

A National Energy Plan

Program For Action

Maximum Public Participation

Public Energy Districts

Regional Energy Boards

National Energy Organizations

The plans and programs set forth in the preceding sections are grounded in concrete experience. They represent bold and imaginative thinking by citizens of local communities in different parts of the nation. These communities differ from one another in terms of their population size and makeup, geography and industrial base.

So far these initiatives have been focused on immediate local problems, but as the reader can readily observe, the different communities in one way or another all have begun to relate to regional or even national programs and policies. In Northglenn, ultimate resolution of the water issue involves metropolitan Denver and the communities and farms extending out and along the slopes of the Rockies. The interests of those regional groups in turn are dependent on national water policy, (the policies of the Department of Interior, Environmental Protection Agency,

Department of Agriculture, etc.) In Davis, a major obstacle to developing a new transportation policy is the failure of federal and state agencies to support mass transit that could carry people back and forth between Davis and Sacramento, and between Davis and the Bay area. In Seattle, the central issue in the energy debate was the city's proposed participation in a regional nuclear power pool.

As I argued in the introduction, energy is a national political issue, and over the long run, must be dealt with in a national context. The United States economy is highly centralized. The companies which dominate fossil fuels, and which have become important factors in the expanding alternative energy industry, achieve their power at the national level through the Congress and administration. I believe that over the long term any substantive change for the better in local energy policy will

entail a change in policy at the regional and federal level.

✓ Not long ago I joined together with friends from the Public Resource Center and elsewhere to discuss the broad outlines of an overall plan that could change the existing energy system in the United States. We met in the wake of the 1973 Arab oil boycott, and our interests were aimed primarily at fossil fuels, but the plan we came up with has direct bearing on alternative energy. We set forth principles and then a tentative scheme for a new system, actually a network of democratically constituted local, regional and national energy organizations. This system

would have the authority to produce, transmit and distribute energy throughout the nation. Its introduction clearly would have major effects on other parts of the political economy as well.

In doing so, we recognized all the dangers inherent in Utopian planning. But it seemed to us important to set forth a vision for the future and also a framework into which various reforms or changes could be fitted. Otherwise, we are likely to go fumbling along, patching up a decrepit system here and there, not driving for any fundamental change.

Proposed Plan

Our plan or system is based on several principles, including:

1. The natural resources of the nation should belong to all the people.

2. Each citizen should be assured a fair share of the energy made available to the American people.

3. Whatever system is developed, it should be firmly rooted in local popular control. Thus, regional and district agencies, created under the plan, should be involved in every stage of the preparation of the national energy plan.

4. All information regarding the activities of every energy agency and all reserve statistics and data on energy consumption should be publicly available on a timely basis, to facilitate the fullest possible participation by the public in the preparation of the plan,

and in its subsequent implementation.

5. The prices of energy products should be set at the minimum level consistent with the costs of production and the ecologically sound use of the nation's resources, including not only energy resources but also air, water, land and other natural resources.

6. There should be the minimum possible consumption of non-renewable resources. Where possible, the energy plan should be coordinated with other national planning aimed at reducing the consumption of non-renewable resources.

With these principles in mind, an initial, tentative scheme for actually translating the ideas into a legislative and administrative program is laid out.

Briefly, the concept calls for creation

of public energy districts around the country. There would be several hundred such districts, and the district energy boards would be chosen in general elections. The district boards would plan, control and administer energy production and distribution within their territories. They are the guts of the system. The local districts, in turn, would send representatives to regional energy boards. The regional boards would send representatives to the national energy agency, which would coordinate and develop national energy policy and arrange for international transactions.

This governmental system would plan energy development and execute energy policy. It would dispense research and development funds and administer large portions of the energy apparatus that is now under private control.

The essential aim was to ground an energy system in responsive democratic government at the local level, which would not only govern, but whose constituents would be intimately involved in actual production, distribution and use of energy. The plan would place control of private transportation systems, i.e., oil and gas pipelines and electric transmission systems, in the hands of the national agency. The plan additionally would sever the bonds that link industry and government by removing planning from the industry purview and putting it in the hands of the new system. Research and development functions also would be taken from the federal government and industry, and instead placed directly in

the hands of the district, regional and national energy agencies.

In practice the energy system might work like this: The energy district board of, let's say, Riverhead, Long Island, New York, would meet weekly to debate and develop energy policy that would include a five-to-ten-year forward plan. These plans would take into account such factors as the feasibility of introducing solar energy for heating and cooling of buildings, low energy architecture, transportation and industrial patterns. Riverhead's district then would join with other public energy districts making up a Middle Atlantic region, for monthly meetings at New York. At these meetings, the Riverhead representative would work with other regional representatives in hammering out a coordinated energy plan, also involving maximum use of solar and other alternative energy schemes. These meetings would result in a regional plan, which the regional representative would present in Washington to the national agency. The members of the national agency, each one representing a region, would then work up a coordinated national plan that sought to meet the requirements of each region and district.

Suppose, in the case of the middle Atlantic region, including Riverhead, the national plan calls for allocating oil to be used for medicine and gasoline. The national board allots the region an amount of oil production on the outer-continental shelf off Louisiana. Then the Middle Atlantic region contracts with the southern region for production of the oil at rates established by the

national board. The oil then is transported from offshore Louisiana to Middle Atlantic refineries via pipelines controlled by the national board, and from the Middle Atlantic refineries to Riverhead, in pipelines controlled by the region.

This system is operated by a popular governmental planning process that is grounded in local constituencies. Private enterprise functions within this system in a circumscribed way, i.e., its methods of operation, rates, etc., are established by the system, treated in effect as a public utility.

Here is a more detailed description of the plan's different aspects:

Public Energy Districts: The heart of the plan involves creation of a new local government unit to administer energy policy—the Public Energy District (PED). This would be a sort of municipal corporation, a political subdivision within a state. The idea is taken in part from Lee Webb's work on a model energy scheme for Vermont. In part it is based on historical experience in the state of Washington. As David Whisnant has described the Washington experience in *People's Appalachia*, "In concept the public utility district is relatively simple. Normally a PUD law authorized a publicly controlled body to issue revenue-producing bonds, receive and disburse funds, acquire real estate (by condemnation if necessary), construct dams and other power generation and distribution facilities, and sell electric power. Many PUDs in the Northwest are distribution facilities only, buying their power from the Bon-

neville Power Administration. All PUDs pay a specified portion of their receipts into the general revenue funds of their counties. As nonprofit enterprises, they are able to supply electricity to their customers at about half the rate charged by private utilities, while paying off their own indebtedness to bondholders.

Directors of the PED would be elected at the polls as part of regularly scheduled elections with standards set for local geographic and worker representation.

A public energy district would have power to eminent domain, but not the power to tax.

The public energy district would be the basic unit within the proposed system of local, regional, and federal energy planning and administrative bodies. It would conduct planning, carry out research and development, produce oil, gas, coal, uranium, etc., design and manufacture solar collectors, build oil refineries, lay pipelines, operate and construct electric generation systems—all of the functions now carried on by the different energy industries or fragmented public or nonprofit bodies.

It is anticipated that the district would continuously debate energy policy and establish and administer policy for the region. It would set utility rates and priorities for end use of fuels.

The district is meant to be a powerful political and economic organization. For example, if an automobile manufacturer sought to open a plant within a public energy district, it must first submit a detailed plan of operations to

the PED whereupon the directors would initiate hearings on the advisability of building such a plant, initially taking into account the plan's impact on energy and the environment. But as the PED developed, it might also go further, inquiring into the energy efficiency and usefulness of the end product, i.e., car, truck or bus; the effect of the plant on employment and transportation within the PED, environmental impacts, effect on economic growth policies, and in other ways look into the beneficial and adverse effects of constructing the factory.

Within the different operations of the district, workers would manage and operate the facilities, although the overall policies would be determined by the district board or council, which of course also would include workers.

Regional Energy Boards: Each public energy district would send a representative of its board to a regional energy board. The federal government has developed 10 multistate regions for the purpose of administering its different programs, and while these regions are arbitrary, the plan uses them as a basis, at least, tentatively.

There are several different sorts of federal regions, including six large "depressed areas" defined by the Economic Development Administration; 25 metropolitan administrative areas called Federal Executive Boards, and 10 overall administrative regions which cover the entire nation and its territories. Under Nixon, the major emphasis was to develop the 10 regions, and the Departments of Labor, HUD and HEW all were committed to similar

regional concepts, and often had offices in the same building in the same city, which served as a sort of regional capital: Boston, New York, Philadelphia, Atlanta, Dallas, Denver, Chicago, San Francisco, Seattle, and Kansas City. Nixon set up a regional council where representatives of each involved agency have a seat.

While the public energy district would administer energy resources on a day to day basis, the regional board would allocate resources within the total area.

The Tennessee Valley Authority provides an idea of what a regional organization might be like. Since its origins in 1933, TVA sought to mesh together different aspects of resource planning, electric power, agriculture, industry, fertilizer production, navigation, flood control, recreation, conservation. It conceived of the immediate job as not merely to build dams and reservoirs, but to put people to work. It did not contract for the workers, but hired them directly, building communities for them, attending to their health needs. It was an important force in reinforcing existing state and local governments, by delegating tasks to these governments on a contractual basis. Its free technical services helped raise the level of state and local services.

Even though it was entirely surrounded by hostile corporations and a federal government which reinforced those corporations, TVA became an immensely important economic force, far more so than often is recognized. It should be remembered that TVA's electrical production program initially made possible the nuclear industry.

Without the vast quantities of electricity produced by the combined coal and hydroelectric plants of the Valley Authority, the Atomic Energy Commission's uranium enrichment plants could never have operated. In providing that electricity, TVA literally reorganized the coal industry. It introduced the concept of long term contracts, was an important factor in mechanizing the coal industry, and became the single largest purchaser of coal, a vital factor in the market. It also introduced a modicum of sanity into the electrical utility industry, through its interlinks with other private systems in the south and southeastern mountains, particularly the American Electric Power Company's operations. Despite the vitriolic attacks made upon TVA by private power, the valley authority, through these entities, made the private systems stronger and more stable.

The tragedy of TVA is that because it became so much an instrument of national economic policy, it has been placed in a position of turning against its own constituency on the strip mine issue. Because of its policy of providing low priced electricity, the authority seeks out coal at the lower prices, and hence trades heavily in strip mined coal from Appalachia. Strip mining is ruinous to the entire region; by buying the stripped coal TVA turns its own constituency against it.

A similar situation developed around nuclear power. TVA reorganized the coal industry to provide the electricity to enrich the uranium necessary for hydrogen bombs and nuclear power plants. In doing so it was answering the dictates of the Pentagon, which was

anxious to perpetuate nuclear technology.

Under this new proposal, the possibility of such policy would be greatly lessened by grounding the policies of a TVA-like authority in the local districts, which in this instance would include the strip mined areas. In this case, it could not become an instrument of top-down federal policy.

National Energy Organization: The purpose of this board or agency would be to coordinate the ideas and plans of the different regions. It would be an important organization, providing the point of contact with the federal governmental apparatus and the Congress.

It would have several principal functions. Perhaps the most important would be to act as trustee of the nation's natural resources, allocating scarce resources to regions for distribution to localities.

In principle, all natural resources of the nation ought to be public, and not given solely to any corporation for exploitation on its own terms. But, as with all other aspects of this plan, transitional steps are needed, Here is one good example:

The national agency could take over from the Interior Department administration of those territories already in the public domain; that is, areas specifically removed from commerce by the Congress for the purpose of the general public good. These federal resources include an extensive amount of mineral fuels. The estimates vary. According to a common estimate, over 50 percent of the fossil fuel energy resources of the United States are in the public domain

territories. Some estimates place the amounts as high as 80 percent. According to the Ford Foundation's Energy Policy Project report, about one-third of the remaining domestic oil and gas resources are estimated as likely to be found in the outercontinental shelf, which is part of the public domain. In 1972, the outercontinental shelf lands produced 10 percent of the domestic oil and 16 percent of the domestic gas. Oil shale is almost entirely controlled by the federal government. About 85 percent of the strippable low sulphur deposits are in the public domain. About half of the nation's geothermal resources are on public land. An estimated 50 percent of the domestic uranium supply is in the public domain.

These estimates do not include the huge areas of Alaska that already have been leased by the federal government to oil companies, nor the state-controlled lands.

Under one concept, a transitional scheme would be to place these important resources, already in the federal public domain (and in one sense "nationalized") within the control of the national agency, whose regional constituents then could make initial plans and coordinate national policy based on this resource base.

Eventually, the idea would be to widen the concept of public lands so that all natural resources, including mineral fuel resources, were considered public.

In principle then, all energy sources would come under the public control. In addition, the national organization

should have a planning staff that functions as a public research and development center serving the different regions. Probably this staff would conduct the mapping and resource estimates that now are carried out by private industry.

The national organization would take over functions of the Federal Energy Regulatory Commission and other regulatory agencies. For instance, it would establish all interstate rates and end use priorities for energy, and arrange for international trade.

As the history of the modern energy industry instructs, again and again large corporate interests—the Standard Oil Trust, its successor companies, the Morgans, Insulls, Rockefellers—dominated different sectors of the industry through control of the transmission facilities. Rockefeller initially built his monopoly through control over transportation. In the 1930's, the Morgans and Rockefellers controlled the natural gas business by dominating the pipelines. In California today, the major companies control the industry by ownership of pipelines. In electricity, brownouts and blackouts are due in large part to the inefficient systems caused because private companies refuse to transmit public power and interlock their systems with public power systems. Tanker fleets, the largest navies in the world, still are controlled by the major oil companies, and so on. Transportation of energy is absolutely crucial to its ultimate control. Therefore, under the plan the major interstate transportation facilities should be placed under the direct con-

trol of the national energy board. This is a crucial part of our long range plan.

It would have the national board, through a staged process, acquire outright control (51 percent) of key sections of major interstate natural gas and oil pipelines, and electrical transmission systems.

During this 10-year period, the national energy board would lease and operate those portions of oil, gas and electrical transmission systems necessary to transmit energy from public domain territories to the different public energy districts. Terms of the leases would be negotiated between the board and the companies.

The lease period would provide an effective test of the systems and the energy board could determine which parts of the transportation lines should be used in its developing inter-regional system.

In the case of interstate commerce in energy that was transported by water, rail, truck or airplane, the energy board would establish rates and prescribe general policy.

While the national board would determine policy and establish rates, the actual work would be carried out at the local level by the PEDs. Neither the national energy board nor the regional boards should maintain sizeable bureaucracies. All work, including planning, bookkeeping, hearings and investigations would be conducted by the PED staff.

The national energy board would also regulate commerce in energy between regions. Commerce within a given region, among the public energy

districts, would be governed by the regional board. Commerce within the public energy district would be regulated by that board.

Planning: As the brief history of the oil and coal industries indicates, the crucial element in the industry's control of public resources and of federal governmental policy is planning. Systematically, since the early 1920's, the federal government has given over to industry access to natural resources and has refused to plan these resources.

The central, most important step in breaking apart big capital from the federal government would be to remove planning from industry. The representative federal board as envisioned in this plan would conduct routine, careful mapping of the nation's mineral energy resources, including geophysical assessments, shallow and deep core drilling, environmental tests, aerial and space surveys, mapping and testing of the nation's coal, etc.

As with other parts of the proposed system, the actual work would be carried out within the different energy districts under contract from the federal and regional boards.

Federal money designated for planning would be earmarked for use first by local energy districts, and secondly through contract with not-for-profit groups within the localities.

Where the money was spent on private industry, it would go to locally owned and managed small businesses.

The long range plan set forth above is primarily concerned with existing fossil fuels and the systems for their pro-

duction, processing and distribution. But obviously as time goes on there probably will be an increasing use of alternative energy. Any political or economic plan must take alternative energy into account. Following are a few ideas for how alternative energy could be included in the long term plan.

To begin with, communities within a given public energy district should be encouraged to develop 10-year community energy plans, concentrating on residential and transportation requirements. These are the two aspects of energy policy that most affect local communities. Such planning might include introduction of bicycles, car pools, minibuses, etc. A community energy center could be established to provide information for different neighborhoods and individual residents. For example, it could provide information on energy audits.

A major block to widespread introduction of solar energy and other alternatives is refusal of banks and the government to provide inexpensive loans to make the often expensive changes. The community energy plan along with the community energy center could be vehicles for dealing with this situation. Leonard Rodberg suggests that community groups, perhaps through the center, negotiate as a group with local banks for long-term loans under special conditions. One of those conditions would be that any money borrowed for alternative energy systems be repaid under a graduated payment plan. Under such a scheme, loan repayments would start off small, and grow larger as time goes on. Some housing loans are

arranged in this manner now.

Secondly, Rodberg would like to see a change in the recently enacted tax credit system. As it stands the government offers a tax credit of up to 20 percent for homeowners who install alternative energy systems or who employ methods of energy conservation, up to \$10,000. Rodberg's idea is to change this tax credit into a direct grant and use it as the downpayment against a loan. Under such a plan, the money would move directly from the federal government to the bank making the loan.

The regional energy boards would be of special importance in any widespread introduction of alternative energy, for many of these systems, including solar, depend on the geography of the locale. What works in southern California may very well not work in the Northeast. Such policies as standard-setting would have special relevance at the regional level. And at the regional level, energy extension services could be developed to spread out into local communities.

At the federal level, the national energy organization could sponsor competitions among architects, engineers and planners for alternative energy system designs, and then gradually over time and on the basis of those competitions begin to set certain criteria for design of public buildings. All buildings constructed with federal funds would be required to adhere to the design criteria. So too would buildings leased by the federal government. Over time the design criteria would apply to buildings inhabited by all organizations receiving federal funds for whatever purpose.

Check List For Energy Action

Here are a few tips to keep in mind as you think about ways to change the energy system in your community:

1. How to Begin. One quick, simple way to get started, especially in places where there has been little serious thought to changing the energy mix, is to pull together your neighbors as an ad hoc group. Get everyone to help gather existing information—such things as street maps, bus routes, numbers and routes of car pools, demographic information, electric and gas consumption figures, utility costs; find out where people in the neighborhood work and the means of transportation they use—anything and everything that seems to you to bear on the subject. Then stage a week-long charette in the evenings after work.

A charette is a tool of planners and to a lesser extent of architects. It's a kind of brain storming session where the people who will use or be affected by a school addition, a mall or building are invited to come to a meeting and help lay out what the project should look like and what it should contain. Everyone takes a hand, marking up plans that are spread all around the room. In the case of energy, you'll want to concentrate most heavily on transportation and

residential systems. The charette should give you a fast education in energy and a rough idea of what can be done in your immediate community.

2. Start a Community Energy Center. Form your neighborhood or community group into a community energy center. No matter how small or makeshift this center is to begin with, it can be an important step in planning for an alternative system. The center can provide information to residents who want to make their own energy audits, or put them in touch with others living in similar style houses who already have conducted audits. Gradually it should become a resource for the entire community, providing details of all sorts on what can, and cannot, be done. It should also be a forum for community discussion and debate, and provide liaison with local government. The center itself can make approaches on behalf of its members to banks and other financial institutions for special loans; it could represent the community before regulatory commissions, conduct studies, and so on.

3. Local Government. Local government can be an important, constructive forum for progressive change in energy policy. In the cases of both