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# North Carolina's Energy Future?

# N.C. Center for Public Policy Research

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A non-profit, non-partisan organization, the Center was formed in 1977 by a diverse group of private citizens "for the purposes of gathering, analyzing and disseminating information concerning North Carolina's institutions of government." It is guided by a self-electing Board of Directors, and has some 600 individual and corporate members across the state. The Center's staff of associate directors, fellows, and interns includes various scholars, students, journalists, and professionals from around the state. Several advisory boards provide members of the staff with expert guidance in specific fields such as education, publications, and fund raising. The Center is forbidden by law from lobbying or otherwise attempting to influence directly the passage of legislation.

Center projects include the issuance of special reports on major policy questions; the publication of a periodic magazine called N.C. Insight; the production of forums, seminars, and television documentaries; the maintenance of a speakers bureau; and the regular participation of members of the staff and the board in public affairs programs around the state. An attempt is made in the various projects undertaken by the Center to synthesize the integrity of scholarly research with the readibility of good journalism. Each Center publication represents an effort to amplify conflicting views on the subject under study and to reach conclusions based on a sound rationalization of these competing ideas. Whenever possible, Center publications advance recommendations for changes in government policies and practices that would seem, based on our research, to hold promise for the improvement of government service to the people of North Carolina.

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# A Word From The Editor

During the past decade the energy "future" has become an expensive and uncomfortable reality in the home, on the highway, and in the minds of every serious policy-maker as well as every ordinary citizen. In 1974, most Americans engaged in their first gas-line skirmishes, but by 1979 the whole nation faced an energy crisis called the "moral equivalent of war." The nuclear accident at Three Mile Island along with spiraling OPEC oil prices shocked the country into a full-fledged examination of the way it uses energy.

In North Carolina, this inquiry has taken many forms. The Legislature established a study commission to consider how alternative fuels like gasohol might have wide application for the state's farmers and motorists. The state's Energy Division became more active in home conservation projects and in delivering energy information to citizens. Governor Hunt planned an emergency response system in case of a nuclear accident.

These diverse efforts had a common theme: North Carolinians have an uncertain energy future. "We're not sure what to do about it," the officials seemed to be saying, "but let's at least start trying some things."

Energy policy is in its infancy. The federal Department of Energy only reached cabinet status in this administration. The state Energy Division began operating just five years ago. The state's traditional energy regulator — the Utilities Commission — has only recently incorporated conservation considerations and alternative fuel possibilities into its ongoing regulatory function.

Through this issue of *N.C. Insight*, the Center for Public Policy Research hopes to introduce some of the primary energy policy considerations now under discussion in North Carolina. While practically every North Carolinian has taken notice of his or her fuel bills and many have debated the merits of nuclear power with a friend or even in a public forum, very few people understand the power or the function of state energy officials.

The new popularity of decentralized energy systems such as wood stoves and hydroelectric co-ops reflects a North Carolina tradition rekindled. As late as 1900, the state was basically energy independent. "Families fueled their homes with wood and sun," writes Gary Gumz, president of the N.C. Coalition for Renewable Energy Resources, in his discussion of future fuel alternatives, "while factories powered their looms by harnessing the flow of water." By 1970, however, centralized power generation and distribution had made local sources too expensive and, in most cases, obsolete.

But what made centralized power systems a blessing

in the past — reliance on fossil fuels — has lately created uncertainties about the future. North Carolina gets 37 percent of its electricity from nuclear reactors, a dependence that will climb to 50 percent before 1990 if all the nuclear plants currently under construction are approved for operation. This state ranks 12th in industrial energy use, and its large agricultural economy depends upon conventional fuels for curing tobacco and transporting crops.

"We need to use more alternatives," says everyone from the Governor to utility company executives to conservationists. Our lead articles focus on this shifting attention to alternatives, examining how the state might facilitate their use through an Alternative Energy Corporation and profiling alternatives from solar tobacco barns to home-brewed alcohol for internal combustion engines.

Despite this growing interest in alternatives, North Carolinians will for years to come be dependent on fossil fuels — including foreign reserves — for much of our energy needs. As global politics complicates this fuel dependence, the federal government will be playing a larger role in regulating our energy. In another article, former state Energy Director Brian Flattery shares his experience in administering one federally regulated program, the "set-aside" of gasoline and oil for emergency periods.

As government takes a more active role in energy questions, citizens will need to take a closer look at what officials can do. Patric Mullen, legislative director for Legal Services of North Carolina, in an article describing the actions of legal services attorneys and clients before the state Utilities Commission, shows that citizens can have some impact on energy policy.

Finally, Joyce Anderson, energy director for the North Carolina League of Women Voters, and N.C. Insight Editor Bill Finger prepared a report called "Who Makes North Carolina's Energy Policy." Descriptions of the various energy agencies and interviews with the major policy makers, together with a statistical overview and an annotated bibliography, introduce this rapidly growing segment of state government.

North Càrolina can never return to the energy independence of 1900. The inventiveness of a backwoods tradition can, however, inform and stimulate creative public policies which are much needed for the future. This is an age of increasing resource interdependence, and without innovative policies that bode a fair and lasting energy peace instead of the "moral equivalent of war," we might all be out in the cold sooner than we can know.  $\Box$ 



Construction work in progress at Shearon Harris nuclear plant.

# Alternative Energy Corporation ... by Lavon Page and Bill Finger "A Fragile Idea" Whose Time Has Come?

On October 8, 1979, the North Carolina Utilities Commission unexpectedly launched a crucial experiment by handing down a rate ruling that surprised both the power companies and their consumer adversaries. The Commission allowed Duke Power Company a \$28.3 million a year rate increase but also ordered the company to allocate \$1 million of it for "research, development, and commercialization of alternative energy supply sources." The order went on to suggest a nonprofit North Carolina Alternative Energy Corporation as the best vehicle for "coordination between the electric utilities who produce and distribute electricity from centralized sources and their customers who may desire to add supplemental energy sources at their decentralized locations."

The ruling not only surprised; it also confused. Who would control the finances and program of the Alternative Energy Corporation and what structure

Dr. Lavon Page is Associate Professor of Mathematics at North Carolina State University and President of the Conservation Council of North Carolina. Bill Finger is a free-lance writer and editor of this issue of N.C. Insight. would it take? Both utility representatives and consumer advocates had trouble reading between the lines of the Commission's order. The \$1 million appeared to be only the beginning; similar amounts could be attached to future rate increases for Duke Power and other electric utilities. Might the Corporation tap other financial resources? Could the Corporation sell bonds, for example? Could it become a lending institution for home energy improvements? Could it own and operate demonstration projects? The funds from the Commission's order would flow through Duke Power, but they would come from the ratepayers, not the stockholders. Did that suggest that the public would control the Corporation or that the companies would control it?

#### WHY ALTERNATIVES

The 1970s have been hard on North Carolina's electric utilities. Duke Power Company has scrapped half of its plans for new plants for the rest of this century, and in July, 1979, told the Utilities Commission that it could continue construction on its Cherokee plant only by issuing new stock below book value. Carolina Power & Light (CP&L) has been facing rapid cost escalation at its Shearon Harris nuclear plant and has cancelled further nuclear units. Virginia Electric and Power Company (Vepco) has discovered geological faults near the site of its nuclear generating plants, has encountered long shutdowns at its Surry units, and has had its operating license for the North Anna II unit frozen in the wake of the nearmeltdown at Three Mile Island. Vepco, moreover, is still suffering from its decision to convert from coal to oil a decade ago.

### The 1970s have been hard on North Carolina's electric utilities.

A consensus of opinion is developing - among company spokesmen and environmentalists, government regulators and private investors - that future expansion of generating capacity through large nuclear and coal plants will be very limited. Independent agencies from the U.S. House of Representatives Committee on Governmental Operations to the President's Council on Environmental Quality to the Harvard Business School group that published Energy Futures have all reached this conclusion. Both coal and nuclear, the two primary sources of today's electricity, cost more now than anybody predicted a decade ago. Health and safety factors are more serious now than ever previously anticipated. According to Edison Electric Institute, an association of electric utilities, the cost of a 1000 megawatt nuclear plant will increase from \$165 million in 1970 to \$1861 million in 1987, a jump of over 1000 per cent. The stakes have changed, both for the companies in raising that kind of capital and for the Utility Commission in responding to rate increase requests.

Charged with regulating the state's long-range electric needs, the Utilities Commission has in recent years complained that central power stations offer little flexibility in anticipating changes in electricity demand. Following a company's decision to build a plant, construction can take 10 to 12 years, and a 10year commitment means unpredictable expenses. "Cost of construction for Duke generating units 10 years ago averaged around \$150/Kw (kilowatt)," the Commission said in its surprise ruling, "while plants now being designed for the 1990's are estimated to exceed \$1,500/Kw."

To meet these extraordinary circumstances, the Utilities Commission called for a far-reaching innovation. "The use of alternative energy sources should, if properly utilized," the Commission explained in a memo following its October proposal, "reduce the growth in peak demand and lessen the need for new and costly conventional, centralized electric generating plants." But a crucial question remained to be answered: would the Alternative Energy Corporation be able to achieve this goal?

#### LEGACIES AND OBSTACLES

Many of the now so-called "alternative" energy sources were once quite "conventional." At the turn of the century, the textile industry rooted itself at the head of every river fork, wherever the velocity of the flow could be harnessed to speed the shuttles and unleash the looms. While millhands were forming the backbone of the state's industrial economy, farmers were maintaining the agricultural traditions, curing their tobacco and warming their homes with sun and with wood. Farmers, factory-owners, and families managed their own energy needs and did not have access to central generating systems.

As central heating and lighting systems — including rural electric cooperatives — modernized industry, agriculture, and communities, small scale power units became, by and large, obsolete. Large-scale, centralized facilities were generating and distributing electricity for whole areas of the state at cheaper rates. Utility companies carved out the turf, finally gaining monopoly control over specified areas and coming under state regulation.

In recent years, public officials, farmers, environmentalists, industrialists, and others have attempted to revive older "alternatives" and initiate new ones. But three primary obstacles have made such a return to decentralized systems difficult: 1) the tendency of the electric utilities to guard their monopoly on production and distribution; 2) severe regulatory and institutional barriers; and 3) underfunding for research in new technologies such as large-scale solar.

"Alternative energy sources ... lessen the need for new and costly conventional, centralized electric generating plants." N.C. Utilities Commission

Like other businesses, utilities tend to consolidate and guard their market. In the case of electricity, this means discouraging small scale generating systems from operating. Duke Power, for example, charges the Blue Ridge Electric Membership Co-op (BREMCO), one of its wholesale customers, a fixed minimum amount for Duke's electricity based on BREMCO's yearly peak demand. In the 1960s, BREMCO could depend entirely on its own hydroproduced power for some time periods but it still had to purchase a minimum Duke requirement. Losing money generating its own power, BREMCO shut down its dam.

Charles Tolley, manager of the French Broad Electric Membership Corporation northwest of Asheville, describes a more recent case of utilities guarding their monopoly. "One of the big problems with (buying power from) Carolina Power & Light," Tolley explains, "is that a big industrial customer can buy cheaper retail from CP&L than we (the French Broad Membership Corporation) can offer the power wholesale." Under such rate structures, electric membership corporations (EMC's) are having more and more difficulty performing their original mission, conceived during the New Deal, to deliver inexpensive power to the rural areas. EMC's in North Carolina are turning towards the monopoly mindset themselves. They are now purchasing portions of new nuclear plants, becoming part owners of major utilities' capital facilities.

Monumental legal and institutional hurdles have also deterred the expansion of alternative sources. Severe regulatory controls, for example, have limited widescale utilization of cogeneration, a process where electricity is generated as a by-product of industrial processes requiring heat. As with hydro power, the technology for cogeneration has existed for more than 50 years. The U.S. Committee on Governmental Operations has concluded that cogeneration can produce electricity cheaper than can new coal or nuclear plants. Yet, only four percent of the nation's electricity comes from cogeneration.

To utilize cogenerated electricity profitably, a company needs to be able to sell the excess power to a utility for distribution. The Federal Energy Regulatory Commission licenses such sales and determines the wholesale rate for the purchase. But there is disagreement about what constitutes a fair rate. The Committee on Governmental Operations argues that the price utilities pay for cogenerated power should be determined by the cost of producing the same amount of electricity with new plants. But some regulatory officials contend that cogeneration's cost-effectiveness must be compared to the cost of electricity from existing plants. Moreover, if a cogenerator needs back-up power (as in the BREMCO example), the state Utilities Commission establishes the level of payment to the utility company, another regulatory overlap.

If this confusion were not enough, the additional research necessary for alternatives such as solar has depended on uncertain federal funding. At the state level, the N.C. Energy Institute has made some progress on researching alternatives especially suitable here, such as peat in the east and hydro in the mountains, but the Institute itself cannot implement large scale alternative systems.

#### JOCKEYING FOR CONTROL

The Utilities Commission issued its order to Duke on Tuesday, October 9. On Thursday, October 11, the Governor announced that he was "designating Jim Gibson, Director of our Energy Division, to work with the Commission and the utilities, co-ops and ElectriCities to develop this corporation." While the Commission emphasized public involvement from the outset, the Governor's initial press release made no mention of the public.



Capitola Dam on the French Broad River, French Broad Electric Membership Corporation.



Lavon Page and Tom Erwin, attorney for the Conservation Council of North Carolina at hearing.

Later in October, Robert Fischbach, the new director of the Public Staff of the Utilities Commission (and a former member of the Commission), planned an informal conference to discuss the proposed Corporation. Fischbach invited 11 power company representatives, four from co-ops and ElectriCities, five state government officials, two persons involved in solar technologies and two public interest group representatives to meet on November 5.

At the November meeting of the Energy Policy Council, the state's umbrella organ whose members are appointed by the governor, Utilities Commission Chairman Robert Koger discussed the Corporation, elaborating on the formal language in the Commission's ruling. "It (the Corporation) is a fragile idea," Koger said. "Almost anybody can shoot it down." Koger explained that the Commission had proposed a "concept," hoping that plant construction could be reduced. He said that he didn't think Duke was doing enough and that he "would prefer a broadbased board, maybe eight public representatives and eight company, with advisory boards below it." Koger made it clear that he was speaking personally and that the Commission had not yet formulated a position on the Corporation's structure.

The Commission had ordered Duke Power and the other electric utilities to submit their proposals on the structure and operation of the Corporation by December 15 and had called for a public hearing on January 2, 1980. Power companies and environmental groups cranked their conceptual resources into high gear. Planning meetings and private discussions ensued. All parties were aware that the die would soon be cast.

At the meeting with Fischbach in November, a Duke spokesman began the informal negotiations in a gentlemanly fashion. "We ought not to support research," he warned, "that may or may not pay off a decade from now." The environmentalists nodded in agreement, also anxious to concentrate on more immediate changes. "We want to support projects," the Duke official continued, "that will lessen the need for new generating facilities within the next several years."

But at the next informal meeting, convened by the Utilities Commission on November 27, the Duke spokesman addressed the heart of the matter. He proposed a Board of Directors dominated by company representatives. Non-utility voices could speak only through an advisory council vested with no real power. The Commission proposed a Board of 25 members: nine from regulated utilities, four from coops and ElectriCities, and 12 other public appointees and representatives of various state agencies. The public appointees would include three to four from universities, one from the Research Triangle Institute and three to four chosen by the Governor. There was no provision requiring these persons to represent positions independent of the utilities. The Commission also said that other structures might be more valid.

In recent years, the environmental groups in the state have gradually gained a level of sophistication and activity that has resulted in wide-spread credibility. At the November meeting, the North Carolina Coalition of Renewable Energy Resources (NCCRER), the Conservation Council of North Carolina (CCNC), the League of Women Voters, the Kudzu Alliance, the Mountain Convergency, and other groups called for a board with strong public representation. "The utilities are already engaged in research to promote their interests," said George Reeves, a manufacturer of solar equipment. "The Corporation will need the expertise of the utilities, but its interests will be fundamentally different."

On January 2, Governor Hunt opened the hearing before the Commission, repeating his support for the Corporation, this time emphasizing public control. A wide range of public witnesses followed, virtually all of them testifying to the importance of a board with strong public representation. The Conservation Council presented the strongest public-oriented plan, proposing that the Corporation's Board of Directors be composed strictly of public representatives, "a majority of whom should have special knowledge of and demonstrated advocacy for conservation and alternative energy sources," and that no employee or major stockholder in a utility company be allowed to sit on the Board.

The next day, the electric suppliers, led by Duke Power spokesman Donald Denton and CP&L vicepresident Thomas Elleman, testified. They proposed an 11-person board with six members from electric suppliers, two state officials, and three public members appointed by the Utilities Commission chairman. Duke Power's proposed Corporation By-Laws require a two-thirds vote for funding any project.



Utility company attorneys at Alternative Energy Corporation hearing (left to right): George Ferguson (Duke Power), Guy Tripp (Vepco), and John Bode (CP&L).

In Raleigh, *The News and Observer* headlined their news account of the hearings from this aspect of Duke's proposal. "Duke plan gives utilities power to veto funding." (See accompanying excerpts from Duke's testimony.)

The Commission has now heard all positions on the proposed Corporation. Like a court, it will hand down a decision during the spring of this year. After the Commission has determined the Corporation's structure, public support must be strong enough, as the Commission's Public Staff put it at the hearings, "for the Corporation to work."

#### **CAN IT WORK?**

While no precise models for the Alternative Energy Corporation exist, utility companies and the public are involved in joint ventures elsewhere. In Oregon, for example, Pacific Power and Light (PP&L) is installing insulation for free in people's homes. PP&L retains a lien on the insulation and recoups its investment if the house is sold. Michigan utilities are extending interest-free loans to consumers for the purchase of energy conservation devices like insulation and furnace modifications. The utilities also provide useful information including lists of qualified contractors to do the work. In Rhode Island, nine electric and gas utilities have joined with local contractors to fund Rhode Islanders Saving Energy (RISE). This nonprofit energy agency has obtained state and federal funding and promotes conservation audits. Reportedly, 5900 customers used RISE's services during a recent six-month period. Despite these successes, however, the accident at Three Mile Island and steep rate increases have caused public trust of utilities to remain low.

For the Alternative Energy Corporation to have significant impact over the coming decades, cooperation far beyond these examples will be necessary. Will the public support the Corporation idea? And will the companies share any of their power? If so, what should the Alternative Energy Corporation become?

Is it to be an arm of the utilities, legitimized by the benign goal of developing alternatives and saving ratepayers money? Will it duplicate research being conducted on a much more substantive scale at the federal level? Will it create a false hope, an arena that will diffuse environmentalists' energy from the primary battles before the Utilities Commission? Such possibilities are very real.

Perhaps as viable, though, are more creative options. The Corporation could help eliminate regulatory barriers for technologies that already exist, like cogeneration. It could support decentralized solar, wind, and hydro projects. It could facilitate the commercialization of resources unique to the state wood, peat, hydro. All of these would reduce the need for future generating plants.



Donald Denton of Duke Power and James Hubbard of the N.C. Association of Electric Cooperatives chat during break in hearing.



N.C. Utility Commission listens to testimony on Alternative Energy Corporation.

The utilities have the means to raise huge amounts of capital. The Utilities Commission regulates them so as to allow a substantial return on their investment. If the Alternative Energy Corporation can lead the utilities' own investment capital into the alternative field, the amounts invested might become truly significant, considerably more than the few million dollars initially projected to establish the Corporation. Several million dollars is, after all only a drop in the bucket compared to Duke or CP&L's construction budget.

But putting the electric companies in control of conservation and alternatives would be a flagrant case of putting the fox in charge of the hen house. The National Energy Conservation Policy Act (NECPA), which requires each state to have a residential conservation program, reflects the hen house view by prohibiting utilities from certain financing mechanisms. Michigan had to obtain an exemption from the Act even for the interest-free loan program.

In California the Campaign for Economic Democracy supports utility involvement in lowinterest loans but is trying hard to keep utilities out of the solar energy market. Solar energy proponents have long felt that the pessimism of the utilities about solar reflects a simple fear of losing control. The Oregon insulation program, for example, if permitted to include solar devices, would wipe out the smallscale entrepreneurs who have brought solar technology to its present sophistication. Such hen house considerations led Congress to include prohibitions against utility company financing of solar projects in the NECPA.

Twenty years ago the utilities moved into nuclear power generation with reservations, not because they were cautious about waste or accidents but because such a large industry shifts major policy directions slowly. Utilities were not advocating nuclear power. They simply didn't want to risk being left out in the cold when nuclear power became "too cheap to meter," as its proponents then predicted. With a similar caution, the companies might now move towards solar.

Guaranteeing the independence of the Alternative Energy Corporation can best prevent such problems. The crux lies then, with the Board of Directors and future funding. Since the Commission initiated the Corporation concept, it's reasonable to assume future Commission decisions will influence the funding and direction of the Corporation. Since the public pays the Commission-mandated rates and has a basic stake in alternative development, it's safe to hope that informed citizens will take the Corporation seriously. And since the companies must support the Corporation because of their public image, it's wise to watch for hard-nosed business maneuvers.

If the control issue is resolved, a middle course for the Corporation is possible. It can help absorb the risks inherent in new ventures. It can pursue solutions to legal and regulatory obstacles. It can encourage small and medium size businesses to participate in demonstration projects, conservation programs, and research on local alternatives. But the eventual involvement of the utilities themselves in even the smallest scale projects, such as solar water heaters for homes, is a distinct possibility. To prevent augmenting monopoly power and citizen dependence, the Corporation must function as a publiclycontrolled organization, not as an adjunct of the utilities.  $\Box$ 

# **Duke Power Company Testimony**

Duke Power Company has been actively pursuing the concepts of conservation, load management and alternative energy supply sources under its overall load management program for several years. We feel that the establishment of an organization to further these goals and objectives and to coordinate the activities of the various interests has great potential and we actively support the Commission's proposal. Accordingly, upon receipt of the Commission's Order Docket No. E-7, Sub 262, we began formulating a concept to accommodate the Commission's proposal. After developing this concept in-house, we had meetings with both the regulated and nonregulated electric suppliers. In general, we received favorable response from these entities.

On November 27, 1979, the Commission held a prehearing conference at which I set forth Duke's original concept. At the prehearing conference, I stated that Duke's original concept was to form a nonprofit corporation to be named The North Carolina Electric Energy Management Corporation (NCEEMC). The corporation's existence was to be perpetual and the purpose of the corporation was to investigate alternate energy sources and to conduct programs, projects and individual experiments in the areas of alternative energy sources, conservation, efficient energy usage and load management. The control of the corporation was to be vested in a Board of Directors and one director was to be appointed by each of the following entities: Duke Power Company, Carolina Power & Light Company, Nantahala Power & Light Company, Virginia Electric and Power Company, ElectriCities and The North Carolina Electric Membership Corporation. In addition, the Director, Energy Division of the North Carolina Department of Commerce (hereafter Director of the Energy Division) and the Executive Director of the Public Staff, NCUC, would be directors. Thus, the Board would consist of eight directors, six of which would represent the electric supplier contributing entities and two of which would represent noncontributing entities. As suggested by the Commission in its Order in Docket No. E-7, Sub 262, we proposed an Advisory Council to consist of ten members. The Chairman would be the Director of the Energy Division, with nine additional members three appointed by the Chairman of the North Carolina Utilities Commission, three appointed by the Director of the Energy Division and three appointed by the NCEEMC Board of Directors. Under the Advisory Council would be several Standing Technical Committees and Technical Subcommittees. The purpose of the Advisory Council would be to encourage the development of the research programs, to evaluate, review and develop conceptually individual projects, programs and demonstrations and to accept from the general public recommendations in those areas. The Advisory Council would be responsible for establishing the general direction of research, development and commercialization of alternative energy sources to be carried out by the corporation. At the prehearing conference, I also briefly indicated how we perceived that the work flow of the corporation would be carried out. I further indicated that the responsibility of the Board of Directors would be to select from worthwhile projects submitted to the Advisory Council those that were most cost effective and would ultimately be of the greatest benefit to electric consumers who had put up the funds.



As a result of the prehearing conference and statements made by members of the Commission and others at that time, we have modified our concept to expand the number of directors to provide broader representation. Orginally, we proposed eight directors representing the entities I previously mentioned. We have increased the number of directors from 8 to 11 by providing that three additional outside directors will be appointed by the Chairman of the North Carolina Utilities Commission. It is our opinion that, as Chairman of the state regulatory agency having jurisdiction over the rates and service of electric utilities, he is generally knowledgeable about matters and things related to the purposes for which the corporation was formed and participates in generic hearings and investigations relating to load management and alternate energy sources in the context of need for future electric generating capacity. We, therefore, considered it logical for him to appoint three additional outside directors.

We believe that the proposed Articles of Incorporation and By-Laws generally accommodate the concerns expressed at the prehearing conference on November 27, 1979. Duke supports the concepts of a North Carolina Electric Energy Management Corporation and is prepared to follow through based on the proposed Articles of Incorporation (Exhibit 1) and By-Laws (Exhibit 2) to join with those other entities that are willing to further the purposes for which the NCEEMC is being formed.

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"Renewable resources are those which, when coupled with proper management, are of inexhaustible supply."

As late as 1900, North Carolina was basically "energy independent." Families fueled their homes with wood and sun while factories powered their looms by harnessing the flow of water. Communities relied on whatever resources were available in their backyards for heat and fuel.

But with the steam turbine and automobile came progress. Water wheels disappeared as service stations were built. Large-scale centralized units began producing and distributing electricity far cheaper than could small, individually-owned systems. Home furnaces and air conditioning arrived, adding comforts and conveniences never experienced before. This 75 years of progress led to an unprecedented energy dependence. Today, North Carolina imports 99% of its conventional fuel sources from out of state.

Since the first oil embargo of 1973, the dangers of such fuel dependence have become graphic. No longer can we depend on cheap oil or coal. The long range future of nuclear power remains more clouded than ever. Rising energy costs and a recognition of the limits of conventional energy supplies have stimulated a cry for conservation — carpooling, weatherstripping, and lower thermostats. "The energy crisis" has become a catchphrase for our time.

State officials, homeowners, and utility executives would all like to reduce the 99% import dependence. Renewable resources available in North Carolina offer the primary hope for more energy independence. Existing energy systems can be remodeled (retrofitted) to utilize indigenous resources. Technologies available from earlier eras (like hydroelectricity) can be "rediscovered" as applicable for today. And new energy systems can be developed and implemented.

#### WHAT'S BEING DONE

In other states which face many of the same problems, large-scale efforts are showing that such dependence can be reduced. In California, for example, San Diego County requires by ordinance that all newly constructed homes have solar water heating units. A homeowner, the county has determined, will pay less to install and operate a solar system than to use a typical gas-fueled water heater. The city of Davis, California, has enacted strict building codes requiring passive solar features and

Gary Gumz is president of North Carolina Coalition for Renewable Energy Resources. insulation as well as extensive tree plantings in new developments, which greatly reduce air-conditioning demands.

Closer to home, the Tennessee Valley Authority (TVA) has launched several pilot projects to utilize solar power. In Memphis, 1000 homeowners have low interest, long-term loans for the purchase, installation, and maintenance of solar hot water heating systems. To finance the system, participants will pay \$13-\$17 per month for ten years as part of their electric bill. Customers currently pay \$16-\$17 per month for water heating. TVA expects the program to assist small businesses to invest in solar equipment and to reduce peak load demand. TVA has also launched the "Nashville 10,000" program to solarize the hot water heating systems of 10,000 existing homes.

North Carolina is beginning to make some advances in large-scale planning for lowering fuel needs. Wilson, N.C., for example, is exploring planning policies that will encourage conservation and utilization of renewables. The 1979 General Assembly approved two tax credits to advance the use of alternatives. One encourages the use of industrial waste heat for generating electricity (a process called cogeneration). The second facilitates the conversion of industrial boilers to burn wood and/or waste wood fuel. The N.C. House of Representatives extended the existing solar tax credit, and the bill now awaits Senate action. Unfortunately, the Legislature defeated an extension of the credit for home insulation.

In October, 1979, the North Carolina Coalition for Renewable Energy Resources (NCCRER) and the North Carolina Land Trustees of America sponsored a statewide conference, "Renewable Energy on the Rise." The U.S. Department of Energy funded a series of such efforts across the nation through the Center for Renewable Energy Resources in Washington, D.C. to promote a wider understanding of the potentials of renewable energy sources. Conference participants such as James Gibson, director of the state Energy Division, Robert Gruber, general counsel for the state Utilities Commission, and Dr. Louis Centofonti, southern regional representative, U.S. Department of Energy, indicated the desirability to conserve and to move towards a greater dependence on renewables. The conference sponsors compiled a catalogue called the North Carolina Notebook of Renewable Energy Projects, which currently is the most comprehensive publication on renewable energy resources and appropriate technology in North Carolina.□



Device on solar tobacco barn monitors heat. In background is a barn painted black for curing.



Since 1973, researchers have been working to take the sun from the tobacco field into the curing barn. Thirty-six thousand commercial curing barns exist in North Carolina. If all of them were adapted to solar, 140 million gallons of fuel would be saved each year.

For the last four years, the North Carolina State University Department of Biological and Agricultural Engineering has been operating demonstration solar curing barns. "The barn is designed as a multi-use structure." explains Research Assistant Paul Oppenheim. "We use solar as a first priority energy source for curing and for seedlings and vegetables in the winter." The project has produced excellent germination rates and much lower mortality for tobacco seedlings. "The barn definitely works," says Oppenheim, "and it can save a farmer money." Through four years of field tests, N.C. State's demonstration units saved 40-51% in fuel costs compared to conventional curing systems.

Traditionally, eastern North Carolina farmers cured their tobacco with wood-burning systems. In the 1960s, farmers converted, by and large, to oil or propane-powered curing systems in tightly-enclosed aluminum structures known as bulk curing barns. The solar tobacco barn is a hybrid of this conventional barn and a large greenhouse.

A solar barn costs \$11-15,000 to build compared to

\$11,000 for a conventional bulk barn. Converting an existing barn to solar (retrofitting) costs approximately \$3,000. The outer walls are made of corrugated clear fiberglass that trap the sun's rays. A series of ducts and fans distribute the heat. During the day, surplus heat passes through a gravel layer beneath the floor. The gravel and small air spaces retain the heat for use during the night. Solar heat is sufficient for the first four to five days of the seven-day curing cycle. A booster of some sort is necessary for the 165 degrees necessary on the last day.

Joe Fowler, an engineer, inventor and farmer from Reidsville, N.C., is attempting commercialization of solar assisted tobacco barns. A \$55,000 Department of Energy grant allowed Fowler to monitor solar barns, new and converted, during the 1978 curing season. On farms from Florida to Virginia, Fowler recorded an average fuel savings of 50%.

The solar assisted curing system is a proven method to reduce dependence on fuel sources outside the state. Because of the capital investment necessary, federal and state incentives are needed to encourage commercialization of solar curing. In the meantime, local farmers can at least paint their aluminum barns black, as the N.C. State program has. Retaining the solar heat through black paint begins the conversion process for curing the state's number one cash crop.□

# attached solar greenhouses

Five years ago, an average homeowner identified the direction in which his house faced for geographical reasons — "we face south, towards town." Today, though, a homeowner talks about his "southern exposure." An energy-conscious era has changed the way we look at the compass.

If a home has good southern exposure — nothing shielding it from the sun on the south side — capturing and retaining solar heat can save up to 35% in heating costs. This can be done without expensive mechanical



collectors, heat transfer fluids, or sophisticated electrical equipment — by passive systems. New homes are now being designed with large windows on southern exposures to bring in the winter sun and with carefully angled roof overhangs for summer shade. For existing homes — and for new designs — building

a greenhouse on the south side of a house can achieve the same results.

The sun provides all the heat and light in a solar greenhouse. The greenhouse collects heat and stores it, which can be used to warm a portion of the adjoining house. An effective solar greenhouse must receive uninterrupted sunlight throughout a winter day. Foundation insulation, caulking, and double glazing (double glass walls) can best reduce heat loss to the outside. The heat storage system — water, rocks, or bricks — must be adequate. Finally, summertime ventilation, usually a roof vent, must be included in design. Almost as a bonus, the greenhouse serves as a horticulture system for growing vegetables and flowers and for drying fruit and herbs throughout the year.

Mark Burham, a planner with Triangle J Council of Governments, built an 8' x 12' greenhouse from recycled materials. One-gallon, water-filled plastic milk jugs — 240 of them — store the heat. The heat buildup during the day keeps the temperature well above freezing at hight. Through two winters, Burham has added heat to his house and at the same time raised spinach, lettuce, onions, and geraniums. He has now decided to make the greenhouse permanent by replacing the plastic siding with fiberglass.

In rural Rutherford County, David Cameron converted the porch of an 80-year old farmhouse to a heat-producing greenhouse. The 16' x 25' greenhouse cost \$1000, even when Cameron used primarily recycled materials. "But the house definitely gains heat," says Cameron, "and the greenhouse does not drop below freezing at night." Two-liter plastic soda bottles filled with water — 950 of them — store the heat.

Passive systems can save energy without large capital investments. Without assistance, however, initial costs can be prohibitive. The N.C. House of Representatives has passed a bill which expands the solar tax credit to include passive systems. The bill is now before the Senate. The financial institutions, however, have not made low-interest loans available for solar greenhouses. Rural electric cooperatives, originally formed to be responsive to rural communities' needs, could also help the large-scale implementation of attached solar greenhouses with low-interest loans.□



David Comeron's solar greenhouse in Union Mills, N.C. Note the the roof vents on the outside view and the storage bottles inside.

# hydroelectricity . . . it's flowing again

In 1978, Consolidated Knitting Mills outside Charlotte saved \$50,000 in fuel costs with their 450kilowatt, hydroelectric turbine. But waterpower was nothing new to Consolidated. The company has been harnessing the energy from falling water for the last 50 years. In an age of conglomerates, the savings from hydropower has enabled this small concern to stay in business.

Over 3,000 dams exist in North Carolina. Many of them date from the turn of the century when flour and textile mills depended on water for power. But hardly any of these are



Dam on the Cullasaja River, Highlands, N.C.

currently being used for hydroelectric power. The advent of the steam engine, cheap fossil fuels, and large-scale hydroelectric facilities made small-scale hydro systems obsolete. It was easier to depend upon a centralized power source than to maintain a decentralized source for a single community or mill.

As Consolidated Knitting continues to demonstrate, these dams retain the potential for producing cheap power. Faced with higher fuel costs, more dam owners are now considering tapping this source. But returning to what was once the state's premier power source is not so easy.

"The major barrier to the development of small hydroelectric plants," says the Research Triangle Institute's (RTI) John Warren, "has been the initial financing."

The U.S. Department of Energy (DOE) is currently providing dam owners with low-risk, low-interest loans to determine whether their dams have potential for power production. Funds are also available to help defray costs of preparing an application for a license from the Federal Energy Regulatory Commission.

With funds from the North Carolina Energy Institute, RTI is assisting small dam owners take advantage of this opportunity. RTI first identified 300 sites out of the 3000 existing dams for further analysis. Detailed studies determined 20-30 locations that have the greatest potential for receiving DOE funding. The dams must have an estimated capacity of less than 15 megawatts, those that have never been used for hydropower production or those previously used but now idle. RTI is working with those who plan to apply for a DOE loan to help them minimize institutional and regulatory delays. North Carolina is the only state that has initiated such a comprehensive program to encourage development of small-scale hydro plants.

The Appalachian Regional Commission (ARC) has also made funds available for developing hydroelectric power. The town of Highlands has recently received a \$300,000 ARC grant to help rehabilitate a dam which produced hydroelectricity until the mid-1960s. The French Broad Electric Membership Corporation received a \$100,000 grant for detailed engineering analysis of its existing dam.

"Small-scale units may be producing 100-500 megawatts by the year 2000," estimates John Warren. Hydropower might well be the cheapest and most environmentally sound source of energy in North Carolina for small industries, rural cooperatives, and small towns.

# alcohol . . . modern day moonshine

Last August, George King, manager of King Brothers Farm Center in Ayden, N.C., called a gasohol meeting. "Gasohol" was a new word to most Pitt County farmers, but 160 people showed up farmers and business leaders, federal, state and local officials — to hear King explain how gasohol can save farmers money.

The oldtimers there didn't need any tips on distillation technologies. Two generations before, prohibition had provided incentive enough for developing backyard methods. And no Pitt County farmer needed to be told that fuel costs for his tractor would be increasing. But farmers did want to know if they could run their tractors on moonshine.

King announced his plans for forming a corporation to distill and market alcohol fuel. Together with Pitt County Community College, King hopes to make the area a model for the state and nation for saving money on gasoline. The community college recently received a \$10,000 grant from the U.S. Department of Energy to build an alcohol still and to conduct courses in the production of alcohol fuels. King is developing a farm-size pilot project.

More than 200 other North Carolinians have joined George King in applying for a permit from the Federal Bureau of Alcohol, Tobacco and Firearms to distill alcohol fuel for experimental use. No other southeastern state has half that many applications.

Escalating gas prices have revived an old idea alcohol fuel. Henry Ford proposed the use of alcohol fuels in his early automobiles. Germany depended on alcohol fuels in the 1930s. Brazil intends to convert 75% of its motor fuel to alcohol by 2000.

Two kinds of alcohol can be used as a substitute and/or extender for gasoline: ethanol and methanol. Fermentation of sugars from grains and starch crops, followed by a distillation process, has traditionally produced ethanol. Anything that was or is plant material, however, can be used to create ethanol. Most methanol is produced from natural gas or oil by converting syngas under high pressure and temperature. It is possible, however, to use coal, wood, farm residues or municipal solid wastes.

Gasohol is a mixture of 10% alcohol (methanol or ethanol) and 90% gasoline. Gasohol use results in lower emissions of air pollutants and increased engine efficiency. Methanol blends can be economically competitive with current gasoline prices.

With only minor adjustments, engines can run on pure alcohol. General Motors and Volkswagen have found that pure alcohol corrodes some fuel systems, however. Fuel system corrosion and establishing separate storage and dispensing facilities at service stations make the widespread use of alcohol only a long range option for the average motorist.

Farm vehicles and private fleets of vehicles, however, could convert to pure alochol fuels immediately. In a study presented to the state Energy Division, "The Potential of Alcohol Derived from Waste Biomass in North Carolina," Phil Lusk estimates that four grains in the state (corn, wheat, sorghym, barley) could yield 330 million gallons of ethanol per year. Converting 60% of these crops into ethanol could replace, Lusk has found, all gasoline and diesel fuels now consumed in the agricultural sector.

The Pitt Community College project hopes to produce about 40 gallons of alcohol a day from 200 gallons of corn mash. And the distilling process does not extract the minerals and proteins from the grain. The left over grain, then, can be used as livestock feed.

Ironically, what was once this state's premier local industry — moonshining — might serve to move North Carolina more rapidly down the road towards developing alternative fuels.□



Revenuers won't raid this moonshine still at Gatesville; Silas Fletcher Sr. plans to use it for backyard manufacture of gasohol.

# "inventing" appropriate technology

Do you have a neighbor who has rigged up a woodburning device to his car or a milk gallon collector system for the sun? Can cost-saving innovations go beyond the backyard garage or workshop? In an age of bewildering energy costs, inventors and tinkerers are no longer obsolete.

In 1977, Congress instructed the Energy Research and Development Administration (now the Department of Energy) to fund grass roots initiatives. Congress said they wanted to support technology appropriate to:

> "the enchancement of community self-reliance...; the use of renewable resources and the conservation of nonrenewable resources; the use of existing technologies applied to novel situations;

applications which demonstrate simplicity of installation, operation, and maintenance."

In 1978, a nationwide "Appropriate Technology Small Grants Program" began, making \$1.3 million available to an eight-state southern region. The North Carolina Energy Division funded Jon Parker of the North Carolina Coalition for Renewable Energy Resources to coordinate 12 workshops throughout the state, informing citizens of the grants programs and its possibilities for their area. Looking for help in developing creative ways to save energy, 179 North Carolinians submitted proposals requesting a total of \$4.5 million.

On January 15, 1980, the Department of Energy awarded the one-year grants. (See box for list of North Carolina recipients.) In 1980, more funds are available for grants in this region.  $\Box$ 

RECIPIENT	PROJECT	AMOUNT
North Carolina State University (Raleigh)	Construction and demonstration of a solar-heated and energy-efficient house	\$45,100
Saddlecraft, Inc. (Cherokee)	Installation of an industrial wood-burning furnace	21,055
Integrated Energy Systems, Inc. (Chapel Hill)	Development and testing of wood-tunnel burner	18,000
Douglas L. Worth (Cary)	Construction of a demonstration, multi-purpose, solar water heater	13,800
Carolina Friends School (Durham)	Further development of an integrated energy system using solar and wood energy and conservation	9,965
Long Branch Environmental Education Center (Leicester)	Construction and demonstration of two passive solar composting toilets	9,580
Volunteer Fire Dept. (Brasstown)	Construction of a forced-air solar heating system	8,069
John C. Campbell Folk School (Brasstown)	Construction of a two-story solar-heated greenhouse on campus	8,000
Bernard Braduch (Marshall)	Construction of a small-scale hydroelectric generator using Mars Hill College students	7,500
Charlotte Area Fund, Inc.	Construction of four solar greenhouses to serve as heat sources for low-income homes	6,000
Long Leaf Farm (Durham)	Construction of a commercial-sized solar greenhouse for vegetable production	e 1,987
Coalition for Safe Energy (Greensboro)	Construction of a passive solar greenhouse for com- munity center for appropriate technologies	- 859

# Allocation ... Of What? How The State "Set-Aside" Doesn't Work By Brian M. Flattery

ecent events in Iran have triggered many emotional responses in the United States not the least of which has been a vision of chaotic disruption of our oil supply system. Very small perturbations in the oil supply system have ripple effects which rapidly travel across the Atlantic and throughout the United States. In a real sense, we are a member state in a very large, global supply system. A five percent shortage in Iran quickly manifests itself as a five percent shortage in North Carolina. One method of sugar coating this painful pill, some believe, is a government-regulated allocation system.

The major allocation tool delegated to individual states by the Congress is known as the state "setaside." Each oil company must "set-aside" five percent of its motor gasoline and four percent of its middle distillate supplies (No. 2 heating fuel, kerosene, and diesel oil) for distribution by the states in time of shortage. The well-meaning intention of Congress was to provide some flexibility to the states to deal with "end users in hardship," to move products around to alleviate hardships to the consumer. But does the state set-aside serve the purpose for which Congress intended it to be used?

In 1973, the Arab oil embargo forced this nation to face the energy issue head-on for the first time. At that time, the U.S. was importing from 13 to 16 percent of the product used in this country from what is now referred to as the "Organization of Petroleum Exporting Countries" (OPEC). By importing that much oil, the U.S. was rendered indefensible against a boycott and, for a five week period, there were very long lines and rapid rises in prices. In December, 1978, with the arrival of the Ayatollah Khomeini, another five percent shortage and its resulting disorder occurred.

In 1974, the Nixon administration created a Federal Energy Office with a staff of eight people. Congress began considering conservation legislation and in 1974 established the set-aside plan. Today, the federal

Brian Flattery is former director of the North Carolina Energy Office and is currently president of an architectural and engineering firm specializing in energy matters. Department of Energy (DOE) has 20,000 employees and an \$11 billion budget. Thousands of these people are involved in allocating, distributing, and regulating the price of crude oil product. Regulations controlling state administration of the set-aside system come from this office. But the rules are constantly changing, from product to product and from month to month, creating extreme difficulties for the state energy offices and complicating the entire fuel supply systems themselves.

B ut the rules are constantly changing, from product to product and from month to month.

The word "allocation" implies an apportionment of resources and, in the case of "fuel allocation," the distribution of a scarce commodity. But in reality the state set-aside does not create any new oil. It simply spreads existing supplies around, taking control of some of the product away from the oil companies and putting it into government hands. The state Energy Office does exercise allocation authority over a portion of North Carolina's gasoline and oil supply, but the supply remains the same. The level of shortage created at the state, national, and international level does not change.

When the state set-aside was created, many government officials and oil company representatives had different ideas about the way it might operate. The Department of Energy saw the set-aside as a "loaves and fishes" effort to create something from nothing by organizing thousands of people to help distribute and price the product. Miraculously, more product would be created. Presumably, the end user in hardship would be relieved from the long gas lines and high prices.

The oil companies, on the other hand, viewed the set-aside as "the oppressive government" confiscating the rightful and just property of the "noble oil industry" which was merely seeking to provide a service of selling a needed product to willing buyers. The seven major oil companies, known as the "Seven Sisters," are trying sincerely to provide the energy to move our society from place to place and produce the world's largest gross national product. But, suddenly onto the scene would come the Department of Energy regulating their prices, restricting the transportation of crude oil, and restricting the discretion afforded the drillers, the refiners, the marketers, and the distributors of the product.

The set-aside system, in fact, makes fuel allocation in times of shortage more like a game of musical chairs. The shortage is moved around from sector to sector, and when the music stops some economic sector comes up shorter than others. The allocation of the product, theoretically, should ease the hardship felt by all consumers, but in the case of the state set-aside, it merely eases the hardship felt by consumers in one sector while intensifying the shortage in another. Due to variances in the rules, some economic sectors such as agriculture or transportation are more protected than others. Some service stations also qualify for special allocations based on their growth. Most often, however, the squeaky hinge gets the oil. This game of musical chairs is not always fair. The most vocal and influential groups are sometimes given special exceptions.

By definition, the set-aside is designed for use only in times of trouble. In a shortage, the states energy offices control the last supplies available. The federal guidelines provide that these supplies should go to only "end users in hardship," and the states must determine the names and addresses of these end users. This system is difficult at best and ludicrous at worst. It does not take into account the obstacles in naming the end users. It does not take into consideration the hardships of the middleman. It does not anticipate the spinoff effects from one sector on another. And it does not prevent the set-aside supply from being used simply as part of the available market.

A home heating fuel jobber can, with great difficulty, provide the state Energy Office the names and addresses of his customers who would not get any fuel next month were it not for the state set-aside. Knowing these names, the Energy Office can allocate for spot shortages in home heating fuels. In theory, were Craven County to experience a shortage and Forsyth County to experience excess, oil products could be redirected to Craven County. In minor shortages this is possible and occurs from day to day. But in major shortages of fuel oil, it is impossible.

In the case of motor gasoline, the requirement to identify and name the end users in hardship is patently absurd. How can a service station owner provide such names?

The set-aside regulations create other hardships for the middlemen, particularly service station owners. Each month, the U.S. Department of Energy assigns customers (service stations or jobbers) to oil companies, even in shortage situations. Gasoline and oil are distributed according to each customer's monthly allocation fraction, the product available to the customer divided by the product assigned by the Department of Energy. This fraction is the ratio between a real number (the amount of oil or gas available) and an imaginary amount (the oil or gas the Department of Energy *feels* that a supplier should be

he set-aside system, in fact, makes fuel allocation in times of shortage more like a game of musical chairs.

able to provide to an end user).

As more gasoline stations open each year, an established supplier's allocation fraction tends to decrease. New customer assignments are being made to the major oil companies every month, so that the established firms must sacrifice a portion of their previous shares. As the product available to them decreases, so does their allocation fraction. A new gasoline station selling 100,000 to 200,000 gallons of gas a month causes an older station's fraction to shrink. When a middleman receives 30% less product this year than he did last year and costs are increasing with inflation, his profits must fall. While the assignment and allocation fraction system are intended to minimize hardship on the end user, they often create new difficulties for the middlemen.

The set-aside system operates in a short-sighted manner, failing to consider the interrelationship between various user segments. In the gasoline and diesel shortages of last summer, for example, the Department of Energy was continually changing its regulations. At one juncture, DOE gave agriculture end users highest priority "in order to keep food on the table." But it didn't work out that way.

DOE allocated agriculture users 100% of their presumed needs, which was considerably more than 100% of their previous year's supplies. By concentrating so much of a limited supply in one sector, DOE had to split the remaining product among all other end users. The trucking sector, for example, received only 60 to 65% of its previous year's supply. Angered, the truckers staged a strike which resulted in, among other things, food products rotting in the field. North Carolina farmers ended up losing money, as did farmers in other states. And a trucking boycott helped cause food shortages and price increases. While DOE had designed policies to keep the food chain functioning, in the long run the regulations hurt the farmers, the truckers, and the real end user — the consumer.

Finally, the state Energy Office becomes a shopping stop for a crafty jobber. Oil people are in the business



William O. Roberts pumps for White Oil Company in Raleigh.

of buying a truckload here and a truckload there. They are skilled practitioners in the art of horse trading and frequently apply for set-aside thinking that they might save a few pennies on a gallon (preferably tens of thousands of gallons). This is not a criticism. It is merely prudent business practice to shop price, and the federal government has forced the states to set up a sizable shop. Neither federal nor state government puts a dollar at risk, but they control a five percent share of the market. Most private businesses would covet that large a share.

he federal allocation system can at best work as well as a free market system. If all participants in the allocation system at both federal and state levels work honestly, quickly, and in an informed manner, they can only approach the efficiency of allocation by price. The business community, if in control, would allocate to the highest bidder. But is that any worst than the government-regulated system? The set-aside procedures are too cumbersome and too unrealistic to respond to the various forces at work in the free market. If one group, because of its political influence, is able to receive a priority at the expense of another group, sooner or later this dislocation will hurt the consumers.

The personnel involved in allocation at both the federal and state levels and the personnel involved in the United States Department of Energy's Office of Hearings and Appeals are essentially standby. Like lifeguards, they are necessary in times of trouble but stand and wait during normal times. With approximately 15,000 service stations and hundreds of oil jobbers in North Carolina, the workload is staggering. Most states cannot afford to keep 15 or 20 trained people waiting for an oil shortage. Consequently, untrained people are suddenly thrown into the breach. During a shortage, every energy office turns into a madhouse with backlogs impossible to overcome.

Much of the work done in the state and federal energy offices is akin to the assignment given to ex P.F.C. Wintergreen in Joseph Heller's *Catch 22*. Wintergreen

A book written by Fred Harwell, Executive Director of the Center, was published in January by Alfred A. Knopf, Inc. of New York. Called *A True Deliverance*, Mr. Harwell's book is about the 1974 slaying of a county jailer in Washington, North Carolina, and the subsequent trial and acquittal of Joan Little, who was charged with the jailer's murder in a case that attracted worldwide attention. Mr. Harwell, a lawyer, attended pre-trial hearings and the trial itself and worked with both defense attorneys and members of the prosecution team to research his account of the case. This is his first book.



was assigned to dig a hole six feet by six feet by six feet and then to refill that hole and keep digging more holes. He works very hard, the taxpayers pay for it, and the ground is *at best* only as well off as before Wintergreen picked up a shovel. Congress needs to muster out the allocation system and with it all the Private Wintergrens.  $\Box$ 



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# Food or Warmth?

#### In 1980, North Carolinians Should Not Have To Choose. By Patric Mullen

Last May, President Carter wrote the 50 governors urging them to prevent "precipitous termination of heating or utility service which could result in critical health and safety problems ... during the winter months." The President's call for help grew out of a fear of disaster. The Department of Energy estimated that an average low-income household would spend \$1000 to \$1200 on heat and light in 1979, almost twice as much as the year before and five times the 1972 cost. Federal energy chief Charles Duncan admitted that many Americans would have to choose between food and warmth.

In North Carolina, at least 1.4 million people are faced with this choice. About one out of four North Carolinians lives at the edge of poverty. Of these, 192,000 receive Aid to Families with Dependent Children (AFDC), a maximum cash payment of \$2,520 for a family of four; 150,000 ward off poverty as best they can with meager Supplemental Security Income (SSI) benefits; 120,000 elderly live below the pale of decent standards. Thousands more who work for a minimum wage are also considered "poor" by the state Department of Human Resources.

The effects of this crisis, however, would not be measured in numbers or categories but in human terms. Last winter, for example, Blanche Lyons of Raleigh had to send her 3-year old son to live with friends. "I had been out of work for two months," Ms. Lyons explains, "I couldn't pay my \$115 bill. I called down to the (CP&L) office and asked, 'Could I pay part of the money?' I was told that I would have to make full payment. I know the hardship of having my lights turned off."

Tens of thousands had their electricity or gas shut off involuntarily last winter. During the year ending August, 1979, according to Carolina Power and Light (CP&L) testimony before the N.C. Utilities Commission, CP&L "disconnected for non-payment purposes only an average of 3,815 customers per month," 19,237 during the winter months (November-March). Duke Power Company, Virginia Electric and Power Company (Vepco), and CP&L together, according to their spokesmen, shut off some 7,600 North Carolinians for non-payment only *every month.* Still more customers had their gas disconnected involuntarily. These figures include

Patric Mullen is Legislative Director for Legal Services of North Carolina.

persons who simply refused to pay their bill for some reason. But also hidden within these statistics are people like Blanche Lyons who couldn't pay.

In recent years the Community Services Administration (CSA) has provided the State of North Carolina approximately \$1 million to respond to residential utility emergencies. This money is rarely available in a timely fashion, and experience has demonstrated that even \$1 million is insufficient to respond to all utility crises. Certain counties, at the discretion of the county commissioners, have voted to supplement the CSA monies with local emergency relief funds; churches and private welfare agencies offer sporadic help for individual cases. None of these efforts, however, has addressed a change in the way utilities do business.

"I had been out of work for two months ... I know the hardship of having my lights turned off."

Blanche Lyons, mother of a 3-year old

By early October, 1979, no action had been taken on the message the President had delivered five months earlier. The Department of Human Resources, the State Office of Economic Opportunity, and the state Energy Office had only briefed one another on the several federal assistance programs then before Congress. The utility companies had not proposed any plan to avoid massive cutoffs. And the Public Staff of the N.C. Utilities Commission had not set forth specific steps designed to lessen the likelihood of shutoffs for nonpayment.

The initiative for the consideration of a change in public policy was taken by clients and attorneys of Legal Services of North Carolina (LSNC). LSNC is charged by the national Legal Services Corporation with providing legal representation for North Carolinians who cannot afford private attorneys. LSNC is a confederation of 17 field programs serving clients throughout the state. Since all of LSNC's clients are poor, they have a high incidence of utility terminations. LSNC attorneys were spending an inordinate amount of time negotiating with the utilities on a case-by-case basis to prevent terminations or to get utilities reconnected. Instead of dealing with the utilities in this piecemeal manner, LSNC attorneys devised a strategy for restructuring the procedures for residential utility termination.



Blanche Lyon testifying before Utilities Commission.

The National Energy Act of 1978 made this debate at the public policy level possible. A section of the Act, the Public Utility Regulatory Policies Act (PURPA), required that each state authority conduct a hearing to consider adoption of certain standards. The heart of the PURPA proposal is:

> service...will not be terminated during any period when termination would be especially dangerous to health as determined by the State regulatory authority, and such customer has established, (a) his inability to pay by normal billing procedures, and (b) his ability to pay later in installments.

In November 1978, one of three public witnesses at a Utility Commission hearing attempted to interject the PURPA standards question, but the Utilities Commission did not then deal with PURPA. On July 20, 1979, however, the Commission ordered a public hearing specifically to consider termination procedures under the PURPA standards. The Public Staff planned to argue for adopting the PURPA standards but was limiting its recommendations to the very general language of the federal legislation. LSNC determined that the Public Staff's position would make little difference in the actual number of their clients terminated. At that point, LSNC attorneys requested permission to intervene in the Commission hearing on behalf of 109 low-income clients. The Commission agreed, making the clients intervenors in the upcoming hearing and permitting LSNC to present witnesses, submit evidence, make motions and examine the utility companies' witnesses.

Based on discussions with their clients and medical experts, LSNC had concluded that any termination of service during the winter months (November 1 through March 31) would be dangerous to health. This determination became the basis for a threepronged emergency rule proposed to the Utilities Commission: 1) order a moratorium on terminations for people who cannot pay for service during the winter months; 2) provide for referrals by utilities to public and private financial aid; and 3) institute an installment agreement where no more than 10% of net monthly income could be charged to pay off the winter bill.

On October 9, 1979, the three parties to the PURPA hearing—the Public Staff, the utility companies and LSNC—arrived at the Dobbs Building in Raleigh. All brought witnesses which they hoped would convince the Utilities Commission of their position.

Dr. Raymond Wheeler opened LSNC's case. A Charlotte physician widely known as an expert on the health and living conditions of poor people in the South, Wheeler immediately placed the hearing in the human arena rather than allowing the proceedings to focus on technical and legal arguments.

"Already in North Carolina we have thousands of poor people who are physically weak because of inadequate diets."

Dr. Raymond Wheeler

"Already in North Carolina we have thousands of poor people who are physically weak because of inadequate diets," said Wheeler. "In order to pay their utility bills these people will have to further reduce the quality and quantity of the food they eat. In turn, this will lead to sickness and absenteeism at work and school. Unfortunately, the only alternative for many is not to pay their utility bills and thus face the possibility of freezing to death in their own homes."

Two LSNC clients testified to the special utility problems elderly people face, confirming Dr. Wheeler's findings.

"My husband is 79 and I'm 76," Cora Harris of Raleigh told the Commission. "I get a VA check for \$75 and my \$57 Social Security and a little check (from SSI) for \$28. I have bad arthritis and high

### At the End of the Day ... Cold by Kay Reibold

There's a little house that borders a tobacco field a few miles outside Fuquay-Varina, N.C. A rusty bucket hangs from the hickory tree which bends near the roof. It's Charlie's basketball hoop.

Smoke floats from the chimney and drifts in the cold night air. The light of the moon on the tin roof is sharp and silver.

In the house, the children of Doritha Covington are dreaming of what it would be like not to be cold. Vivien and Jennifer, Levirnis and Paulette, Charlie and David and Elizabeth all sleep in one room. It's the only way to stay warm.

Moonlight shines through the house. It creeps in the gaping holes around the windows and slips through the wide cracks in the walls. Moonlight steals into each opening and each corner, and with it, the cold. Cold that pushes through the rotting floor boards. Cold that fills the house with chill and dampness and misery.

When morning comes, a metal tub of water sits before the electric oven so the children can bathe. Water is carried in pails from a nearby pond or the landowners' house. There is no well. There is no outhouse.

The family's heat comes from the electric oven and a crumbling fireplace. A single light bulb dangles from the ceiling.

Two years ago, a representative from Carolina Power and Light of Fuquay Varina visited Mrs. Covington and her children to inform her that her electricity was about to be terminated for a past due bill.

"I explained that I would pay as soon as I

Kay Reibold is a supervisor for Wake Opportunities and a free-lance scriptwriter. could," Mrs. Covington recalls. "I asked that they think about my children. I told them my food would spoil. I have to be able to cook."

Mrs. Covington had not been able to pay her bill for two months. "I asked him if I could pay a little at a time," she remembers. "But he told me, 'No, the full amount has to be paid now." If she didn't find the money, CP&L would automatically cut her off.

Mrs. Covington then borrowed the needed amount from the landowners, the people who allow her family to stay in the little house in exchange for work in their tobacco fields.

"I been workin' in tobacco ever since I been married," Mrs. Covington says. She grew up in Gibson, N.C., where her mother did field work and her father worked at the Southern Cotton Oil Mill.

"I like it here because I can raise my own food in the country. I'd rather raise something that belongs to me. I guess I just love to live in the country."

But country life holds little joy for Mrs. Covington and her children in the winter months.

"The cold's like slow torture," she says. "It's just with us all the time and I'm always afraid the children will get sick."

The house is so dilapidated that both the oven and the heat from the small fireplace do little to warm the four rooms. The walls are rotting. Cardboard and fabric patch the windows. There is no glass in the windowframes. There are no rugs on the floor.

Once bills are paid for the phone, insurance, lights, clothing for the children and laundry supplies, there is little money remaining for blood pressure. He has arthritis. In the winter, we have to be kept very warm. When we get cold, we ache a lot."

Daisey Brown, another client over 70, explained why the elderly are particularly vulnerable. "If I don't keep warm, I gets stiffer." Then Ms. Brown looked at the commissioners in the eye. "I don't think there should be any shut off in cold weather because I know how I suffer."

The gas bill alone in the Harris and Brown homes will average \$50 a month this winter. Without adequate heat, the elderly are susceptible to complications in existing medical problems as well as exposure to hypothermia, a condition where the body temperature drops to 95 degrees or less. W. Moulton Avery, Director of the Carolina Wilderness Institute, explained to the Commission that 25,000 Americans die every year from hypothermia.

#### "If I don't keep warm, I gets stiffer." Daisey Brown, age 71

Kay Reibold, who has administered Wake County Opportunity's energy emergency assistance for the past several years, followed Ms. Brown to the witness table.



firewood or any materials to patch the house. Mrs. Covington receives a monthly AFDC check of \$277.00. She also receives food stamps. To Mrs. Covington and her children, like so many other low-income families struggling to meet basic needs during winter months, electricity and fuel are of critical concern. On Sunday morning each of the children stands in the bright December sunlight, huddled in coats. They look out across the dirt yard. The sunlight is warm. But Mrs. Covington sighs to herself as she watches smoke curl from the chimney. It won't be long before the day will end and bring with it the cold. "Last year, we responded to 469 utility crises in Wake County," Ms. Reibold said. "I personally know of 50 elderly persons or mothers with young children who did not have heat in their homes last winter.

"We had \$25,000 available to us last winter for emergencies," Ms. Reibold continued. "There was no way we could respond to all of them. Without new energy assistance from Congress, hundreds of Wake

"I personally know of 50 elderly persons or mothers with small children who did not have heat in their homes last winter." Kay Reibold, Wake County Opportunities

County residents will be forced to rely on the uncertain contributions from churches and the county."

Following LSNC's testimony, lawyers from the utility companies presented their cases. Duke, CP&L, and the gas companies all felt that the existing Commission rules and internal company policies protected customers from unwarranted service terminations. They argued that the needs of the sick, the elderly and the handicapped were already considered. None felt a compelling need to adopt the PURPA standards, arguing that they were not consistent with North Carolina law and would be too expensive.

Presentations on specific procedures, however, varied from company to company. Some advised customers about assistance programs, for example, while others did not. Only two witnesses testified that their companies take severe weather conditions into account before disconnection. William F. Fritsch of Vepco described his company's rule on nondisconnection if the temperature falls below 35 degrees. He did not comment, however, on the question of hardship following disconnection, i.e., from 40 degrees one day to 20 degrees the next. In written comments, Duke Power's Lewis W. Deal said that inclement weather was "considered" in terminations, but he did not explain how.

Collectively, the utilities portrayed themselves as responsible, humane corporate citizens. One utility, in a prepared statement, lashed out at the LSNC proposal as an unconstitutional assault on corporate revenues designed to transfer the state's utilities into welfare agencies. While all were not so strident, all made the case that good corporate citizens had a responsibility to their stockholders and to all their rate



LSNC attorneys, clients, and supporters plan testimony for Utilities Commission hearing.

payers on an equal basis, rather than a special obligation to those unable to pay.

The PURPA regulations had only required the Utility Commission to hold the hearings. But after listening to the day's testimony, the Commission was clearly moving expeditiously toward some decision. LSNC requested 10 days to file legal arguments in support of its proposed emergency rule. The Commission gave the utilities a 10-day response period.

Just three weeks later, on November 14, the Utilities Commission issued a 23-page decision unique in the Southeast for its breadth and compassion. "The Commission certainly believes that the regulated utilities have historically endeavored to work with their customers," the findings read. "Nevertheless, a careful consideration of the entire record in the case leads the Commission to conclude that it should expeditiously proceed to revise its present Rule R12-10 concerning disconnection of residential electric and natural gas service."

The Commission had responded to the plight of Blanche Lyons and Cora Harris and Daisey Brown. It had considered the needs of the poor and had made special allowances for the elderly and handicapped. (See box for full ruling.) Apparently persuaded by human as well as legal arguments, the Commission had gone beyond the mandates PURPA placed upon it.

The Utilities covered by the order include the following:

Carolina Power and Light Company Duke Power Company Nantahala Power and Light Company Virginia Electric and Power Company Crisp Power Company Laurel Hill Electric Company New River Light and Power Company Pinehurst, Inc. Western Carolina University Piedmont Natural Gas Company, Inc. United Cities Gas Company Pennsylvania and Southern Gas Company Public Service Company of N.C., Inc. North Carolina Natural Gas Corporation

The Utilities Commission order places North Carolina in the forefront nationally as far as implementing the full intent of PURPA. It offers significant protection for many North Carolinians whose household utilities are provided by the major gas and electric companies in the state. Even so, the large number who heat with wood, fuel oil, and coal and who receive utility services from electric cooperatives or municipally-owned companies are not protected by this order. Fortunately, President Carter recently signed a \$1.35 billion energy aid package which will provide North Carolina with a \$34.4 million to help pay the utility and heating bills of

#### SUMMARY OF UTILITY COMMISSION RULING

- 1. Service cannot be terminated between November 1 and March 31 for households with an elderly (65 or over) or handicapped person without express approval of the Commission if the customer can establish all of the following:
  - (a) That a member of the customer's household is either certifiably handicapped or elderly (65 years of age or older), or both.
  - (b) That the customer is unable to pay for such service in full or in accordance with the subrule's provision for installment agreement.
  - (c) That the household is certified by the local social service office which administers the Energy Crisis Assistance Program or other similar programs as being eligible (whether funds are then available or not) to receive assistance under such programs.
- 2. All residential customers must be personally contacted prior to termination.
- 3. All residential customers must be given notice of an opportunity to negotiate a reasonable installment agreement designed to bring their account into balance within six months of the agreement.
- 4. All residential customers must be sent notices on how to obtain assistance in paying utility bills and how to appeal disputes to the Public Staff.
- 5. Both informal and formal appeal procedures must be established. During the appeal process, service must be continued.

those people in the states who cannot pay.

As a result of federal assistance and the actions of the Utilities Commission, no one in North Carolina has to freeze or suffer from intense cold in their homes this winter. No one should have to choose between heat and food.  $\Box$ 

# Who Makes N.C.'s Energy Policy?

Ten years ago, most North Carolinians never thought twice about their electric or gas bills. Few people questioned the charge or wondered who set the rates. But the times have changed. Since the first major oil embargo in 1973, energy has become a household word. Energy officials in North Carolina have become important public officials. The Utility Commission is viewed as one of the most critical regulatory bodies in the state. The setting of energy policy is now a continuing governmental concern and the passage of energy legislation has become a perennial issue in the General Assembly.

The background, competence, and initiative of the officials who determine energy policy in North Carolina seems more important today than ever before. Yet the average citizen knows very little about "who's who" in energy. Moreover, because energy is such a new arena for governmental attention, policy

Joyce Anderson is Energy Director, League of Women Voters of North Carolina. Bill Finger, a freelance writer, edited this issue of **N.C. Insight.** 

#### by Joyce Anderson and Bill Finger

questions are in constant flux. Officials, often appointed for political reasons, have to achieve an instant sophistication in an area that has grown extremely complicated — and critical. Finally, the matter of "turf" and who works for whom has been a sticky issue under the Hunt administration's reorganization, in energy agencies as well as others. The evolution of the various energy departments has sometimes been a painful process.

The interviews and sketches that follow are an attempt to introduce the major energy policymakers to the public and to provide brief descriptions of the various energy agencies that now dot the landscape of state government. But this is only an introduction, an effort to focus more attention on the way energy policy is made and on the people who make it in North Carolina. Increased public awareness of the actions of these officials is vitally important, not only because of escalating energy costs but also because close scrutiny is critical during a time when policy and agency interaction is changing so rapidly.





In 1975, the North Carolina Energy Policy Act established the Energy Policy Council to make recommendations to the Governor and the General Assembly. The Energy Division was designated to serve as the Council's staff. The Council has the job of establishing a state energy policy and emergency planning procedures. It is an umbrella organ composed of representatives of state agencies, the General Assembly, the private sector, and the public.

#### **Energy Policy Council Members**

- **D.M. (Lauch) Faircloth,** Secretary of the Department of Commerce, Council Chairman\*
- Robert Koger, Chairman, N.C. Utilities Commission\*

Jim Graham, Commissioner of Agriculture\*

- Jane Patterson, Acting Secretary, Department of Administration\*
- Charlie Webb, representing Secretary Howard Lee, Department of Natural Resources and Community Development\*
- William S. Lee, President, Duke Power

#### B Interview with Lauch Faircloth

**D.M. (Lauch) Faircloth, 52, is Secretary of the Department of Commerce.** A native of Clinton, Faircloth owns a variety of businesses in farm equipment, commercial real estate, construction, and farming. A long-time political adviser, he was appointed by Governor Hunt in 1977.

# Secretary Faircloth, you are chairman of the Energy Policy Council (EPC). What is it doing and what should it be doing?

The Council is an extremely competent group. Its purpose when it was formed was to set policy in event of an emergency. The state's Emergency Plan was developed as a result.

We have some new members on the Council and we now have Jim Gibson as director of the Energy Division. I believe we will move positively toward developing a comprehensive energy policy for the state. However, we need to have flexibility — in establishing such a policy. It should be able to move with the situation. Until now, the council has had to lurch from one crisis to another and hasn't had the Company, electric power industry representative

- **Donald McCoy,** attorney, natural gas industry representative
- Robert Mattocks, President, Jenkins Gas Company, petroleum marketing industry representative

John Neufeld, Professor of Economics, UNC-Greensboro, represents person experienced in economic analysis of energy requirements

John Curry, attorney, represents person experienced in environmental protection

George Norman, retired Vice-President of Burlington Industries, representative of industrial energy consumption

**Robert Cole,** Professor of Physics, UNC-Asheville, represents person knowledgeable in alternative sources of energy

Senator Henson P. Barnes Senator Russell Walker Representative Allen Adams

Representative Louise S. Brennan

\*These five are *ex officio* members. The Lt. Governor appoints the state senators. The Speaker of the House of Representatives appoints the state representatives. The Governor appoints all other positions.

opportunity to give its full attention to policy development except in a fragmented way.

#### Who is in charge of the policy development effort?

The initial stages of development are being handled by the Management Committee of the Council under Donald McCoy from Fayetteville. (McCoy represents the natural gas industry on the EPC.) Tom Moffitt working with the Energy Division is doing a lot of the leg work, and of course Jim Gibson and the Energy Division staff are working hard on putting this thing together.

What format do you see the energy policy taking?

I think a set of generally flexible guidelines should be developed: e.g., increase price — limit consumption.

### How do you and the Energy Division relate to the other energy agencies in state government?

It is clear that there is the need for more coordination. I feel all grant requests should be made through Gibson's office. He is clearly going to be "Head of Energy" in this state. Some of our previous programs have operated independently. We cannot continue to ignore each other.

# **N.C. Energy Division**

The North Carolina General Assembly created the Energy Division in 1974 as a part of the old Department of Military and Veteran Affairs. For several years, it occupied an old house on Lane Street. The Energy Division was then placed under the Department of Commerce and in 1977 moved to its current offices in the basement of the new Dobbs Building. The Energy Division is slowly spreading through the bowels of the building, occupying more space each year, in much the same way that energy issues have begun to occupy more and more of the attention and time of state government officials.

In 1976, the Division had an eleven member staff working in three major areas: allocations and plans, conservation, and research and development. Today that staff has more than doubled, adding an energy information section, a technical section, an accountant, a staff attorney, an energy conservation volunteer coordinator, and an assistant to the director.

The Energy Division serves as the staff for the Energy Policy Council. The individual sections also have other functions. The conservation section administers the state energy conservation plan and the energy extension service. The technical section advances alternatives such as cogeneration, wood, and solar and administers the state's conservation program for schools, hospitals, and public buildings. The allocations and energy planning section administers the set-aside of petroleum products for emergency needs and the state's energy emergency plan developed with the Energy Policy Council. The information section serves as a clearinghouse for projects, programs, meetings, and other energy activities in the state; it also publishes a monthly newsletter, Energy Issues, and mans an energy hotline (1-800-662-7131).



James E. Gibson Jr., 53, became director of the State Energy Division in September, 1979. A native of Blowing Rock, Gibson graduated from Duke University in business administration. He was a textile executive with J.P. Stevens, Duplan Corp., Hanes Corp. and Wilkes Hosiery before becoming director of the division of medical assistance in the state's Department of Human Resources (DHR). He left the DHR job to join the Energy Division.

# North Carolina Energy Institute

In 1978, the Energy Policy Council established, through an executive order of the Governor, the North Carolina Energy Institute. The General Assembly passed a \$600,000 annual budget, 85% of which the Energy Institute distributes to outside consultants for developing energy resources unique to the state. The Research Triangle Institute, for example, has investigated hydroelectricity sources while others have worked to develop solar, peat, and wood projects. Dr. James Bresee, formerly with the U.S. Department of Energy, heads the fourperson administrative staff. Dr. Bresee recently testified before the Utilities Commission that it might be appropriate for the Energy Institute to merge with the proposed Alternative Energy Corporation.  $\Box$ 

# <sup>®</sup>Interview with James Gibson

#### What is the main job of the Energy Division?

The Energy Division is the major authority on energy matters for the state. We serve as the staff for the Energy Policy Council (EPC) and we work closely with the Energy Institute. Our mission, as mandated, is four-fold: to develop and administer emergency allocation plans, to promote conservation programs, to provide public information and education, and to provide technical assistance.

#### What is your number one priority?

To fill the need for a formal state energy policy. The EPC has been misused to some extent. It has had to contend with numerous brush fires. We have real talent and capability on the Council and on our staff. We are going to put it together.

At the November 8 (1979) meeting of the Energy Policy Council, of which I am the Executive Director, I urged that a comprehensive energy policy be formulated as soon as possible. I see two aspects of that policy: 1) petroleum use in home heating, in transportation, and by utilities; and 2) utilities' sources of energy: nuclear, gas, coal.

## What role will the public play in the development of the state's energy policy?

We are making a real effort to involve the public. We have been meeting with a group in Asheville and will meet with other groups in the state, asking for help with the policy development process. We feel that the process is as important as the policy if it is to be one which the people of North Carolina will accept. For the formulation process, we will work initially through the EPC's Management Committee. There will be at least four public hearing meetings at which we hope to hear regional concerns expressed.

#### What will be the format of the state energy policy?

We have no clear idea of that at the present time. It certainly will contain renewed statements of certain principles which we have already developed. It will state goals and objectives and attempt a realistic assessment of needs. It will ideally reflect a balance of concerns. What is the relationship of the Energy Division with the Public Staff of the Utilities Commission?

Its responsibility is to confront the utilities and the Commission in matters pertaining to the consumer, the rate-payer. We probably need more communication with the Public Staff. They are doing excellent studies. We should explore ways in which we can work together.

#### What is your "energy philosophy?"

Efficiency in energy usage is of prime importance. And our biggest source of energy is conservation. I see the prime responsibility of this Energy Division as promoting and implementing measures and programs which increase efficiency and result in conservation.

#### How do you view the Energy Extension Service?

It will certainly be good as an interim program, especially as a means to further the conservation effort. There is not a great deal of money — only \$580,000 for all of North Carolina, but it is an opportunity for one-on-one contact at the grass-roots level.

## How much dependence on nuclear power do you anticipate the state having in the future?

That must be determined by a state energy policy. If there is to be continued expansion and growth in North Carolina's economy, I think we will need nuclear power for the short term. My practical judgment is that we will have difficulty doing much more about nuclear in the long run. Other fuels and processes will come forth, but I think it will be awhile before we can use much more coal. If we are to use it, there will have to be modifications in the Clean Air Act, and I think these will come.

#### How did your work in the Department of Human Resources (DHR) prepare you to head the Energy Division?

Before I worked for DHR, I had considerable management experience in the private sector. These skills are transferable. In Human Resources, I worked in the area of management consultation and coordination and was able to use innovative techniques to solve some management problems. When the Energy Division job became available, I was interested because I felt it called for strong management capabilities: how to relate to different sets of people, how to make things happen. I am very goal-oriented.  $\Box$ 

# \*North Carolina Utilities Commission

Since the state's first utilities regulatory body, the Railroad Commission, was created in 1891, everything from street railways to canals to telephone companies to motor carriers has been regulated. In 1941, the present Utilities Commission was established with three full-time members serving six year terms. In 1977, the General Assembly, at Governor Hunt's urging, reorganized the Commission, creating an independent Public Staff within the entire Commission. This reorganization divided the resources between the Commission Staff and the Public Staff. The 1979-80 budgets for the Commission Staff (\$2.1 million, 81 positions) and the Public Staff (\$2.2 million, 88 positions) are among the largest in the country for such agencies. Only Ohio has a larger budget for its public staff and many states do not even have such a body. Moreover, Electric Week recently reported that "North Carolina Leads DOE Grant Parade With Awards Totaling \$1,045,859 for a variety of rate-reform projects." California followed North Carolina with \$952,500.

Legislature but plays both an administrative and judicial role in regulating the rates and services of about 1000 utility and common carrier companies in the state. These include electric, telephone, natural gas, water, and sewer utilities, radio common carriers, and rail and motor carriers of passengers and/or freight. The Commission follows court procedures since its decisions can be appealed into the courts. But unlike trials, commission hearings have often been used as a public forum for policy debates.

The Public Staff is mandated to represent the consuming public before the Commission on matters concerning rates and regulations. The Public Staff has also taken over much of the work once performed by the Commission, such as forecasting the state's future energy demands.

The Governor appoints the seven Utilities Commissioners (8-year terms) and the Executive Director of the Public Staff (6-year term), all of whom are Democrats and make \$41,500 (except the Commission Chairman who makes \$42,500).

The Utilities Commission acts as an arm of the

# The North Carolina Utilities Commissioners

- Robert Koger, Chairman (see interview with him on pages 35-37 for biographical information)
- Leigh Hammond, 50, is an economist (Ph.D., North Carolina State University). A South Carolina native, Hammond taught economics at North Carolina State (1964-69 and 73-77) and served as Vice-Chancellor there. From 1970-73, Hammond was Deputy Secretary of the state Department of Administration. Appointed in 1977, his term ends in 1985.
- Sarah Lindsay Tate, 52, is an attorney (LLB, University of North Carolina), formerly an associate with the Raleigh firm of Sanford, Adams, McCullough, and Beard. Originally from Charlotte, she has been an associate counsel for insurance companies. Appointed in 1977, her term expires in 1985.
- John Winters, Sr., 60, is a Raleigh native and graduate of Virginia State College. A real estate broker and builder, Winters has been on the Raleigh City Council (1961-67), in the State Senate (1974-77), on the University of North Carolina Board of Governors (1972-74), and active in Raleigh's business com-

munity. Appointed in 1977, his term expires in 1985.

- Edward Hipp, 58, is an attorney (J.D., University of North Carolina), originally from Charlotte. He was special counsel for the North Carolina General Statutes Commission Utility Law Revision (1962-63) and General Counsel for the Utilities Commission (1963-77) before being appointed Commissioner. Appointed in 1977, his term ends in 1981.
- A. Hartwell Campbell, 63, was a minister (B.D., Yale) (1941-46) before managing radio and television stations (1946-79) in eastern North Carolina. He served in the General Assembly (1969-79) before being appointed Commissioner. Appointed in 1979, his term ends in 1987.
- **Douglas P. Leary, 44**, graduated from East Carolina University in business administration. He worked for the Four County Electric Membership Corporation (1961-72) and was General Manager of the Wake Electric Membership Corporation (1972-79) before being appointed Commissioner. Appointed in 1979, his term expires in 1985.

#### Thterview with Robert Koger

**Robert Koger, 43, is chairman of the North Carolina** Utilities Commission. He holds a Ph.D. in industrial engineering and a M.A. in economics from North Carolina State University. Before joining the Utilities Commission as an engineer in 1967, he worked for the U.S. Rural Electrification Administration (1961-67). Governor Hunt appointed Koger a Commissioner in 1977.

### What do you see as the primary mandate of the North Carolina Utilities Commission?

To see that the utilities and transportation industries which have been granted exclusive service franchises by the state provide adequate, reliable, and safe services at the lowest possible rates to their consumers.

### How are the Commission Staff and the Public Staff related?

Even though they are both part of the North Carolina Utilities Commission, they are independent of each other. Each has its own budget, and neither

#### Thterview with Robert Fischbach

Robert Fischbach, 40, is executive director of the Public Staff of the North Carolina Utilities Commission. He holds a Ph.D. in physics from the University of Virginia (1969). He worked as a research scientist for Fiber Industries Inc. (1969-77) in Charlotte where he was active in local civic and political activities. In 1977, Governor Hunt named him a Utilities Commissioner and in 1979 appointed him to head the Public Staff.

#### As Director of the Utilities Commission Public Staff, what is your goal? What would you like to accomplish?

A lot of our work is "reaction work" to utility filings with the Commission. We want to continue to keep rate increases at a minimum, certainly. In addition, I would like to see some timely resolution to the Vepco situation.\* We should be able to get lower rates for those people in North Carolina who are served by Vepco. We need to be bolder in pushing conservation. It disturbs me that fully 15% of the homes in NC have *no* insulation!

\* The Vepco rates are currently much higher than CP&L and Duke Power rates.

has any managerial or decision-making authority over the other. The Public Staff has a legal mandate to be the public's advocate in proceedings before the Commission while the Commission, by law, must take a judicial, objective position in its decision. The Public Staff can appeal Commission decisions to the North Carolina Court of Appeals.

#### Are there any disadvantages to having a separate Public Staff?

It is working very well for the most part. The Commission lost most of its staff when the Public Staff was formed. We could use one or two more good engineers on our staff. Most of the attorneys are now with the Public Staff where they can be much more independent in their representation of the rate-payer.

The main disadvantage was the loss of informal communication I had with the people who went to the Public Staff. Contrary to what the public may think, the law prohibits informal discussion between the Commission and any other parties — including the Public Staff — in pending cases. And, of course, this is right and in the best public interest. No "deals" can be made outside the hearing room — with the utilities or with the Public Staff.

How much dependence on nuclear power do you anticipate the State having in the future?



#### (Koger interview continued)

The utilities made a large commitment to nuclear power in the late 1960's and early 1970's, Duke and CP&L are now generating about 35% of their power with nuclear and project 50% dependence by the mid to late 1980's. The recent freeze on operating licenses by the Nuclear Regulatory Commission is affecting Vepco's North Anna II unit and could affect Duke's McGuire Unit I scheduled for operation in the fall of 1980.

### What is your position on Construction Work in Progress (CWIP)?

I took no position on the matter when it came before the Legislature during the 1977 Session. As I see it, it comes down primarily to a decision which may adversely impact one generation while helping other generations. Up to 1986, it will mean higher rates than if we didn't have it. After 1986, the rates will be lower.

Some critics have said CWIP will encourage excess construction of generating plants by the utilities. I don't think this is valid. Utilities must still prove need and be granted a Certificate of Public Convenience and Necessity before they can build new plants.

What is the status of rate-reform measures such as interruptible rates and load-leveling rates in North Carolina?

In December, 1979, the Commission issued an order to the utilities to develop plans for certain ratereform measures and to file them by the fall of 79. Duke and CP&L both now have special rates for solar with thermal storage. Interruptible rates will be initiated soon in several areas on an experimental basis, and the equipment has been ordered to implement time-of-day rates. Industrial customers will soon be able to opt for a lower cost interruptible service.

### What has the Commission done to promote energy conservation?

First of all, the only advertising we approve as a recoverable operating expense for electric utilities is that associated with conservation. Secondly, we encourage all gas and electric utilities to promote conservation offering energy audits to their customers and assistance in finding financing and contractors to insulate their homes. Each year at our annual electric load forecast hearings, we ask the utilities and the Public Staff to forecast the percentage reduction estimated to come from conservation and load management programs. We have approved a conservation rate for Duke Power which provides that customers meeting certain stringent insulation requirements are eligible for a lower rate. A similar rate proposal is pending for CP&L.

#### (Fischbach interview continued) What do you see as the role of the Public Staff in influencing state energy policy?

We play a major role in setting it. For example, in the annual load-forecast hearings the Commission reviews the Public Staff work. We pioneered the economic forecaster. The utilities are now doing their own, Vepco for the first time this year. We are not simply respondents, as in rate cases. We can instigate proceedings as we have done for the May, 1980, hearings to review the PURPA (Public Utility Regulatory Policies Act) rate-making and rate-reform measures.

### How can public-interest and consumer-interest groups best work with the Public Staff?

It is our responsibility to represent the public at rate-increase hearings and in other proceedings before the Commission. When groups make statements at hearings and make demands that we do this or that, they should have the data to back up their contentions. For example, a lot of claims are made for the potential of solar energy. We need facts and figures to back up these claims. Our research has not been able to substantiate some of the claims which are being made. Furthermore, we hear over and over that the Commission and the Public Staff should put more emphasis on conservation. I would like to know, specifically, what the Commission should do that it is not already doing in the area of conservation. As a regulatory agency, we have to be extremely conscious of how heavy our hand can be. When you push something down the public's throat, you'd better be sure it's a proper pill.

### How much dependence on nuclear power do you anticipate the state having in the future?

For the next 10-15 years, our dependence will be considerable. For the calendar year 1978, CP&L generated 47% of its electricity from nuclear plant operation. The NRC freeze on operating licenses could certainly affect our short-term dependence. The McGuire Unit 1 is scheduled to begin operating in August of 1980.

I consider myself a "nuclear realist." We have to look at what is here now. Whether we like it or not, at least 40% of our electricity today comes from nuclear generation. I don't know where we could get another 40% to replace it in the short term. Replacement or phasing out of nuclear would have to be long-term for other sources to have that much impact.

#### How effective is the Energy Policy Council?

It has a major role in recommending energy legislation to the General Assembly such as tax credits for insulation and solar installations. It also played a part in the establishment of the state's Energy Institute. Preparing detailed emergency plans for use in times of energy shortages has been a major contribution. Presently, we are reacting to federal guidelines on possible gasoline reduction targets for the state and the possibility of having to administer federally mandated rationing.

#### How does the Utilities Commission interact with the General Assembly?

While we are independent in our decision-making role, the Utilities Commission is by law an arm of the Legislature. In 1975, the joint Senate-House Utilities Review Committee was established. I meet with the Committee frequently to keep the Legislature informed of our major activities and to consult with them on any needed changes in laws affecting public utility regulation.

#### How do you feel about your job as Commission chairman?

I feel my job is an important one and one in which I can make a worthwhile contribution to the people



During Alternative Energy Corporation hearing, Robert Fischbach (left) and Robert Koger (right) listen to Conservation Council attorney Tom Erwin (front).

of North Carolina. I was on the Commission staff for 10 years and was chief of the electric division before Governor Hunt appointed me to the Commission. Now I have the opportunity to participate in the decisions and use the experience that I have. I am especially proud of the fact that since July, 1977, the percent of annual increase in electric rates has been held down considerably over that of the three prior vears. So far, we have averaged only a seven percent annual increase (since 1977) compared to a 21 percent average annual increase from 1974-77. □

What is your position on Construction Work in Progress (CWIP)? Did you support the state legislation creating CWIP last spring? Is it fair to the consumers?

I did not favor the bill although I did not get involved in the legislation. I would just as soon we didn't have the law, though there is certainly some justification for it. There is no doubt that the total cost to the consumer, over the life of the plant, is less. However, it does violate a cornerstone principle of utility rate-setting: that the consumer should pay only for services received, when he or she receives them.

#### What rate-related reforms do you favor? What are the utilities in North Carolina doing?

Interruptible rates are now offered to large industrial users. Experiments with peak-load pricing, time-of-day rates, and interruptible rates for residential customers are now or soon will be underway. Hearings will be held in May, 1980, to assess the progress and results of these experiments. I feel that we have already gone deeply into rate reform. I can't think of any contemporary rate reform concepts that we haven't already confronted, begun to implement or discarded. We are moving toward a flat rate. The declining block rate (more use gets cheaper rates) is definitely on its way out, but it can't be changed overnight.

#### Do you see any conflicts of interest in your former position as a Commissioner and your present position?

No. My experience as Commissioner has given me a helpful perspective. The Commission is in the decision-making business; the Public Staff is a decision-advocating outfit. Before reorganization and the formation of the Public Staff, there was no separate voice to advocate the "good of the public."

#### What do you like best about your job as Director of the Public Staff?

We are right in the middle of things. We have the most professional staff of any Commission in the country. For example, we have three Ph.D. economists on our staff; our Electric Section I would put up against any in the country, and I could make similar comments about our other divisions. I have a staff to be proud of.  $\Box$ 

# **\*Nuclear Waste Control**

Growing amounts of nuclear waste, and a limited number of depositories, are presenting North Carolina with the prospect of handling more of its waste than in the past. A state task force has been considering a nuclear waste depository in as rural a section of the state as can be found. "Ten miles from nowhere" is the location suggested by one staff member in the Department of Human Resources.

But the state officials are rapidly finding that a spot 10 miles from nowhere does not exist. When Ralph Ely, a scientist with Research Triangle Institute, suggested the upper Dan River valley in the northwest as one possible site, boards of county commissioners in the area responded by passing local ordinances which, in one county's language, make it illegal to "process, store, bury, receive or acquire radioactive waste..." When state authorities looked at the possibility of storing waste temporarily in an old warehouse at the small Granville County town of Butner, inspectors from the state property insurance division found the building unsafe. And when a waste processing plant was suggested for the City of Burlington, the city council said no.

A deputy attorney general, William F. Briley, has since told the task force chairman who is also the Governor's science advisor, Dr. Quentin Lindsey, that he thinks the local ordinances should not affect state



licensing for a nuclear waste facility. But the situation still seems charged with chances for state-local conflict. If the state goes ahead and licenses waste handling in one of the counties or towns which has objected, a long legal argument could ensue.

Straightening all this out is the job of the task force and the state's radiation protection division, the ultimate arbiter on questions of radiological health in North Carolina. But the division director, Dayne H. Brown, has said his office does not have the money to do a proper job.



by Tom Dillon

# Which Fuels Does N.C. Use?

Presenting a concise, statistical view of North Carolina energy uses is difficult if not impossible. Unlike many census indices (population, wage, place of residence, etc.), energy sources and uses have not been measured extensively over the years, and hence, collection systems are not well developed. (The exceptions are heavily regulated sectors such as electricity and gasoline.) The federal Department of Energy has recently introduced the Federal Energy Data System (FEDS) and the North Carolina Energy Division and Utilities Commission Public Staff are undertaking more sophisticated data analysis every year. But much of the primary data remains with the energy industry itself: oil companies, utilities, and even individual oil jobbers.

Complicating the difficulties in collecting information are several factors unique to energy. For example, the FEDS system is geared to traditional fuels, but does not contain data for sources such as solar, wood, and wind. Marketing systems for wood (buying from a local woodcutter) and measuring techniques for solar (discounting the cost of solar collectors on "free" energy) add difficulties to data collecting which have not been overcome. As the North Carolina Energy Division puts it: "The result is that while the data given...for traditional fuels may be relatively good, as alternative fuels make more of a contribution, the divergence between FEDS data and a more comprehensive estimate of energy consumption will grow larger."

Another problem unique to energy data is measuring "gross" energy as opposed to "net" energy. That is, does one measure the total amount of fuel that goes into the economy or only the energy actually delivered to the consumer. The major difference comes in fuel losses inherent in generating electricity. Of the coal delivered to a power plant, for example, only about one-third of the coal's energy is available to the end-user. The other two-thirds of power is lost either as waste heat at the power plant or in transmission and distribution.

Given these various limitations, the charts below present as concise a view of the state's energy uses as possible.

"The Type of Energy Used in Each Sector" shows the relative dependence on different fuel sources for end uses of power. In the residential sector then from lighting to space heating to cooking consumers depend upon electricity for 65.9% of their needs, petroleum for 24.2%, natural gas for 9.4%, and coal for .6%. We used "gross" electricity for our calculations, (not "net"), feeling that the total amount of fuel necessary for producing electricity is the proper amount to measure proportionately with other fuels.

The bar graph, "Fuel Sources for Generating North Carolina's Electricity," highlights the change in fuelsource mix that the electric utilities made from 1970 to 1978, including an increase in nuclear power from 0% to 37%. "Use of Electricity in North Carolina" breaks down aggregate electricity-use by sector.

Finally, "Net Energy Use in All Sectors by Percent Fuel Type" shows the relative dependence on various fuels from 1960 to 1977. Because of the FEDS reporting system, we used "net" electricity here. While the net figure somewhat skews the graph ("gross" would give electricity significantly higher figures), the percentage for petroleum would still be very large.□





# **Type Of Energy Used** In Each Sector



Photo by Jackson Hill

# Selected Energy Resources

Analysis of Long Range Needs for Electric Generating Facilities in North Carolina, Report of the Public Staff, North Carolina Utilities Commission 1979. In 1975, the General Assembly mandated the Utilities Commission to undertake such an analysis on a regular basis. Following the Commission reorganization in 1977, the Public Staff took over this function. Using econometric and engineering techniques, the forecast run up to 1995.

Energy Future: A Report of the Energy Project at the Harvard Business School, edited by Robert Stobaugh and Daniel Yergin, Random House, 1979. This study, six years in the making, examines the American dependence on conventional fuels, particularly on imported oil, and places the prestige of the Harvard Business School firmly behind conservation and solar energy.

Energy and Growth Policy in North Carolina, John Lebens, Urban Studies Energy Project, Center for Urban and Regional Studies, University of North Carolina at Chapel Hill, June, 1978. This analysis of evolving state energy and growth policy includes general policy recommendations. Useful overview of energy literature and bibliography included.

Energy in North Carolina, Greensboro Daily News, published as a composite from their September 9, 11, 14, 16, 18, and 21, 1979, issues. A thorough look at the state's energy "at home," "on the road," "on the job," "under control?" (politics), and "alternatives." Extremely useful overview and resource. Combines newspaper readability with state-oriented data.

An Energy Policy Option for North Carolina: Toward Conservation and Renewable Energy Resources, Thomas Gunter, Department of Physics, University of North Carolina at Chapel Hill, October, 1978. Gunter provides an overview of how state energy policy could shift from conventional fuels to alternate sources (conservation, solar, biomass, wind, hydro). It includes a discussion of legislative activity and offers recommendations for moving toward alternative policies.

Energy Technologies and Policies for North Carolina, Environmental Studies Council, University of North Carolina, 1978. This is a compilation of the proceedings — papers presented and recommendations — from a May, 1978, conference attended by 120 people from universities, government, industry, and the public.

Interim Report of the Interagency Task Force on Energy Management for Balanced Growth, December, 1978. This Task Force represented an effort at intergovernmental examination of the energy issue as it relates to growth.

North Carolina Energy Institute Annual Report, 1979. In this first annual report, the Energy Institute details future research needs and lists the various contractors who have undertaken research projects. For information, contact Energy Institute, P.O.Box 12235, Research Triangle Park, N.C. 27709.

North Carolina Energy Policy Council Annual Report, 1978. Since 1976, the Energy Division, as the staff for the Energy Policy Council, has produced three such reports which serve as a general reference for the developing energy policy in the state. The Energy Division has published a number of other reports on their various activities and puts out a monthly newsletter, Energy Issues. For copies or information, contact Information Section, Energy Division, 430 N. Salisbury St., Raleigh, N.C. 27611.

North Carolina Notebook of Renewable Energy Projects, North Carolina Land Trustees of America and the North Carolina Coalition for Renewable Energy Resources (NCCRER), October, 1979. By far the most comprehensive listing of energy resources agencies, organizations, and individuals. Available from NCCRER, Box 10564, Raleigh, N.C. 27605.

North Carolina Utilities Commission, 1978 Report, Vol. XII, January, 1979. This is the annual report of the Utilities Commission and includes statistical and analytical data through 1976. It is a useful overview of the Commission — its history, legislative mandates, and responsibilities. For information, contact N.C. Utilities Commission, P.O. Box 991, Raleigh, N.C. 27602.

Nuclear Cargo in North Carolina: What Are the Risks? May, 1977, Radiation on the Roads May, 1979, Blind Faith: North Carolina's Nuclear Accident Preparedness, November, 1979, the North Carolina Public Interest Research Group. This series reports on the state's level of preparedness in case of nuclear accident and the risks in transporting nuclear cargo through the state. For copies, write N.C.P.I.R.G., Box 2901, Durham, N.C. 27705.

A Statement to the Governor by the North Carolina Alternate Energy Task Force, September 14, 1977. Written by three former members of the Jim Hunt Energy Task Force (Daniel Koenigshofer, David Orr, Brad Stuart) and two former presidents of the Conservation Council of North Carolina (John Curry, Wallace Kaufman), this policy proposal to the newly-elected governor critiques nuclear power and proposes alternative paths.

Tower of Babel: A Special Report on the Nuclear Industry, Southern Exposure, Vol. VII, No. 4, Winter, 1979. In a 1973 issue, Southern Exposure examined the region as an "energy colony." This much-expanded and updated sequel has a wide range of articles and a lengthy research section, which includes "interlocking directorates," charts of the utilities' boards of directors. Copies are \$4.00 from Southern Exposure, Box 531, Durham, N.C. 27702. □

# ARTICLE II

# A Guide to the North Carolina Legislature . . .

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The North Carolina Center for Public Policy Research, Inc., Post Office Box 430, Raleigh, N.C. 27602. The Center is a private, non-profit, non-partisan research institution formed to analyze and assess the performance of state government.

## WHEN

Order now and you'll receive your copy early. Article II will be published in the spring, while many members of the General Assembly will be running for re-election and well before the 1980 session of the legislature convenes.

# HOW (MUCH)

\$4.00 (including tax and postage)\*

\*A few copies of the first edition of *Article II*, covering the 1977-78 General Assembly, are still available for \$3.00 each.



FROM THE CENTER OUT

In December, the Center released a short report called "The Gannett Conundrum: Keeping the Courts of North Carolina Open to the Public." The report was written by Fred Harwell and distributed free of charge to the press, government officials, members of the Center, and the public. It focused on the effects of the U.S. Supreme Court's ruling in the case of *Gannett Co. vs De Pasquale*, which was announced on July 2, 1979. In that case the Court held, by a vote of 5-4, that members of the public have no Sixth Amendment right of access to some criminal court proceedings. The Center's report concluded, however, that in North Carolina the public has a right of access to trials and pretrial hearings, irrespective of the Supreme Court's interpretation of the Sixth Amendment, because of language in the North Carolina Constitution.

The report got wide publicity and received a number of responses both in letters to the Center and in newspaper editorials across the state.

The report also received an official response from Thomas S. Watts, President of the North Carolina District Attorneys Association. The letter from Mr. Watts appears below.

Dear Mr. Harwell:

Re: "The Gannett Conundrum"

I received a copy of the above captioned document, authored by you, on November 29, 1979. On behalf of the 33 District Attorneys of North Carolina, I take extreme issue with your unsupported

assertion regarding the existence of "a judicial conspiracy" between the Judges and prosecutors of this state to exclude the public from criminal Court matters. The conclusion you assert is without any basis in fact!

The "rights" granted to every criminal accused under the State and Federal Constitutions, the General Statutes of the State and Federal and State appellate decisions create a narrow pathway for a prosecutor to tread as he seeks to convict those who prey upon our society. The rapid expansion of the "rights" of the accused, to the detriment of the "rights" of the victims of crime, has been vigorously pursued by organizations such as yours for a number of years. It is ironic that these expanded privileges of the criminal defendant are now confronted directly by what you term as the business of the "public", i.e. society. If nothing else, this confrontation should remind many people of the old and valuable lesson that one cannot have one's cake and eat it too!

The District Attorneys of North Carolina welcome open, public trials in the belief that every conviction, with resulting punishment, serves as a deterrent to those who would plan committing similar crimes. Media reports of criminal proceedings, although often inadequate and incorrect, serve to widely disseminate and greatly multiply the deterrent factor; however, there is no deterrent to a conviction which is reversed on appeal because of prejudicial publicity which prohibited the accused from receiving a fair and impartial trial.

Budgetary and other logistical restraints frequently inhibit changes of venue or the use of special jury venires to eliminate the impact of pretrial publicity. I believe that your organization would better serve the citizens of North Carolina by seeking viable solutions to such problems, rather than attacking able trial Judges, our fine Chief Justice and North Carolina prosecutors with meritless assertions.

I was amused to note that you did not include the defense bar in your conspiracy allegation along with the Judges and prosecutors of the State; it appears to me that they are the people who initiate closure motions. Defense attorneys take the same oath quoted in your paper upon their admission to the practice of law.

November 30, 1979

Thomas S. Watts

On January 2, 1980, the Center officially moved from its old quarters on Morgan Street to offices located in the Insurance Building in downtown Raleigh. Please note our new address and new telephone number: North Carolina Center for Public Policy Research Room 412, 336 Fayetteville Street Post Office Box 430 Raleigh, N. C. 27602 919/832-2839

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