplus commodity. Certainly not in the foreseeable future. As Hollis M. Dole, former Assistant Secretary of Interior for Mineral Resources, has said, "America's energy binge is over."

The problems of today and the future call for new thinking, new programs. For communicators in the gas industry this means a high priority for conservation programs. And since all sources of energy are so closely related scientifically and economically, dividends will flow to the gas industry if it broadens its communications programs in this regard to encompass the full range of fuels.

Third-party endorsement

Important as the first two priorities are, it is the third in the list which requires immediate and very serious attention. Public relations men need not be reminded of the value of third-party endorsement. It is a highly useful, valid and totally ethical technique which, when utilized properly, is most effective.

If this nation is to have the energy it requires, both government and industry must have public understanding and support for the actions which will have to be taken in the period ahead. In other periods, when government has needed to turn public opinion around to permit a major new direction in policy, government and concerned private organizations mounted crash public support programs. That was the case in 1962 when President Kennedy converted the United States from a high tariff to a free trade nation. The job was done by getting third-party endorsement.

Today, government has not yet started a public support effort on energy. Energy interests certainly have, but they appear to have forgotten a basic tenet of public relations: that credibility is best won through third-party endorsement. What has been the result of industry's failure to get third-party endorsement?

In an important optional pricing case now before the courts, the Consumers Union, with about 350,000 members, intervened in Federal Power Commission hearings. It said it was intervening to permit consumers to be directly represented in a matter of "enormous importance to the economic interest of national gas consumers."

In this case, the petitioners sought permission to sell new gas interstate under the new optional pricing method. The offshore Louisiana gas involved brings 65 cents a thousand cubic feet intrastate; the interstate ceiling is 26 cents. The companies petitioning asked 45 cents to bring the gas out of Louisiana to the broader consuming public. The 45 cents is roughly one-half of the cost of importing liquefied natural gas and one-third the price of synthetic. Consumers Union opposed the 45-cent petition.

And the Senate Commerce Committee is told by a member of the House, in testimony on the nomination of an appointee to the Federal Power Commission, that doubt regarding the nominee's objectivity "is shared by the energy consumers of America."

This raises the serious question: Who speaks for energy users? Are they truly represented by Consumers Union? What about American industries as energy users—the firms which produce all that we as a nation manufacture, use and sell; the firms which employ

the vast majority of our American work force; all of the commercial firms, including the service industries, the transportation industry, the retail industry. And, of course, the home owners of the nation. Does Consumers Union speak for these groups?

The fact is that *all* energy users should be heard today on the entire range of issues posed by the energy dilemma: industry and homeowners as well as consumers. These are the voices which should be providing the third-party endorsement. But has anyone heard them?

It is doubtful that these voices will be heard unless either government or the energy industries call in some of our major users and ask them to organize and be heard if they want continued adequate supplies of fuel of all kinds.

Public awareness

There are some steps in the right direction. General Motors has created a new executive position, energy coordinator. The National Association of Food Chains has distributed a 16-page memorandum to its members warning of the threat of energy shortages which could affect deliveries, warehousing, heating, lighting, etc., in the nation's supermarkets.

And when FPC recently proposed priorities for curtailment of natural gas supplies as the shortage worsens, it suddenly heard from some more of the real consumers: The Fertilizer Institute, whose members process 80% of the nation's fertilizers; Wilson and Company, meat packers; the American Textile Manufacturers Institute; electric companies; Western Washington State College, which needs gas to heat its dormitories; and a company in Waukesha, Wisconsin, which said that if its gas supply is curtailed it won't be able to produce the equipment needed to drill for and process gas.

These are our gas industry public relations priorities. That our industry interests and the public interest coincide makes our job easier. But the tasks faced now and in the foreseeable future will require all of its skills. It must also draw upon the wisdom and foresight of government and industry leaders, and convince them of the need to support the public relations effort with the same fortitude and determination with which they attack all other major aspects of the energy thicket. ■

Gas Industry Public Relations Priorities

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Editor's Note: In an address to the 1973 A.G.A.-INGAA Public Relations Workshop, the author counseled that public understanding and support is the foundation upon which the entire complex edifice of energy sufficiency must be built. He went on to list and discuss the industry's public relations priorities. His discussion is the basis of this article.

Dr. H. Guyford Stever, director of the National Science Foundation, noted in a recent speech that the energy situation often is referred to as the "energy crisis." However, he said, the subject is so complex, has so many technological, environmental, economic, social, and international ramifications that he preferred to call it the "energy thicket."

The gas industry today is in the middle of this thicket, undoubtedly, in the densest part of it. How and when it gets out will depend, as Dr. Stever suggested, on its success in meeting and mastering several key problems: the technological problems and opportunities; the environmental problems which seem to acquire new and greater dimensions almost by geometric progression from month to month; the economic problems; the social problems; and the international ramifications with oil and gas caught up in the mad, swirling sands of Middle Eastern politics and East-West political one-upmanship.

In this situation, physical, social and political scientists, engineers, economists, and communicators have an important role. None can be excluded from what must be a team effort. For as certain as it is that scientific, economic, and political solutions are necessary, it is now abundantly clear

that public understanding and support is the foundation upon which the entire complex edifice of energy sufficiency must be built.

What are the priorities?

First on the list must be the continuing effort to impress and re-impress upon public and government the superior qualities of gas as a fuel, and therefore the need to accept and adopt those policies which will increase gas supply. In this endeavor, properly executed, the gas industry, without the normal marketing effort, will keep before the public the product attributes which are the starting points for all marketing.

Second, because of the extent to which it lends validity to the first priority and contributes to interim easing of the shortage, there must be continuing effort to encourage fuel economy.

Third, also an important priority and one which has been too long neglected, is the need to enlist classic communications techniques to develop and bring into play third-party endorsement.

Fourth is a job which desperately needs attention. I refer to the need to build public understanding and support for mining policies which will provide coal in the vast amounts required for gasification. This point, which could be considered part of the number one priority, is singled out for separate attention because of its obvious importance to future gas supply.

Fifth is the continuing need to remain alert and address ourselves to newly emerging environmental challenges such as that which was recently brought into question the health effects of carbon monoxide pollution in homes.

Sixth, to round out a full half-dozen,

should be careful attention to detailed planning and execution of public understanding programs when the industry is preparing to announce new projects to augment pipeline supply. Sad experience has shown the uninformed reflex opposition—resulting from the company's failure to anticipate and then moderate the reaction of community and environmental activists to new projects—can deny a company and the public the benefit of vital new sources of supplemental gas.

Anyone who observes the changing tides of public opinion and the reactions to major national issues must acknowledge that today the public generally accepts and recognizes two facts central to the gas industry's message. One is that gas is the cleanest burning of fuels. The other is that the shortage is real.

It was not always thus. It is a tribute to the communications job that has been done that the tide of understanding has turned in the industry's favor. The greatest factor in this success in this regard has been the decision to mount an all-out fuel economy campaign and to enlist the government and public interest groups in that effort.

While there is no agreement on the percentage of fuel consumption which can be conserved as a result of this effort, and certainly conservation alone cannot eliminate the energy problem, experts agree that this is part of the solution.

Conservation as a solution

A Rand Corporation study in California has estimated that better insulation in new housing could cut heating and cooling requirements by 40% to 50%, and that the extra construction costs could be amortized in four to seven years through reduced fuel

Still another explains a company program pioneered by Peoples Gas through which high school students, primarily black and Spanish, are employed to deliver bills after school and during summer months. The money they earn enables them to stay in school and to get a start in the business world.

Subjects of other ads include: steps the company is taking to prevent environmental pollution in its own operations; an educational program enabling employees to earn high school equivalency certificates; and employee participation in a medical research program which has yielded valuable data over the years to doctors studying heart disease.

Ideas for new ads are generated continuously as new company programs are introduced. For example, when Peoples Gas Light's home economics department began making cooking demonstrations and recipes available in Spanish, that program became the subject of an ad.

Sometimes ideas come from unusual sources. At the company's annual meeting, a stockholder made complimentary remarks about the work of two Peoples Gas servicemen who responded to a call for assistance when his furnace went out on a cold night. With the stockholder's permission, his remarks were incorporated in an ad saluting company service personnel.

A number of the ads highlight volunteer activities of Peoples Gas employees outside the company. One ad describes how a woman employee has participated in a counseling and education program for unwed mothers; another recognizes a company man who advises and helps young people put on probation by local courts.

These and other print ads have appeared since 1971 in Chicago daily papers and in community and ethnic publications, particularly those circulating in the black and Spanish communities. Ads appearing in Spanish publications are, of course, in Spanish.

In addition to the print series, television spots carrying social responsibility themes have been prepared for use on major Chicago stations as well as on stations featuring ethnic programming.

In one 30-second spot, a local banker explains how Peoples Gas makes substantial deposits in minority-

owned banks, thus helping to fund building programs in the inner city.

Another spot, filmed on location in a Chicago high school, shows a Peoples Gas employee encouraging students to stay in school, a role he actually plays as a participant in the city's Youth Motivation Program.

A third shows a Peoples Gas mechanic testing a company vehicle for harmful exhaust emissions in an air pollution prevention effort.

Radio is the newest medium to be used in the social responsibility campaign. Peoples Gas and a prominent black-owned insurance company are now cosponsoring a weekly talk-show on a leading black-oriented radio station. The show's panel moderator and his guests discuss topics of interest to the black community, and the intervening Peoples Gas commercials carry themes similar to the print and television messages described above.

Foote, Cone and Belding, the Chicago utility's advertising agency, prepares most of the Peoples Gas social responsibility advertising. However, the company also employs a local black public relations counseling firm and a local Spanish-speaking advertising agency to provide an objective viewpoint and to carry out various corollary services.

Response to the advertising series has been highly favorable. A research study consisting of 640 interviews in the black and Spanish communities, conducted about a year after the advertising was launched, showed a high recognition rate: about 56% of those in the black community and 20% in the Spanish reported having seen the ads. And 65% of the blacks and 82% of the Spanish-speaking persons who had seen the ads expressed favorable reactions to their themes.

When asked what they thought the purpose of the ads was, both groups responded: first, to show concern about people, and, second, to show there are equal employment opportunities at Peoples Gas. Both groups also said that the ads were sincere and easy to understand.

Anthony B. Young, manager of advertising at Peoples Gas, believes that the ad series is doing a good job of communicating to the public the company's sense of responsibility to the community. In addition, he relates: "Since the start of the series, we have received numerous requests for re-

prints of the ads from individuals who wanted to learn more about the programs mentioned in the copy. We as a company can't solve the enormous problems of an urban community all by ourselves, but we can do our share. And if we can act as a catalyst to encourage others to help, an even better job will result."

Peoples Gas plans to continue the social responsibility advertising as long as the ads prove to have an impact on the community.

Peoples Gas Light, Chicago distribution subsidiary in the Peoples Gas system, has a long history of participation in community programs designed to help solve social, educational, economic, health, and environmental problems. And the company had long sought a way to tell that story to the public.

The opportunity came in 1970 when the emerging nationwide gas shortage prompted Peoples Gas Light and other companies in the Peoples Gas system to begin limiting service to new customers. Recognizing that it was not appropriate to build demand for more gas when the company could not provide service to those who were already seeking it, Peoples Gas Light eliminated all advertising designed to stimulate additional use of gas.

In place of load-building ads, three new campaigns were developed to meet the company's changing communications objectives. The first was the social responsibility series. The other two were: a corporate financial campaign, to run in business publications and build awareness of Peoples Gas as an investment medium; and a series of ads on the gas shortage, explaining its origins and describing how the company is seeking to secure new sources of gas. The supply series has since been shifted to a conservation theme, advising customers on how they can cut down on the use of gas and thus reduce their heating bills.

Peoples Gas management does not regard the social responsibility advertising series as an altruistic effort. Rather, it reflects the company's conviction that its long-range survival will depend upon the economic viability of Chicago's neighborhoods and communities and the extent to which a continuous upgrading process takes place in all parts of the city.

In other words, "We're all in this together."