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# Energy and Urban Policies/Programs

*Official Transcript of  
Public Briefing and Addendum  
April 27, 1978  
Washington, D.C.*

Published February 1979

**U.S. Department of Energy**  
Assistant Secretary for Intergovernmental  
and Institutional Relations  
Office of Consumer Affairs



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OPENING REMARKS:

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Secretary of Energy

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Assistant Secretary for Intergovernmental  
and Institutional Relations  
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Assistant Secretary for Policy  
and Evaluation  
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Acting Assistant Secretary  
for Conservation and Solar  
Applications  
Department of Energy

MR. WILLIAM PEACOCK  
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Assistant Secretary for Neighborhoods,  
Voluntary Associations, and Consumer  
Protection  
Department of Housing and Urban Development

MR. WALTER JABZANKA  
Department of Housing and  
Urban Development  
(Sat in for Father Baroni when  
he was called away from the briefing.)

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Roscoe Ward, Chief, Biomass Branch, Office of Energy Technology, ET



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The following is an index of questions raised relative to the DOE public briefing on Energy and Urban Policies/Programs. Questions 1 through 40 were submitted by consumer and public interest groups prior to the public briefing. Their answers were prepared by DOE program offices. Questions 3, 5, 7, and 13 answered also by the panelists.

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#7 - Healthy urban areas can grow from the stake that small business and small investors have in their local area. What is DOE doing to protect small business and inventors from being gobbled up by large energy companies who have no dependence on nurturing urban communities?

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#8 - During the March hearings of the Joint Economic Committee's Subcommittee on Energy, DOE confessed that there was no input from DOL into the National Energy Plan. Witnesses from DOE and DOL further admitted that no integrated employment energy impact analysis mechanism on different energy sources existed then, nor does it exist now. Why? Witnesses further admitted that the conservation and solar families of energy technologies--unlike other sources of energy--could create jobs in urban settings and particularly in crisis cities where the hard core unemployment problems exist. During those hearings in March, 1978, Secretary Schlesinger said that developing energy employment impact analysis--particularly of conservation and small-scale appropriate energy technologies vs. traditional big energy impact--would be one of DOE's top priorities.

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- What has DOE done since March to implement this priority?
- What is DOE's plan after this briefing on employment impact analysis and what resources are committed to having EIA's this year?
- What data sources will be used to link DOE's EIA's to hard inner city employment data?

#9 - What specific mechanisms, if any, does DOE use to assess the potential employment effects of the various long- and short-term conservation and supply strategies it has under consideration?

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- How are these effects taken into account by DOE in deciding which of these strategies to pursue?
- On what basis does DOE know, if it does, the short-, middle-, and long-term employment impacts between a supply strategy which places greater emphasis on the development of decentralized solar, on the one hand, as opposed to centralized nuclear and/or fossil fuel power generation on the other hand?
- If DOE has no reliable basis to make such an assessment, what specific steps is the agency taking to remedy this deficiency?

#10 - Under the President's proposed Urban Aid Program, \$400 million are being advocated for job training subsidies with the hope of providing 100,000 "hard-core unemployed" citizens on-the-job training. Has DOE considered what measures it will undertake to spur the energy organizations into providing on-the-job training programs in energy related fields and, if so, what guarantees can the Department make to assure that the skills learned will be applicable in the open employment market?

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#11 - What has DOE done to encourage the development of labor-intensive alternative energy businesses in inner city areas to assist in resolving some unemployment problems? What is DOE's position on the Humphrey-Hawkins bill insofar as providing public service jobs in the fields of solar technicians, wind-mill mechanics and weatherization experts? Why isn't DOE developing programs around the employment and economic development potential of low-cost solar, passive and other appropriate technologies?

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#12 - Has there been any effort by the Department of Energy to coordinate plans with other agencies to put unemployed youth to work during the summer months in energy conservation programs?

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#13 - How does the operation of DOE's weatherization program for low-income persons ensure that all necessary housing rehabilitation work, including burner or furnace repairs, will be concurrently performed, together with their weatherization activities?

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#14 - The prime thrust of the conservation and alternative energy elements of the Administration's energy effort has been to provide incentives for owners to weatherize, insulate and install solar equipment, etc. What incentives will the Department of Energy undertake to ensure penetration of solar and conservation technologies to those segments of the urban population which do not benefit from such incentives? Specifically, what actions will DOE undertake to cause these technologies to benefit construction of inner city, low-cost rental housing?

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#15 - Has the Department made an effort to assure that the forthcoming revisions in the HUD minimum property standards will be as effective as feasible in reducing residential energy consumption?

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#16 - The provisions for weatherization funds as outlined by the Community Services Administration (CSA) provide for services for low-income homeowners only. What considerations are being made for low-income apartment dwellers or house tenants who are unsuccessful in forcing landlords to make weatherization repairs or renovations?

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#17 - Why is DOE seeking to seize control of the home weatherization program when the CSA and the 800 Community Action Agencies (CAAs) across the country have already demonstrated an excellent track record in performing such work?

110

#18 - What is DOE doing to support the development and marketing of electric cars that would reduce pollution in the urban areas and take advantage of power during low electricity demand periods? Is it possible to gear battery chargers to periods of minimum electric loads?

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#19 - Alcohol as an alternative fuel appears to offer considerable promise in reducing reliance on petroleum based fuels. Alcohol fuels should help ease pollution problems in urban areas and provide a market for surplus crops or agriculture waste. What is DOE's position on alcohol? On gasahol? On methanol? On ethanol? On mixes of alcohol? On small-scale ethanol production to serve the needs of the community?

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#20 - In most urban areas, mass transportation is sorely inadequate. In this area, what specifically is DOE doing with its authorities and resources to encourage a vastly expanded urban and suburban mass transportation system? Is DOE encouraging the use of less polluting, more efficient, smaller mass transportation vehicles for low passenger periods? Although the economics of such vehicles may not be altogether favorable, the energy savings and pollution abatement advantage may well outweigh the disadvantages.

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#21 - We understand the transportation of food is one of the most energy intensive components in the food production-food consumption cycle. This energy intensive component can be reduced by more direct producer-consumer relationships. Is DOE working with USDA to advance these relationships? Is DOE encouraging GSA, HEW, DOD, DOI and other major purchasers of food to encourage energy saving practices in terms of local buying, transportation and marketing practices?

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#22 - What policies does DOE have for encouraging non-polluting energy conservation transportation with the Department itself, i.e., bus transports, motor pools, etc.?

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#23 - Why has DOE invested so little funds and done virtually nothing to promote Federal legislation that would either mandate or support urban bikeways as an alternative to cars and buses?

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#24 - How does the Department of Energy plan to utilize the energy efficiencies of public transit as an urban strategy for energy conservation? The Department has supported and publicized the use of car and van pools. How does the Department of Energy plan to coordinate these alternatives to single passenger automobiles with public transit in its urban strategy?

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#25 - Vast amounts of public funds have been expended to construct energy intensive consolidated waste water treatment plants in metropolitan industries and developers at the expense of city taxpayers. What is DOE doing to influence EPA to go after the industries that avoids pretreatment and force the public to clean up the mess in an energy intensive centralized system? In addition, the urban parks and gardens as the fringe farms are not able to use the valuable nutrients that can be routinely reclaimed from wisely managed waste treatment facilities due to the problem of heavy metals that could be removed by pretreatment. How is DOE working with EPA and USDA to prevent this energy and basic nutrient loss?

119

#26 - The production of methane from the anaerobic digestion of organic matter is a well established technology. There is a huge amount of organic waste in urban areas. What is DOE doing to explore and develop practical programs that will capture the methane energy available in urban areas? Is DOE working with HUD, DOL, CSA and other agencies to encourage small community owned and managed business to exploit this wasted energy resource? Could you also address fluidized bed and pyrolysis operations as similar questions?

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#27 - In many of our urban areas we have extensive parks, greenbelt areas and rights-of-way under cultivation of some sort, usually grass, trees or ornamentals. The maintenance of these areas are generally energy intensive in terms of fertilizers, pesticides and herbicides as well as mechanized equipment. Instead of an energy draw-down, these areas could be net energy producers through the

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harvest and utilization by biomass fuels. In addition, this process could generate urban jobs and help clean up the environment through the process of photosynthesis. What is DOE doing about this small, but highly visible opportunity to both conserve and produce energy?

#28 - What studies has DOE completed on the energy savings potential of returnable beverage containers (such as the Oregon experience)? List such studies and summarize the findings. What is DOE doing to encourage State and local governments to take advantage of such savings?

124

#29 - What will DOE do to support the Federal buildings bill in NEA? Will it force energy self-sufficient Federal buildings such as the Manchester, New Hampshire Federal Building in every Federal situation?

126

#30 - The conservation and solar technologies can be of real benefit to many financial, employment and environmental problems plaguing citizens and small business in urban areas-- particularly the cities. Yet cities face a real problem with the financial community in obtaining loans for energy conservation and solar technology.

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- What is DOE doing to promote across the financial community examples like the Seattle, Washington, bank which gives consumers and business low-interest loans for energy conservation and solar investments?
- What priority does DOE place on changing the financial community's reluctance to finance these energy investments?
- How much staff and money is devoted to analyzing and directly impacting the financial community's lack of support to these priority national energy goals in conservation and renewable energy resources?

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#31 - At the last session (February), there was a question as to where cities and private groups or citizen coalitions in cities can go to find a "smorgasbord" of options, projects, funding, technical assistance, consultants and other direct help easily and with minimal red tape when they want to take initiatives on energy conservation and locally based alternative energy sources. Is there a central Federal source of information? If not, please list contacts in DOE who could provide such information.

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#32 - There has been considerable talk about providing tax incentives or rebates to homeowners who make weatherization repairs or renovations, or to those who use alternative energy sources for home consumption. What is DOE's view on energy related tax incentives or rebates, and how would DOE propose to implement such a program?

129

#33 - The Federal Home Administration, the Veterans Administration and the Farmers Home Loan Administration have major influences over new housing and building starts in this Nation. What is DOE doing to ensure that those new starts funded on loans guaranteed by the taxpayers are as energy efficient as is technically and economically feasible? We understand that purchasers seeking loan guarantees from these Administrations must agree to fossil fuel (or electric) energy systems before the loan is authorized. Is this possible under today's energy realities? If so, what is DOE doing to correct this energy affront?

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#34 - DOE has not developed specific energy conservation programs for low-income, fixed-income people nor a delivery system of getting this information/technology to the very people who need it the most. When will this come about and how is DOE going to evaluate whether the program is adequate?

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#35 - Vocational education or vocational agriculture schools are technically oriented, publicly supported institutions. What is DOE doing to encourage such institutions

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(and HEW) to more effectively include in their curriculum materials on energy oriented, locally appropriate technologies? How does DOE ensure that the HEW (OE) material represents the "state of the art" and does not mislead the students in support of or in opposition to these technologies?

#36 - Why isn't DOE using "in place" appropriate technology organizations to accomplish both economic and development demonstrations?

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#37 - What specific mechanisms and analytical tools does DOE utilize to assess the effects of its proposed pricing policies (e.g., natural gas) on low-income persons living in cities? Precisely, how are these undoubtedly severe effects taken into account, if at all, by DOE in choosing among various available policy scenarios? What specific policy options in the form of permanent and lasting answers is DOE considering, either by itself or in conjunction with other Federal agencies to alleviate the impact on low-income persons of skyrocketing energy costs?

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#38 - In many urban areas across the country, severe problems have occurred in the delivery of fuel oil for residential heating. In particular, low-income urban areas often must pay higher prices, must make immediate cash payment and often are unable to obtain delivery of necessary quantities of fuel oil. What is DOE doing to combat de facto energy "redlining," and what will it do for urban consumers to ensure that alternative energy sources are made available in the future for low-income persons through either grants or demonstration programs?

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#39 - With the National Energy Plan (NEP) pushing for increased use of coal, won't the urban areas be forced to endure even higher levels of air pollution than at present?

141

#40 - In the formulation of the National Energy Plan, did the Department of Energy fully consider the implications of the Clean Air Act Amendments of 1977 and their implementation?

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Questions from the floor at the public briefing on Energy and Urban Policies/Programs:

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#41 - What is HUD doing to help public housing tenants with their energy problems, and what is HUD's policy toward neighborhood organizations running their own energy conservation programs, and how does this fit in with DOE's programs? Is DOE helping or hindering?	9
#42 - Given the concern for delivery of specific energy conservation information technology to low and fixed-income people, has DOE considered or will it consider utilization of the adult community, vocational, education system and utilization of the county extension agent system of USDA?	21
#43 - Is there right now in operation a precise place where local community coalitions, private groups, or a combination of both can go; a specific person, a specific office, where we can get: A, an itemized list of things that are appropriate for our size city or community; and B, some technical assistance at assessing our needs and our opportunities; C, some technical assistance in implementing programs that deal with those needs, and some money?	24
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#45 - There is conflicting information on insulation which is best in terms of quality, fire safety, cost, and so forth. Couldn't the Federal agencies involved with insulation come up with a standard and type of insulation that is best perhaps on a regional basis, but at least come up with one or two strong suggestions as to which is best?	31

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#46 - Are there going to be any massive demonstration projects for solar energy products in areas such as New England?

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#47 - When the National Energy Plan was first proposed, conservation was described as the cornerstone of the plan, and nuclear energy was kind of relegated to a "use cautiously" status. But now, one year later, we still have no permanent appointment for Assistant Secretary for Conservation, and the Administration has introduced a nuclear licensing bill which will cut in half the amount of time it needs to set up a plant. Have these developments shown a change, a reverse, in national energy policy?

33

#48 - I have recently become aware that the National Center for Appropriate Technology has some problems. This appropriate technology movement is too new, too young, and has too many possibilities to let this matter slip by. I would like to know what you know about it, and what, if anything, are you able to do about it, and what are you going to do about it?

36

#49 - I have heard that the Department was planning on taking a more careful look at the role that cities might play in national energy policy, particularly that there was some kind of study discussed to look at this kind of question. Is that in fact the case? Has there been any thought given to such a study? If so, what are its dimensions, and if it is to be undertaken, when might we expect some kind of results?

39

#50 - I am interested in a lot of areas in which policies relating to energy will affect disabled people. I am concerned about what I have seen in terms of energy statements coming out of both Congress and the White House that seem to me woefully inadequate in terms of their addressing the problem of public mass transportation. What is DOE planning to do to address the need for adequate public mass transportation, specifically with reference to interface with the Department of Transportation?

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- #51 - Are price controls holding down the prices of petroleum products to the consumer? If so, where is the evidence, or are we simply helping to prop up the OPEC cartel at the expense of the American consumer? 44
- #52 - What policy and program lines is DOE casting to encourage integrated net energy conservation activities? For example, urban agriculture in urban integrated pest management, recycling, composed organic waste; the integration of these such as we have seen, for instance, in the Chinese society and in local appropriate technology attempts in this country. 50
- #53 - Will DOE use the local community action agencies' experiences in weatherization programs for low-income people? 54
- #54 - Does DOE know how much of EPCA funds that were to be passed through to localities actually made it to the localities, and if the intent is to fund local governments in these programs, why weren't pass-throughs mandated over direct grants made to local governments? 56
- #55 - To what extent are energy programs and this experience of meeting with public interest groups and industry, being shared with the writers of the U.S. paper that is being prepared for the UN Conference of Science and Technology, to come off in August of 1979? 61
- #56 - Why is the National Energy Plan promotive of large-scale fuel plants, when many recent studies indicate more jobs would be created with solar and other decentralized technologies? If our concern is with urban environments and energy plans are localized, why not localize production and create more jobs? 66
- #57 - We feel that there is a very unequal division of the monies that are coming down for weatherization projects, and we are also letting a single contract, for the entire State (Louisiana), on energy education work, and that is through the agricultural extension service. Do you have any influence with State governments to see that next year's budget is not let, for example, in a single contract? Do you have any plans to review the apportionment of the weatherization funds to see that it really gets to the place where it is needed? 68

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#58 - People cannot get financing for solar installations. You can't get solar installations through building codes. You can't get house financing, and some of the government financing programs do not yet cover it. It would be of great interest to know the status of those and when we will have standards that are acceptable.

73

#59 - I am interested in the sensitive subject of what DOE is doing for high-energy agriculture. What can be done and what is being done by DOE for these high-energy uses? Are Americans going to be willing to pay exorbitant prices for food, or are we going to somehow develop alternative energy sources for farms?

75

#60 - Because proposed tax credits may not be useful to urban dwellers, many of whom are on low or fixed incomes, and because of the problem of an already-built environment that is dense with shadow zones, cities may be left out of solar development. Has the Department thought about this problem? If so, what are you going to do, and if you haven't thought about it, what kind of mechanism will you develop to factor these types of concerns in your decision making?

79

#61 - Under the National Energy Act, utility companies are to be charged with performance of home energy audits in terms of retrofit and tax credit. There are scores of local governments which have begun to offer this service at no charge. There is some discrepancy between what the local governments will be recommending for insulation and retrofit, and what the utility companies will be doing. What is DOE planning to do to avoid overlap, and really destroying the local initiative?

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\* \* \* \* \*

Three additional questions were read into the official record of the proceedings at the conclusion of the public briefing. Their answers were prepared by DOE program offices.

\* \* \* \* \*

QUESTION:

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#1 - With the rising costs of utilities, what type of provisions have been made to address the impact of these costs on persons with fixed incomes, and on the elderly?

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#2 - Does the State energy planning program include emergency planning to cope with problems such as last winter's electric power shortage?

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#3 - Other than tax credits and weatherization programs, what is DOE policy related to retrofitting existing buildings in the urban community? Sweden, for example, has started a 10 billion dollar program of education and implementation for dealing with existing buildings; for a country with eight million people, this represents a significant commitment.

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## P R O C E E D I N G S

MR. HUGHES: Good morning. I am Sam Hughes, for the benefit of those who haven't seen me before at one of the four prior briefings of this sort. We are very pleased to have you here. We had hoped this morning to have two distinguished guests to talk briefly with us about the subject of this morning's briefing; "Energy and Urban Policies and Programs." Unfortunately, Leo Sullivan was not able to make it.

However, we are fortunate and delighted to have the Secretary of Energy with us this morning. We have had Dale Myers, the Undersecretary, and Jack O'Leary, the Deputy, at prior briefings, and it is a real pleasure to welcome Dr. James Schlesinger this morning to open our session. Dr. Schlesinger.

DR. SCHLESINGER: Thank you very much, Sam, and I thank you, Tina, for the opportunity to participate in this morning's exchange, and to offer greetings particularly to the new Consumer Advisory Committee, which I am informed has representatives from 23 separate States. The Consumer Advisory Committee is most welcome because the ultimate purpose of our energy policy is to serve the average American citizen, and to provide employment.

The question of employment, of course, bears upon the particular issue for discussion at this fifth briefing -- which is energy and urban policy.

I think we all recognize that we are going to go through a difficult energy transition in the United States as the world capacity to produce additional crude oil ultimately tops out sometime in the 1980's, for all practical effect.

At that time, we will be producing worldwide probably 15, perhaps 20 percent more crude oil than today, and we must go through a difficult transition because our economy has increasingly been fueled since World War II by cheap oil, first domestically supplied, and then to an increasing degree, supplied from overseas sources.

The spectacular growth of the American economy and the world economy since World War II has been based upon these cheap energy sources, and now we face, in the 1980's the end of our capacity to increase production worldwide, and that will mean a difficult adjustment for our economy. Unless we are careful about it, it will threaten the growth that creates jobs and is fundamental to stable employment, and consequently to the stability of our political system.

The National Energy Plan is designed to take advantage of the time that is available before these difficult days are on us -- to make adjustments in the economy; to make it more fuel efficient through what is referred to as conservation. Basically it is fuel efficiency, and through adapting the economy to the use of other, more abundant fuels; coal most notably in the short term. Unless we are able to make these kinds of adjustments, we will face in the 1980's a shortfall in the supply of energy which will have ripple effects on the economy. It will relate to rising unemployment of the sort that we experienced after the embargo was started in 1973. It will lead to more rapid inflation, once again, of the sort that we experienced in 1973, 1974.



Axiomatic in the National Energy Plan is that the economy must continue to expand; in order to have expansion of the economy, we need energy. In order to have additional jobs, we need both economic expansion and energy. We hope to become more fuel efficient, but it is axiomatic in the plan that whatever energy resources are necessary for expansion of the economy and expansion of jobs should be made available; that the economy has first claim on our supplies of energy.

This, of course, is central to the issue of the future of our urban communities. Urban communities are hard hit by unemployment. They are hard hit under normal circumstances because much of our unemployment is concentrated amongst minority groups in central-city areas. If we are unable to deal with our energy problems, and consequently with the long-term economic problem of long-term economic growth, this would fall with particular weight upon our urban areas.

Urban living has certain advantages from the standpoint of our energy plan, because urban areas are more energy efficient than are suburban or rural communities. Less transportation is required. Public transit is a viable means of moving people about in urban areas. Multi-family or row housing tends to be far more thermally efficient than is typical of housing in suburban or rural areas.

As we think increasingly about fuel efficiency in this country, we will I believe increasingly see the advantages of urban life, and the need for strengthening our urban communities.

President Carter's recent urban message supports our national energy objectives. He emphasizes in that message the rehabilitation of existing residential and public buildings, the improvement of the existing public transportation systems, incentives for urban employment, and support of neighborhood and community revitalization efforts.

These endeavors are important not only for what they will do for the urban areas, but they are also useful in helping the nation grapple with its energy problems.

This connection between the urban problem and the energy problem is one that you will explore at great length today. I welcome you to Washington, those who are visitors here. For those who live in Washington, we welcome you to this particular meeting.

Thank you very much.

MR. HUGHES: Thank you, Mr. Secretary, for some cogent remarks which I think launch this briefing in good style.

Let me review with you some of the ground rules for these sessions, and then Tina will discuss them in more detail after I introduce our panel.

First, I should mention that the sixth and last of these briefings that is now scheduled will occur on May 25th. The general subject will be food and energy, and will be in this same location, and at the same time.

This briefing, like the prior ones, is being videotaped for distribution to our Regional Offices in order to give the discussion and the views expressed as large an exposure as we can.

Our discussion today covers a rather wide range of energy issues which affect urban areas, including employment, urban energy supply, housing, weatherization, conservation, and transportation, to name a few. For this reason, our panel has responsibilities covering a fairly wide range of Department of Energy activities, and we are also fortunate in having a representative from the Department of Housing and Urban Development. Let me now introduce the panel.

Some of you met Al Alm at prior briefings. He is the Assistant Secretary for Policy and Evaluation in the Department of Energy. In that position, he is responsible for formulating and recommending the Department's overall policy direction, and for coordinating the analysis and evaluation of policies and programs.

He also is responsible for ensuring competition in the energy industries, and that consumer impact is considered in the course of energy policy decision making.

Our panel member from the Department of Housing and Urban Development is Father Geno Baroni, who is Assistant Secretary for Neighborhoods, Voluntary Associations and Consumer Protection. His office is responsible for maintaining an advocacy and brokering role between HUD and neighborhoods and consumer organizations across the

country. The office has a range of functions which deal with consumer problems and citizen participation with respect to all HUD programs.

In addition, he is responsible, he and his office, for neighborhood development, and will be working closely with neighborhood organizations on local self-help neighborhood development and neighborhood revitalization.

Finally, he is responsible for implementing for HUD the minimum energy conservation standards, for all new construction, being developed by HUD and DOE under Title 3 of the Energy Conservation and Production Act. So, he is on target and attuned with our purposes here this morning.

Don Beattie, whom some of you will have seen before on prior panels, is the Acting Assistant Secretary for Conservation and Solar Applications, responsible for implementation of the Department's conservation programs, as well as those programs dealing with solar commercialization.

Bill Peacock is the Director of Intergovernmental Affairs for the Department of Energy, and is responsible for coordinating the Department's programs and plans with state and local government.

Now I would like to introduce our moderator, who doesn't require introduction, at least for a good many of you. Tina Hobson is the Director of the Office of Consumer Affairs of the Department of Energy, and she is responsible for helping to facilitate communication

with all of you, or between all of you, and all of us in the Department of Energy, and helping us within the Department to better understand the needs and concerns which you have and which should influence our actions and our decisions in the Department of Energy.

Tina will explain the circumstances and the ground rules somewhat more in detail than I have. Tina.

MS. HOBSON: Thank you, Sam, and welcome to you all. I want to particularly say thanks to the panel. Many of the members on the panel have been with us at one or more sessions and, as you know, this is an effort to get out basic information on Department of Energy policies and programs. One of the things that we do as a result of this is the Consumer Briefing Summary. If you haven't picked up the latest Summary of the last briefing, "Energy and Consumer Protection, Competition and Fraud," pick one up during the break. This goes to about 22,000 consumer and public interest groups around the country. With it, we hope to disseminate the information that we have, so that we can encourage responses which will indeed help us to evaluate and take another look at our policies.

In terms of the game plan for today; before the panel begins to address questions, I would like to review the ground rules a bit. The first four of the 40 questions submitted by consumer and public interest groups in advance of this meeting will be addressed in the next 30 minutes. We have selected four to address because they appear

generic to all answers, and that will give the panel a chance to open up, and you a chance to see what kind of questions you want to ask during the rest of the time.

However, the remaining 36 questions listed in your program will be answered in the transcript, if you don't elect to bring them up from the floor after the break today. They will become a part of the transcript. The questions that appear are as submitted to us. They were not altered or rewritten. In some cases, more than one group asked the same type of questions, and the list of the people who did ask these questions is available in my office.

You should have a five by seven question card. During the panel discussion period, write your question on the card and indicate whether you represent consumer, environmental, or industrial interests. Then, during the break, my staff will mark a number on your card and we will call the questioners in rotation by interest areas, so everyone will have a chance to be heard.

Each person today is more than welcome to ask one question. If at the end of the briefing all questions aren't asked, we will submit them to the official reporter here and answer them in the transcript.

Now we get to Fern Spivy, our timer. Fern, will you raise your hand? Panel members will be given a warning at the one-minute mark. They have five minutes. There is the one minute card. When the five minutes have been used, I will ring this bell. This is our own Gong Show. If I don't get to ring this bell, I always feel a little put

out because it is the only time I can stop Assistant Secretaries from speaking. I want to begin now, and I will direct my first question to you, Geno. We have asked Father Baroni to answer a special question, and we will just give our guest a start at this.

The question is; what is HUD doing to help public housing tenants with their energy problems, and what is HUD's policy toward neighborhood organizations running their own energy conservation programs, and how does this fit in with DOE's programs? Is DOE helping or hindering?

FATHER BARONI: Thank you very much, Tina. Those are very important questions. What HUD is doing about public housing tenants and the problem of utilities costs comes home right here in Washington, D.C. We just opened three new developments in Washington. One is called Urban Village and is up in the 14th Street area. There are 476 all-electric units in these three buildings.

They were just occupied in January, 1978. The tenants got their first and second utility bills, and they are overwhelming. The tenants are being forced to leave, because these all-electric units have single meters. Everybody has their own meter, and that is separate from the rent, and the rent structure, and the subsidies.

The night before last I called on the president of the local utility to ask for a moratorium, so that the tenants' electricity won't be cut off. This is a national problem, not just with these three new buildings. It is a national problem for HUD, because the supplement for

utility rates and the whole mortgage structure for public housing is out of whack with the increased energy costs and the tough winters. Also, since the apartments here in Washington happen to be all electric, summer is not going to help. In fact, in summer we expect increased utility bills, so we are raising this at the Secretary's level in the Department. We are trying to renegotiate some kind of subsidy for utility costs. This will be a national issue with HUD.

Secondly, there is an effort that we discussed and won with the Office of Management and Budget and the Secretary of HUD. We've set up a task force, an advisory commission of public housing tenants, and HUD staff. They have gone around the country for the past year to determine what the new tenant participation issues are. There are nearly four million tenants in public housing, particularly subsidized housing, in the country. One of the issues that comes up at every meeting of every tenant group of every public housing agency of the 2800 in the country, is the whole question of fuel cost and energy. This issue will have to be faced by HUD in terms of new kinds of subsidies and new kinds of energy assistance programs.

Thirdly, with public housing, we have a massive, multi-million dollar program to retrofit public housing where possible in order to make it more energy efficient. This is part of an energy conservation program in HUD's Office of Public Housing.

The second question about neighborhoods is something about which I am principally concerned. The Government cannot do everything,



and in a new urban policy framework that the President recently set out, he talks about a partnership. There is the Federal Government role, there is the state government role, and there is the local, city government role. To this has been added two things I fought for very strongly--the role of non-governmental, voluntary associations, both national and local, and the role of neighborhoods. Because neighborhoods are where people live, they essentially are the building blocks of the city. I don't think the Government has enough money to revitalize our urban areas. I think that local neighborhood groups don't need everything done to them, or for them, by Federal, state or local government. Such groups need the technology, the know-how, and some resources to do things for themselves, be it revitalizing their neighborhoods, rehabilitating their buildings, creating housing or jobs, or energy conservation. I think that is an essential ingredient in public urban policy. And I think that is one of the strong things we in HUD hope to work more closely with the Department of Energy and the Department of Labor in trying to develop and deliver resources and capacity to local neighborhood groups who are interested in rehabilitation, revitalization, and energy conservation. That includes jobs; that includes capacity; that includes technology; and that includes working in partnership with the public sector and the private sector in terms of revitalizing cities. That is an essential ingredient, at least in the framework of a new urban policy.

MS. HOBSON: Thank you very much, Geno. Okay Bill, I think you selected question five; what is being done to build the city or county government's capacity to address our energy problems? There is a subquestion; what has the DOE done to stimulate the establishment of community energy planning committees; committees of local citizens, government officials, business representatives, academic people, et cetera, who work to put together an energy plan for a given community designed to meet the city or town's energy needs via conservation, renewable resources, and other tactics?

MR. PEACOCK: Thank you for such a simple question, Tina. I think one of the best ways to answer this is to describe the Assistant Secretariat that is commanded by Sam Hughes. Basically, this follows the NASA model and incorporates all of the outreach activities of the Department of Energy; public affairs, congressional affairs, education, business, and labor affairs, consumer affairs, and my own Office of Intergovernmental Affairs. Within my office, we have established a division specifically for city and county relations.

At the direction of the Secretary of Energy, we have been working with a number of major public interest groups; the National Association of Counties, the National Association of Regional Councils, the U.S. Conference of Mayors, and the National League of Cities, to establish a local energy policy advisory committee, to be comprised of elected officials of city and county governments.

In addition, we are also in the process of drafting legislation which has now been submitted to OMB and is called the State Energy Management and Planning Program, which would require State governments to involve local government in any energy planning activities.

One of the existing efforts in DOE to assist communities is the development of a program for comprehensive community planning. Ten to 15 communities will be selected in a demonstration program under what is called the Comprehensive Community Energy Planning Act, which will begin in fiscal 1979, and be carried on through fiscal 1980. These demonstrations are intended to demonstrate and evaluate the needs of local governments by methods such as increasing local interest in energy management, by the extensive use of energy management, and in local planning and decision-making processes.

A key element in this process is the establishment of an organization at the local level to define energy objectives and to lay out some initiatives and action plans by which we can monitor the development of the implementation program.

In addition, we presently have provided assistance to five major communities in this preliminary demonstration plan and these communities are; Hobson, New Mexico; Clarksburg, West Virginia; Alaska's new State Capital; Mercer County, North Dakota; and Atlantic City, New Jersey. All of these plans have been concluded and required heavy community involvement and input.

MS. HOBSON: Thank you, Bill. I am sure people will have some questions about that later. Al, we really saved the easiest question for you. Question Number 3; for 30 years, our national policy has been to improve the economic status of the urban poor. Now they are being asked to sacrifice on behalf of the national energy policy. How do you explain this inconsistency?

MR. ALM: Is that a question or an assertion? Let me start out by talking about the principles under which the National Energy Plan was developed. Two of the main principles were; one, that the plan had to be equitable to all sectors in the society, so that no sector should bear unfair burdens, and, secondly, that the plan had to promote employment and help the Nation's economic growth.

Particular provisions of the National Energy Plan were designed to implement the principles, and let me mention a few of those. With respect to the crude oil equalization tax, we were concerned about the impact of a tax on consumers across the country, when heavy burdens of energy costs are already being placed on the average consumer.

First of all, the tax would have been rebated on a per capita basis. The impact of a per capita rebate is very progressive. In other words, those at the lowest income levels would receive proportionately a great deal more assistance than those in the upper income levels, particularly when one looks at energy use by income class.

Secondly, there is a rebate for home heating oil use. That is a dollar-for-dollar rebate, so that those using oil to heat their homes would be no worse off.

With respect to natural gas pricing, we structured legislation that would place the burden of inevitably rising prices on the investor sector to cushion the consumer from the impact of rising gas prices. This is the so-called "incremental pricing policy" which would require that all high-cost gas be absorbed by the industrial sector before it would be absorbed by the residential sector.

The National Energy Plan contained a number of direct assistance programs. One was a strong commitment to fund the low-income weatherization program at a \$200 million per year level for a number of years. There were also provisions in the National Energy Plan for emergency energy assistance for low-income persons. This program will be administered by CSA or HEW; \$200 million is available in 1978 for this purpose.

There are a number of other provisions that the Administration has supported during the consideration of the NEP by the Congress. That includes low-interest loans for weatherization purposes. The Administration also proposed tax credits for weatherization.

Let me make one final comment. Secretary Schlesinger spoke briefly about the future in terms of a supply stringency. What are the impacts of a supply stringency? This does not mean that we are going to run out of oil per se, that there won't be oil around. If our demand exceeds world supply, the impact is going to be soaring prices, unless the Government attempts to allocate supplies, and that would create a whole host of other problems. Soaring prices will have a significant impact on our economy, and the cities are going to be hit the hardest.

What I am saying simply is that, if the country does not come to grips with its energy problem, like other problems in the economy, it is going to be the cities and the poor that are hurt the most. I think we have developed a plan that cushions the blow to low-income groups to the greatest extent possible, but I think it is in everybody's interest that we get on with it, pass a national energy plan, deal with the energy problem. If we don't, we are going to have trouble down the road; economic troubles, and unemployment problems that are going to be much more severe.

MS. HOBSON: Thank you, Al. That's the beginning of a very difficult subject.

Don, could I ask you question 7? Healthy urban areas can grow from the stake that small business and small investors have in their local area. What is DOE doing to protect small business and small investors from being gobbled up by large energy companies who have no dependence on nurturing urban communities?

MR. BEATTIE: Thank you, Tina. I selected this question because it is always nice to be able to report positive results, and those who were with us for the appropriate technology briefing know that we discussed where we were going in appropriate technology, and that is one part of the answer I will give this morning.

There are three ways in which the Department of Energy is attempting to protect the small businessman and inventor and make sure that he is a part of our energy community and is able to flourish and develop his business.

In the inventions program, we are working with the National Bureau of Standards to select inventions submitted to us and to NBS for funding. At the present time, about 55 inventions have been referred to the Department for funding. About a third of those now are underway, and we fully expect that the majority of the remaining 30 or so will be funded in the coming months.

That program is working relatively well at this point in time, after a slow start due primarily to the fact that there was such a tremendous backlog of inventions that came in for evaluation.

In my particular area, I have set aside funds to take care of the inventions that come in, and I have \$1.2 million this year set aside for small inventors.

The next area is the appropriate technology program. We reported at the last briefing that we were about to make awards in our first pilot project in Region 9. We have now made those awards. We are in the process of making 108 awards based on the proposals that have come to us. This was the first time, of course, that we had even solicited in this area, so we were unsure as to what the response would be, and the response was rather overwhelming. We received 1100 proposals, and the 108 were viewed as those most deserving of funding.

As a result of that large response, we almost tripled the funding that was made available to the program. We originally were considering only \$500,000 for a pilot effort, and it is now up to \$1.3

million, so we expect that program to go nationwide during the remainder of this year, and in fiscal '79.

The program has been slowed just a bit by some administrative procedures, but we will be moving that program to the Northeast and the Midwest by the end of this fiscal year or in early fiscal '79.

Finally, in the small business area, there are many things that are happening in the Department. I think the Department of Energy, to my knowledge, is a leader in attempting to get small business into our programs. We have a unit within the Procurement Office which specifically helps screen procurements that are leaving the Department, to ensure that those that are appropriate for small business do, in fact, get to the small business man.

Many of our programs, especially in the conservation and solar area, are now showing small business set-asides, and programs that we are jointly funding--that we fund through HUD as an example--are almost entirely going to small businessmen around the country. The many energy systems that are going upon residential buildings around the country are being manufactured, supplied and installed by small businessmen.

In addition, in my office, I have a small group now that is working with the small business community in attempting to help them face the problems of high energy costs by providing them information on how they can conserve energy and save money in their specific business. All those programs will continue and will expand.



If I could just move very quickly to question 36, which is related to appropriate technology; aren't we using appropriate technology in in-place institutions? The answer is, of course, that we are. In the Region 9 pilot project, we did use the California Office of Appropriate Technology for evaluation of proposals. We also used the National Center for Appropriate Technology to help us evaluate proposals and to help us set up the program, and we plan to continue to do that in the remaining regions of the country.

MS. HOBSON: Thank you, Don. That was no fun at all. I didn't get to use my gong. I'm sorry you all are so disciplined with time.

This gives us about fifteen minutes for a coffee break now, and your opportunity to talk to the panelists.

Geno Baroni has informed me that he has been called this morning to Capitol Hill, but that Walter Jabzanka will be sitting in for him after the coffee break. Geno, can you stay and have a cup of coffee, so people can ask you some questions?

While you are out in the corridor, Sandy Bregman will be out there assigning numbers for your cards so we will be able to call you in order for your questions after the coffee break. Please be in your seats by five minutes after ten. We will ring the bell then.

Thank you very much.

(A recess was taken from 9:45 a.m. until approximately 10:07 a.m.)

MR. HUGHES: If you in the audience will take your seats, I will reassemble the panel.

MS. HOBSON: May I please have your attention? We will start with the more informal part of the program. One of the public groups asked that we videotape the entire proceedings, so we are going to give you a choice. If you would like to ask your question on the videotape, you will have to come down to the podium on the right, and we can pick you up with the camera.

If you don't care to be on the tape, just raise your hand when your number or name is called. We have two microphones in the aisle. Carl Conrad and Bill Stuver, who are standing in the back, will pick up a microphone and take it to you so you won't have to leave your seat.

When we call on the questioner, please give your name and affiliation for the transcript. You can state your question, and then we usually follow the Presidential conference technique. We will answer your question. If you don't like the answer, or if you think it is incomplete or inaccurate, you have an opportunity to come back and ask a second question of the panelists.

At the end of your question, would you give your question card to either Bill or Carl or to Ms. Liz Overstreet, who is sitting here, so we will have complete information for our record. We found that our first transcripts were sold out immediately. The appropriate technology transcripts will be coming out shortly. We hope to speed things up. There is quite a bit of interest.

We are particularly impressed and delighted to have many out of town people here today, because that gives a different dimension to the hearings. The first person that we will call on will be environmental; Dr. B. Campbell of the New Jersey Department of Education.

DR. CAMPBELL: Given the concern for delivery of specific energy conservation information technology to low and fixed-income people (reference question 34 in the representative questions), has DOE considered or will it consider utilization of the adult community, vocational, education system and utilization of the county extension agent system of USDA?

MS. HOBSON: Who would like to tackle that? All right. Sam, you might want to say something about that.

MR. HUGHES: Part of the question is very simple. Let me respond to the cooperative extension service aspect of the question.

There is, as you may know, an energy extension service in a pilot stage as a part of the outreach activities that I am more or less responsible for. That activity is going forward in ten states. Seven of those states have elected to use the cooperative extension service of the Department of Agriculture as a part of the mechanism for communicating with individuals and groups in their homes and in their communities.

The energy extension service in its entirety was, to an extent at least, patterned after the cooperative extension service, but, of

course, it has different relationships with the university system, and a somewhat different statutory framework.

MR. BEATTIE: I could add briefly, if I might, Tina. We have a memorandum of understanding with the Department of Agriculture now that is allowing us to work with them in all areas of their programs, from farmers' home loan down to the cooperative extension services. We are channeling through parts of the Department of Agriculture funds to develop a number of energy technologies on the farm, and to develop joint programs with them to allow us to show the farmer and the urban dweller ways to save energy. So, there is a very active program, in cooperation with the Department of Agriculture.

MS. HOBSON: Does that answer your question? Do you have a followup?

DR. CAMPBELL: The second part of the question was well answered. The first part; consideration of utilization of the adult/community/vocational education system, I don't believe was mentioned.

MS. HOBSON: All right. Sam, do you want to discuss that?

MR. HUGHES: I will take a run at it. We have relatively small programs, at least in dollar terms, involving grades 1 through 12 in energy education, essentially the training of teachers. Those programs extend to community colleges, vocational schools, and so on. They are rather limited in size. Some think they should be larger, and we need to look at that rather carefully in future budgets, but there are on-going problems.

DR. CAMPBELL: Thank you.

MS. HOBSON: For the record, we will check to see what HEW is doing. I know they are funding a number of educational programs, so we can give you as full an answer as possible.

All right. Number one on the consumer list is Jim Flug of Energy Action.

MR. FLUG: I am forced, Madam Chairperson, to raise a procedural question before I raise my substantive question, and I regret having to do this.

MS. HOBSON: I would be disappointed if you didn't.

MR. FLUG: A month ago, I raised at the session previous to this one the question of the legal status of one of the panel members, and that same question has now been raised by the Office of White House Counsel with the Department of Justice, and one of the people in question is the purported Acting Assistant Secretary for Conservation and Solar, and he is a member of this panel. May I ask whether there is a definitive ruling on his status at this point?

MS. HOBSON: Sam?

MR. HUGHES: The answer is no, Jim, there has not been. The question has been raised with the White House Counsel, who in turn raised the question with the Office of Legal Counsel of the Department of Justice, and they are considering the matter.

MR. FLUG: May I say that I do not mean this to be any personal reflection on Mr. Beattie. But I think it does relate to the

regularity of the Department's proceedings, and also to the fact that the permanent appointee has been held up. There seems to be a relaxed attitude towards the completion of her nomination process. To some extent, the fact that the position is occupied may have contributed to that relaxed attitude. The position should have been filled a long time ago.

My substantive question has to do with a followup on the question 5 that Mr. Peacock already addressed himself to, and again, it was raised at an earlier session; in fact, two earlier sessions of these briefings.

I am pleased to hear that there is now under development a comprehensive community action program, and that model cities are going to be selected, if only a limited number. Is there right now in operation a precise place where local community coalitions, or private groups, or a combination of private and public groups (as we are trying to form here in the District), can go; a specific person, a specific office, where we can get; A, an itemized list of things that are appropriate for our size city or community, and, B, some technical assistance at assessing our needs and our opportunities; C, some technical assistance in implementing programs that deal with those needs, and some money?

MS. HOBSON: Bill, why don't you take a crack at that, and Don, I think you probably might like to add something.

MR. PEACOCK: Jim, as I mentioned at that earlier briefing, and I understand that you were absent for the major portion of the answer--

MR. FLUG: I did read your answer.

MR. PEACOCK: We have established an office of city and county relations. The proprietor of that office is here in the audience, and would be delighted to visit with you. He is George Keto.

We are in the process of taking a look at a proposal that has been submitted, and which would compile exactly the list that you are talking about.

To the best of my knowledge, there is no comprehensive list of technical assistance that is available to communities in one set place. However, there are a number of documents that we have that we would be delighted to make available to you, and what we have been attempting to do on requests of this nature, through Mr. Keto's office, is to respond on an ad hoc basis as rapidly as we can to provide answers to the questions that communities have.

MS. HOBSON: Are you talking about appropriate technology or technical transfer also?

MR. FLUG: Well, it is some of that, but what I am asking is; most of the community groups don't have the resources within their own staffs and financial resources to come up with a plan to do the technology transfer. We and they need a package. We need to see what has

happened elsewhere in a form that we can use it, and know what the steps are to make those things happen.

I want to say we are going to try to kick off a process like that here in the District of Columbia. Some people who are involved in that are here in the room, and you have given a grant to the Institute for Local Self-Reliance that will help in that process. I hope that you will send somebody to come join us next week. The University of the District of Columbia will host a seminar for opinion leaders to kick off this process in the District of Columbia, but as far as I can tell, there is no place to go right now for that smorgasbord of help.

MS. HOBSON: Don, can people come into your office for technical information on appropriate technology?

MR. BEATTIE: Certainly. They certainly can, and I guess, Jim, I refer you to the answer in question 6 also, if you haven't seen that one, which I think addresses more specifically the kinds of things you are asking for, where we indicate that we are in the process of selecting 15 communities to prepare comprehensive community energy management programs.

MR. FLUG: I did see that, but beyond the 15, I think there has got to be a place where anybody willing to do something can go and get help.

MR. BEATTIE: There are funds in the area that should come down to communities to help them in their planning. We recognize that the amount of funding in those particular programs are not large, and



that not very much gets down to the local area. We hope that you will see some additional programs coming along in the not too distant future that will increase the amount of funds that come in at the local and community level.

We can't guarantee it, but we are working to try and get that kind of program on the books.

MR. PEACOCK: Jim, you may also be interested in taking a look at the draft of a catalog of domestic assistance which we participated in putting together. We will make that available to you through that office, if that would be helpful.

MS. HOBSON: We will get some names and phone numbers of key people. You are correct. There isn't a good, coordinated center, but we will list the key people, with names and phone numbers, in the transcript.

MR. FLUG: We are here in Washington, and it is difficult for us. Imagine what it's like for people from outside of Washington.

MR. PEACOCK: It is a point well taken Tina, and we have coordinated the effort that is looking at the delivery systems for that type of information, and we are in the process of reviewing some contracts right now to try to tie all that together in one bag.

It is a point well made and taken.

MS. HOBSON: Let's go to Representative Royal Bolling from the Massachusetts legislature. We are glad to have you here.

MR. BOLLING: Thank you, Madam Chairperson, and members of the panel; I am Representative Royal Bolling from Boston, Massachusetts, home of the Blizzard of '78.

We have a very unique situation in New England, particularly Massachusetts, and that centers around the high cost of energy. As most of you know, New England is very dependent on oil for its heating source. Because most of it has to be imported, it is very expensive. A hundred gallons of oil in Boston now, cash on the barrelhead, is \$15.00. If you want to finance it, and pay so much by the month, it ranges from \$52.00 to \$53.00 per hundred gallons. You can see this is quite an expensive way to heat your home. Unfortunately, that is the main way that Massachusetts does heat its properties.

The situation in Massachusetts is such that there is a great deal of foreclosure of property and property abandonment because the owners cannot keep up with the cost of heating oil. I mean this in terms of Federally-subsidized projects, as well as for individual owner-occupied, two and three-family homes. The situation is so bad that many banks have held off on foreclosing procedures pending some kind of agreement they can work out with the property owner to delay foreclosure, particularly in the last two winters. It is that bad.

Also, to compound the situation, legislation has just been passed whereby a house must be energy-tight. You must remember, in the City of Boston, the average house is at least 45 years old. The average house is a two to three-family home with separate heating units. The

typical heating unit was originally a coal furnace that had been converted to oil. So, essentially, the average heating plant in the average home is outdated, antiquated, and not really fuel efficient. That forces many landlords to throw up their hands and say, "I will walk away from the property." Combine that with the separate units for heat, where the tenant supplies his own heat, the increasing cost in fuel oil, and they fall behind in their rent. Therefore, you have wholesale foreclosure and delinquent payments in the City of Boston, but also in other older cities in Massachusetts.

In essence, what has to be done in my opinion is to look at the whole structure in terms of subsidizing heat.

MS. HOBSON: Are you asking if DOE is looking at that?

MR. BOLLING: Are you looking at it? I raise the question specifically on rebates. Rebates assume that you have the money to pay in the first place.

My suggestion is to work hard on families with a large number of children, and/or the elderly. My suggestion to you is this; with the elderly, especially those on a fixed income, in terms of Social Security, is there any type of increment that could be added to their Social Security check during the heating season?

MS. HOBSON: Are we doing anything else to address this problem? Al, I guess you are the logical one to answer this.

MR. ALM: Okay. Let me answer the last question first. In terms of Social Security, we have looked generally at the problem of

rising energy costs. Obviously, account is taken of rising energy prices because the Social Security fund and some of the other income transfer programs are indexed to inflation. Insofar as energy is part of the indexing, more funds are made available as a result of rising energy costs.

Obviously there are additional problems, particularly in a catastrophic winter, and we have pushed very hard within the Department of Energy for funding of the CSA program as a way to deal with emergency situations. This was an initiative taken in the National Energy Plan.

The longer term relief is going to have to come through some form of weatherization to conserve energy. That will accomplish more in the long term than changing the income transfer programs, and it is something that I think we need to push ahead vigorously.

There is a minor fix that we are working on right now that would affect New England; a change in the entitlements program, which would help reduce to a small extent the cost of imported oil, as well as oil produced in the U.S. and then transported to the East Coast--such as fuel oil.

It is an issue which we are very concerned about. As I indicated earlier, in the development of the plan, we tried to include as many safeguards as possible, but the problem is that the cost of energy, at least oil, is very unlikely to go down in the world market and, frankly, unless almost Herculean efforts are taken by the U.S. and the other major oil users, it is very likely to go up.

I think that this Department, HEW, and outside groups ought to give real thought to the kinds of programs that will be needed if there is any new and large increment in the price of oil. I think your point is well taken, and I think it is incumbent upon the Department to not only think about this, but to think tangibly in terms of program activities.

MS. HOBSON: Does that answer your question?

MR. BOLLING: Yes, it does, and I have one more question. That is in terms of conservation and home insulation. One of the problems that we have in Massachusetts is conflicting information on insulation. Which is the best in terms of quality, fire safety, cost, and so forth?

We have a Consumer's Council in Massachusetts that periodically comes out saying, "Watch out for cheaters and fellows that install insulation because it is below standard, the R factor is not high enough or low enough," or whatever the situation.

What I would like to see is that the Federal agencies involved come up with a standard and a type of insulation that is the best perhaps on a regional basis, maybe a different type of insulation that is good for New England, but at least come up with one or two strong suggestions as to which is the best.

There is a lot of interest on the Energy Committee as to insulation, but no one knows exactly what is the best type of insulation.

MS. HOBSON: We are glad to have that question. Even though you exceeded your one question by a hundred percent, we think your second is important, too.

MR. BEATTIE: We are in the process of working within the Federal establishment to develop a standard for insulation which will be used primarily in the Federal establishment, but it will probably be the basis for a standard in the private sector also; for homes such as FHA and VA approved homes.

That standard and/or standards will be available I believe sometime in the fall. The way we are proceeding, it is a little difficult to make specific kinds of recommendations, but I believe that what we will end up with is sufficient information so that a reasonably knowledgeable person will be able to start making a determination as to what is best for his situation. So, some time in the fall, you will see that kind of a standard available.

We are working with the FTC and the Consumer Product Safety Commission and other agencies to try and develop a labeling program, and things of this sort, so that a person can look at the product and at a label on the product and determine what it is that that product will do for him if it is installed in the manner that is recommended.

MS. HOBSON: Thank you.

MR. BOLLING: A question from the Chairman of my Committee, very specifically, are there going to be any massive--

MS. HOBSON: I can see why you were elected.

MR. BOLLING: --demonstration projects for solar energy products in areas such as New England?

MR. BEATTIE: We have just initiated a 10 to 11-thousand unit, hot water initiative, which is primarily in New England. The New England states, New York, and Florida are the candidate states. Most of the requests have already gone out from the states to individuals, and the only state that I am aware of that is kind of undersubscribed at this time is Pennsylvania. So, there will be several thousand units installed over the next few months in New England.

In addition, we have now in place the New England Regional Solar Center. That is the most advanced of the four regional solar centers that we have around the country. We expect that that institution in New England will provide a mechanism for the New England states to understand what is happening in solar, and take part in our solar program.

MS. HOBSON: Where is that located?

MR. BEATTIE: It is presently housed in a building at MIT.\*

MS. HOBSON: All right.

MR. BOLLING: Thank you very much.

MS. HOBSON: Thank you. Industry; Art Brodsky.

MR. BRODSKY: This is somewhat of a general question following upon what Mr. Flug asked a moment ago. When the National Energy Plan was first proposed, conservation was described as the cornerstone of the

\*-Massachusetts Institute of Technology.

plan, and nuclear energy was kind of relegated to a "use cautiously" status. But now, one year later, we still have no permanent appointment for Assistant Secretary for Conservation, and the Administration has introduced a nuclear licensing bill which will cut in half the amount of time it needs to set up a plant.

My question is; have these developments shown a change, a reverse, in national energy policy?

MS. HOBSON: All right. Sam, would you like to answer that?

MR. HUGHES: Let me try. Al may also. First, with respect to the absence of an Assistant Secretary in the conservation area, that is, the permanent Assistant Secretary; we could not be other than acutely aware of that problem. At least in its present form, it is somewhat outside our control. The nomination has gone forward. The Senate Committee, which is struggling also with the energy legislation, has to schedule hearings when it feels the time is appropriate.

I can assure you that Don's situation is not a happy one, and none of us are comfortable, to use Mr. Flug's term, with the present situation. We want to get on with that work.

Meanwhile, Don Beattie, who is knowledgeable and competent and has been very cooperative in these efforts, and is aware of the problem, was willing to serve here at this briefing, and I thought that was a good idea.

The absence of one individual from the scene does not reflect any change in the Administration's priorities with regard to energy



matters. I think it is an almost universally accepted fact that conservation is the quickest, easiest and most cost effective way to, in rather basic terms, produce energy. Energy which we can conserve is available for other purposes, and there is no way to get it quicker, easier, and cheaper. That sets our priorities, at least as I see it.

With regard to nuclear matters, I think the siting bill that was referred to should be of some interest to consumers, urban consumers as well as others, because if we can cut down the time for the construction of nuclear or any other plants, for that matter; if we can cut down the lead time for investing capital in energy-producing projects, we can very substantially affect the utility rates that must be charged to pay off those capital costs, so the Department has been very much interested in shortening the lead time for constructing plants of any sort and the nuclear siting bill is an example of that.

MR. ALM: I don't think anything has changed since the NEP. The NEP laid out the conservation measures. Unfortunately, they are not all through the Congress.

Secondly, the 1979 budget includes about a billion dollars for conservation, a substantial increase. The NEP indicated that legislation would be developed on nuclear siting, and the legislation was developed along the lines discussed in the NEP. So, basically nothing has changed. It is merely a question of timing. The fact is that the nuclear bill came out much later than the other NEP initiatives.

MS. HOBSON: Followup?

MR. BRODSKY: Just out of sheer curiosity, for whichever gentleman; why did you take so long to put up a nominee for Assistant Secretary of Conservation?

MR. ALM: I assume it is our careful selection process.

MS. HOBSON: I think that's the best answer of the day.

MR. ALM: I'm not sure it is the most popular one.

MS. HOBSON: Mr. Seifert--consumer.

MR. SEIFERT: My name is Mr. Seifert. I am a member of the Consumer Affairs Advisory Committee to DOE. My question concerns the National Center for Appropriate Technology. I have recently become aware that NCAT has some problems. I think the appropriate technology people have waited long and hard trying to see if something constructive would come out of this organization. It appears to have some administrative problems.

I have an article in my hand from the "Rain Journal," published out of Portland, Oregon, which describes the problems in detail, and I think this appropriate technology movement is too new, too young, and has too many possibilities to let this matter slip by. The mandate is simply not being lived up to.

I would like to know what you know about it, and second of all, what, if anything, are you able to do about it, and what are you going to do about it?

MS. HOBSON: All right. Don, do you want to talk about your office?

MR. BEATTIE: Well, we have heard of problems with the National Center for Appropriate Technology. As you know, a lot of the funding is coming from CSA at this point in time. The responsibilities for an Office of Appropriate Technology at this time rests with the Assistant Secretary for Conservation and Solar Applications. We have made recommendations on how we think that office should be structured, and those recommendations are now being considered, and I think await only the formal nomination of the Assistant Secretary before they will be implemented. I think you will see when that happens that that office is given very good visibility under the Assistant Secretary for Conservation and Solar Applications.

We are, of course, evaluating that program right now. As you know, that first pilot project is just beyond us, so to speak, for just a month. We have planned to go nationwide; as I mentioned earlier, in my first question and answer, I believe that there is a very good chance that the funding for that program will be expanded in the years ahead. I don't see any reason why that won't happen, and that is not a hard thing to say because, as you know, it is a rather small program at this time, but I do believe that that program will be expanded in the years ahead, and I believe that because of the expansion of that program, there will be the opportunity to support institutions like the National Center for Appropriate Technology.

MS. HOBSON: A followup question?

MR. SEIFERT: I would just like to add one thing, and that is one of the things the article mentions quite precisely--the inordinate amount of paperwork that is required for a small amount of money. To make a comparison; between the DOE grant valued at \$300,000, and an NCAT grant valued at \$8,000, the amount of paperwork was something like ten times as much for the \$8,000 grant.

I can't understand that, and I think attention should be given to that. It seems just grossly unnecessary. The Department of Energy's small grants program is much more successful, and there should be some mutual exchange of process there that isn't happening.

MS. HOBSON: Are you saying that the NCAT is requiring a lot of forms?

MR. SEIFERT: Very definitely.

MS. HOBSON: Not the Department of Energy.

MR. SEIFERT: I think DOE's is similar to that.

MR. BEATTIE: I am confused. Which has got the most paperwork?

MR. SEIFERT: NCAT.

MR. BEATTIE: Of course, we made a very concerted effort to try and make our program just as simple as we possibly could, to the extent that you almost only had to fill in the blanks in order to get a proposal before us, and as far as I can tell now, after having evaluated the process, that has worked very successfully, and I see no reason why

we in the Department would change that. If anything, we will try and streamline it even further to make the process for getting funds from the Federal Government just as easy as it can be.

MS. HOBSON: And we can try to get a little education with the Center, too. Thank you. Is Mr. Megles here, from the environment side?

(No response.).

MS. HOBSON: All right. Let's go on with Richard Mounts. Is Mr. Mounts here? From NLC?

MR. MOUNTS: That is the National League of Cities. I am very pleased that this kind of gathering is being held today. I am glad to see this kind of attention given to the connection between energy and urban problems.

I have heard from two or three different sources on different occasions that the Department was planning on taking a more careful look at the role that cities might play in national energy policy, particularly that there was some kind of study discussed, planned, thought of, or what have you, to look at this kind of question.

My question is; is that in fact the case? Has there been any thought given to such a study? If so, what are its dimensions, and if it is to be undertaken, when might we expect some kind of results?

MS. HOBSON: All right. Bill, do you want to take a crack at that?

MR. PEACOCK: Al was in the process of developing that.

MS. HOBSON: All right.

MR. ALM: As you may be aware, the Department did conduct a state role study, which looked at the roles that states play in moving ahead and dealing with energy problems.

My office is in the process now, along with the Office of Intergovernmental Relations, of putting together a local role study. Such a study would be done in close cooperation with local governmental organizations, as well as with elected public officials.

I think it is fair to say that we need to get a better grip on the role of local government and what local governments can do to deal with energy problems.

My personal feeling is that local governments offer a laboratory for innovative ideas; ideas that, when developed, can be pursued more broadly across the country. So, the study will look at the overall activities of local governments, how they relate to state energy programs, how they relate to Federal energy programs, and then we can identify the best mechanisms for DOE to relate to local government.

MS. HOBSON: Do you have a followup?

MR. MOUNTS: Just when might that be completed?

MS. HOBSON: What is the timeframe for the study?

MR. ALM: I have learned not to set public timetables. I seem to get enough in the Department of Energy anyway. What we would like to do is to sit down with various groups. First of all, get a feeling for what information is available, what kinds of assistance we could get

outside the Department in a study like this. I think it probably makes more sense to agree on some deadline among the affected parties rather than for me to set an arbitrary one right now.

MS. HOBSON: Would we like to mention a year--1979?

MR. ALM: Let me say a year would be the outer bounds.

MS. HOBSON: A year would be the outer bounds.

MR. JABZANKA: I would just like to bring something to your attention, Mr. Mounts, that you may be already aware of, and that is some resources that might be available to local governments for energy-related activities, especially for weatherization and retrofit. It may or may not be a little known fact that community development block grant funds, which are delivered to localities from HUD, can be utilized for various retrofit activities. That is, as part of a larger scale local housing rehabilitation activity. The same is true of a loan program, that goes by the name of Section 312, for code enforcement area housing rehabilitation. The Section 312 loans are usually used in low-income areas. Municipalities can choose to incorporate these two HUD programs into their overall rehab and energy conservation plans.

MS. HOBSON: Thank you for your contribution.

Dennis Cannon. Mr. Cannon?

MR. CANNON: My name is Dennis Cannon. I am President of the California Association of the Physically Handicapped, and I am interested in a lot of areas in which policies relating to energy will affect disabled people.

My primary interest at this time has to do with the fact that I am a consultant on transportation systems for disabled and elderly people, and I am concerned about what I have seen in terms of energy statements and what have you coming out of both Congress and the White House that seem to me woefully inadequate in terms of their addressing the problem of public mass transportation, so my question precisely is what is the Department of Energy planning to do to address the need for adequate public mass transportation, specifically with reference to interface with the Department of Transportation?

MR. ALM: We work with the Department of Transportation generally on transportation matters. Something that you may be aware of, we are conducting a comprehensive joint study with the Department of Transportation dealing with the transportation of energy, and DOT does have legislation up on the Hill dealing with mass transit. My office is also doing some analytical work on the energy benefits of mass transit. What we are talking about here is a process of working with DOT, which has the primary mandate to improve transportation; the Department of Energy having a mandate to find more fuel efficient ways of moving people and goods.

I might also add that we have a lot of interaction with the Department of Transportation and the Environmental Protection Agency on fuel efficiency standards. Although not related to your question, it is an area of continuing interest on our part.



MR. BEATTIE: I would like to just add also to that one, Tina, to throw out an acronym. We are also working with UMTA, Urban Mass Transit, but I think you must be aware that the EPCA funding that is going out to the states does require states to look into the question of transportation, to be eligible for those grants, and so they are looking at public transportation, car pooling and van pooling. The van pooling area is an area of special interest that we are developing programs for, because of the possibility to really make a big impact there. So, there are programs underway, there are funds coming out to the states under EPCA to help in looking at mass transit, and then we have a special program in van pooling underway at this time.

MS. HOBSON: Are those programs required to look at the special needs of the physically handicapped?

MR. BEATTIE: I am not sure. Let me ask Frank Stewart.

MR. STEWART: There is no particular requirement that they in particular will address the needs of the handicapped.

MR. BEATTIE: The answer was the UMTA funds do not say that there is a particular requirement to look at the physically handicapped. That is possibly something that should be examined once again when we look at further legislation.

MR. CANNON: I know. I am working with UMTA to prepare regulations for implementation of Section 504 of the Rehabilitation Act of 1973.

I am aware that there are problems and there are programs dealing with energy and mass transportation. I am curious to know whether or not you have any opinion as to why, in messages from the Administration and so forth, there has been a lack of reference to public mass transit as an energy-efficient system?

MR. ALM: I don't know if that is true. Certainly the National Energy Plan mentioned mass transit as a very efficient method of transportation. I know, in making public speeches myself, I have mentioned it a number of times. I don't have time to monitor what my colleagues say, but I am hopeful that they say the same thing.

MS. HOBSON: Thank you.

Dr. Everson Hull, American Association for Blacks in Energy.

DR. HULL: Thank you. Price ceilings have been put into effect in the U.S. for the primary purpose of holding inflation in check, and also as a means of holding the price of petroleum-based items within the reach of low income persons. The resulting shortages have made it necessary to spend billions of dollars each year on higher priced foreign oil, with the outlook for future import of liquefied natural gas looking equally grim.

Are price controls holding down prices of petroleum products to the consumer? If so, where is the evidence, or are we simply helping to prop up the OPEC cartel at the expense of the American consumer?

MS. HOBSON: Very good question. Al, would you like to tackle it first?

MR. ALM: The answer to the question is no. In terms of the oil production, the President has indicated that we would provide the world price for new discoveries of oil. Obviously, that is the greatest incentive that can be made available. In considering the tax structure in the United States as compared to other oil producing regions, as far as we know, it is the best incentive anywhere in the world for new production.

In terms of natural gas, our analyses indicate that a price around \$1.75, escalating with the domestic price of oil, would provide a very strong incentive. Obviously there are differences of opinion.

The House-Senate Conference has come very close to reaching agreement on natural gas prices.

In terms of your general question, the argument is, at least as I understand it, that by controlling prices, we are not providing enough cash flow for the industry to make new investments. I think it is very hard to argue that the prices for new oil and gas are inadequate. Our analyses indicate that the cash flow is adequate, and secondly, that these are very desirable investments, and should easily attract venture capital. So, we think that the pricing structures recommended in the National Energy Plan are now not only adequate, but provide very strong incentives for new production of oil and gas.

There is one other issue relative to gas. The argument is made that we import LNG at somewhere around \$3.00 to \$4.00 per thousand cubic foot, while we hold domestic prices down. You should be aware,

though, that in the national energy plan, the President recommended that high cost sources of gas, such as deep drilling or unconventional sources like geopressurized methane, would receive special incentive prices. In other words, they would receive prices which, though certainly not comparable to the LNG price, would be much higher than the current regulatory price, and these incentives ought to be adequate to bring in high-cost gas.

MS. HOBSON: Dr. Hull, would you like to follow up?

DR. HULL: Not at this point.

MS. HOBSON: Thank you very much. Michael Schedler, Committee on Training and Employment. Could you identify whose committee?

MR. SCHEDLER: The Committee on Training and Employment is a program. Contrary to what was seen in question 16, the CSA funds have not been used just for single family home owners. They have been utilized in multi-family situations throughout the country. In Stanford, we have successfully been able to combine the block grants resources, mentioned a moment ago, with the DOL funds and CSA funds to get a fairly substantial program off the ground.

What we have not yet received is any DOE funds. I would like to know how the DOE funds are going to specifically fit in as a piece of the pie in this program, as is addressed in question 13 in the prepared questions?

MS. HOBSON: All right. Thirteen asks; how does the operation of the DOE weatherization program for low income persons ensure that all

necessary housing rehabilitation work, including burner or furnace repairs, will be concurrently performed, together with their weatherization activities?

You are talking about this, and you would like to know how DOE funds relate to CSA funds?

MR. SCHEDLER: No. What I am most interested in is how DOE funds are going to facilitate weatherizing multi-family housing.

MS. HOBSON: Weatherizing multi-family housing?

MR. SCHEDLER: Rental housing.

MS. HOBSON: Yes. That's a difficult question. Don, can you answer it?

MR. BEATTIE: Well, not very easily at the present time. I think "not easily" is the answer for multi-family housing and rental units, because there are some restrictions that are involved in using the funds for rental units. I wonder if I could ask Mary Bell to perhaps address that a little more in detail.

MS. HOBSON: Mary, do you want to come down?

MR. BEATTIE: Mary is in charge of our weatherization program at the Department.

MS. BELL: You are aware of the statute on the multi-family dwelling. There are three provisions, that the benefit must accrue to the low income applicant. Doing this, it is very difficult, because the landlord must agree not to evict a tenant within a year and not to raise the rent. Also, it depends on who is paying the utility bills. If it

is a central heating system and the landlord is paying it, then we require that the benefit accrue to the low income, so consequently, we are having some difficulty getting those multi-units weatherized in rentals.

What we are doing, though, is two demonstration programs, and we are focusing primarily on multi-units. We put the program out without a lot of research in that area, so we hope to revise the procedures on that by this fall or when the NEP is passed. By that time, we will have some hard data from demonstration projects where we are focusing primarily on that issue.

MS. HOBSON: Do you know how much funding has gone into weatherizing multi-units?

MS. BELL: No, because we didn't prioritize it in that fashion, and it is not required because that is done at the local level.

MS. HOBSON: We don't know whether we have weatherized four or five or what?

MS. BELL: We don't have that figure yet. As you know, our program is getting off the ground now, with our first report due as of 31 December, whereas we had weatherized at that time 501 homes. We expect to be going full speed by June, and at that time we will have those figures.

MS. HOBSON: Very good. Michael, do you have a followup?

MR. SCHEDLER: Yes, I do. It concerns the eligibility guidelines of DOE, which I find quite astounding, particularly in Connecticut. Under the eligibility guidelines, we have a situation where under the CSA crisis intervention program, we poured out almost \$10 million in the State of Connecticut over the last 12 months, and yet we received less than one million for weatherization repairs; energy conservation repairs.

The question I have is how does DOE see this as being compatible, because what we could be doing is carrying energy bills for people under 125 percent of the poverty guidelines, and not yet being able to weatherize the houses that create these bills?

MR. BEATTIE: Let me take the first crack, and maybe, Mary, you can join in. Your observation is correct. First of all, there is a difference in eligibility between the CSA program and the DOE program. That is by statute. We have to follow the statute. The amount of funding, of course, that goes to the individual states for the weatherization program is determined by formula based on the total amount of funds that the Congress appropriates to us, so again, that is not something that we have any control over at this point in time as to how much money really goes to the states, other than we help develop a formula to some degree.

What we expect will happen, though, once the NEA is passed is that these different requirements between the CSA program and the DOE programs will come together and we will have a uniform set of criteria

for the weatherization program, and Mary, if you would like to add to that, please do.

MS. BELL: That is correct.

MS. HOBSON: Thank you very much. Our next questioner is Helga Okowski from the John Muir Institute.

MS. OKOWSKI: The John Muir Institute is an environmental organization; a group of scientists concerned with environmental issues and developing appropriate technologies.

Some of our number of programs concern themselves with urban areas and energy. I would like to ask what policy and program lines DOE is casting to encourage integrated net energy conservation activities? For example, urban agriculture in urban integrated pest management, recycling, composted organic waste; the integration of these such as we have seen, for instance, in the Chinese society and in local appropriate technology attempts in this country.

MR. BEATTIE: Let me get started on that one, and Al, please join in, especially if I start straying. That is a difficult question, of course, to address, depending on how large you want to make your universe as you look at the question of that energy.

We are attempting to do that. It is something that is just in the development phase. As I mentioned to you in the hall, we have, for instance, been looking at the question of using biomass for the development and production of alcohol fuels, and it creates some problems because, when we look at the net energy question of using biomass for



alcohol fuels, it doesn't appear to us on that basis, and the way agriculture is presently running, that there is much of an advantage in using farm products or especially-grown crops to develop alcohol.

If we want to have an alcohol fuel, the net energy balance looks much more attractive if we go to a methane fuel, where we use coal as the feedstock. However, again, it is a difficult question because you must bound your study to some degree to make that kind of analysis, and you could obviously go back to that question and say, "Well, suppose I farm differently, suppose I don't use quite so much fertilizer in an energy-intensive way, what does that do to the net energy balance?" Those sorts of analyses we haven't done, but we are in the process of doing it at this point in time, and I think that you will see the Department using net energy as an analytical tool much more broadly in the future because, in fact, that is the bottom line. If we look at that, there are a lot of quick fixes that you can perhaps come up with, but if the bottom line doesn't tell you that the net energy balance is in your favor, then probably you shouldn't be embarking on some of these questions.

MS. HOBSON: You might explain just very briefly what an integrated system is. This is a new concept that we are dealing with at the Department of Energy, and many in the audience might not know.

MS. OKOWSKI: We are talking about systems that feed each other. Just to follow on the example that you used, it is not an urban one; it is not the ones that I work with most closely, but I know

something about agricultural systems, and it is a very good one because as you pointed out, if you simply look at how much energy is saved or involved totally in the raising of a particular plant which you hope will end up as alcohol, for example, as a fuel, then you have not looked at the real system, because the real system, as Mr. Beattie pointed out, is the agricultural system, and in fact, the real savings may come in the diversification of that farm management system, and bringing in other crops which will then make the farmer a lot less dependent upon pesticide and fertilizer input that may bring him closer to local markets, and thus reduce transportation costs.

In fact, you have to draw the boundary of the system large enough to include the solution within it, as we were saying earlier.

Now an integrated system is one in which you look at the way in which all these little pieces--and I see the DOE looking piecemeal at things at the moment--you look at the way these pieces integrate, and you try to take a chunk of it. For example, in urban habitat; how urban habitat uses energy, uses food, and so forth, uses, manages its waste, how a neighborhood does that, how a city does that, and you examine the energy conservation implications of integrating those systems instead of looking at them one by one, bureaucratically putting them in separate boxes. In the real world, they can't be, and real energy conservation will come about by integrating those systems.

MR. BEATTIE: I couldn't agree with you more. We do have programs looking at some of those problems. For instance, in the

building and community systems program area, we have integrated community energy systems, but we are looking at the total use of energy in a community to make sure that we get the last squeak out of the wheel. We are attempting to look at the needs for electric power, heat, cooling, and so forth, to make sure that we use all of the energy available; from the garbage to the steam generating plants to the bottoming cycles, topping cycles, and all these things.

Taking that one step further, we are looking at the problems now of industrial parks, and whether we can show industry in a very tangible way the benefit that can come to them by in fact combining their energy needs in one place.

Fortunately or unfortunately, it is easier to look at these things in pieces than it is in the total, but as I mentioned earlier, I think there is just no question in my mind that we are going to have to keep broadening that envelope to look at the total problem.

MS. HOBSON: Who is the person responsible in your office, Don?

MR. BEATTIE: Integrated community energy systems, that is Dr. Maxine Savitz. We have some projects underway in the industrial park area, both Maxine and Doug Harvey are looking at the problems of trying to combine various end users.

MS. HOBSON: Do you have a followup?

MS. OKOWSKI: Just that I hope that you will include urban agriculture and the small-scale technologies that can really make a

difference to the urban life style, both the low income and the middle income.

MS. HOBSON: Thank you very much. Richard Wright.

MR. WRIGHT: I am Richard Wright with the Community Action Agency in Connecticut. Significant efforts have been made in employment and energy conservation through the Community Services Administration delivery system. When will the Department of Energy use the local community action agencies' experiences in weatherization programs for low income people?

MS. HOBSON: Back to you, Don, and maybe to Walter.

MR. BEATTIE: We are in fact using that delivery mechanism right now, although we give the money to the states and the states have some flexibility in how they finally develop their programs.

The fact of the matter is that a very large percentage of the funds that we have going to the states finally end up in the community action agencies and either Mary or Frank, if you would like to add to that, please do.

MS. BELL: It is mandated by the legislation that the community action agency will be the local delivery mechanism, unless they are proving to be ineffective, and I can say that, in the first round of funding, more than 85 percent went to the community action agencies, and the others were uncovered by the community action agencies. That is the legislative mandate.

MS. HOBSON: All right. Richard, did that answer your question?

MR. WRIGHT: On the local level, we haven't received it yet. I don't know whether Connecticut has DOE money.

MS. BELL: I think it is a matter of timing.

MR. BEATTIE: Let me just add to what Mary said earlier. Our first grants in the weatherization program just got out the door at the end of December. We are already into the second round of fiscal '78, and most of those funds will be out by the end of this month, in just a few days, so the possibility is that the first round of funding--and that was a relatively small amount, it was I think \$27 million spread over 50 states--comes out to about \$500,000 a state if you just do straight arithmetic on that. You probably won't see much in that first round of funding.

However, the second round of funding which is going out now is close to \$70 million to be spread over the 50 states, and I am sure that if you haven't seen it, it is because the mechanism within the state has slowed that grant given at the end of December. It hasn't had time to get to your level, but I'm sure it will.

MS. HOBSON: Perhaps you can get together with Mary Bell before you leave town and see what the time schedule is related to your specific area.

MR. WRIGHT: Thank you.

MS. HOBSON: I would like for Mark Croke, National Association of Counties, to come forward.

MR. CROKE: My question touches on an issue that was brought up a bit earlier. Under the EPCA program, states were charged with a certain responsibility which fell heavily on local governments. You mentioned the fact that there were some monies available, which were designed to be passed through to localities.

Now the question is; does DOE know how much of those funds actually made it to localities and, if the intent is to fund local governments in these programs, why weren't pass-throughs mandated over direct grants made to local governments?

MR. BEATTIE: Well, to my knowledge, we are not in a position to know how much of the state funds were passed through. I don't have a great amount of history on the legislation. Perhaps, Frank, you could add to that answer? Frank is the Director of all of our state and local programs.

MR. STEWART: The amount of funds available under EPCA do not amount to so large a portion to be distributed very broadly in the states. There were a number of requirements and a number of activities that states were asked to acknowledge that slowed cooperation with local governments. It was the state's choice as to whether that would be assistance in terms of dollar pass-through or provision for technical assistance or some other kind of assistance. So, in terms of the number

of dollars, as compared with the amount of service, it is something that I was unable to determine.

MR. CROKE: Do you anticipate any kind of a followup or evaluation?

MR. STEWART: We do have a number of activities on-going now in terms of special reportings and special investigations trying to get a hand on that; at this point, it would be difficult to give a clear dollar value to the amount of services that have gone to local governments.

We do anticipate looking further at that. We have got a number of activities presently on the drawing boards, and are working with some of the national associations and are looking at that whole question all over again.

MR. CROKE: Can we anticipate that future DOE programs will take this trickle-down approach to local governments, or can we anticipate a more direct involvement of counties and cities at the local level?

MR. BEATTIE: Let me start that one, Frank, if I can. Most of the programs, again, are managed by us as per the statute or the law that comes to us from the Congress.

In the case of the new programs that are on the books or will be on the books when the NEA passes, such as the schools and hospitals and local government buildings program, again, those programs are

designed to send the money to the states, and the states in turn pass the money down to the local municipalities or local units of government.

However, we have a little more flexibility, as I understand the legislation now, in that, if the state elects or if the state doesn't come in with a program that is complete in this regard, there is the opportunity for local municipalities to come in directly and ask for grants.

MS. HOBSON: There is that opportunity?

MR. BEATTIE: I believe that's right.

MR. STEWART: That is true. Under the schools and hospitals section, if the state does not come in with an application within two years, the individual municipalities may be able to apply directly, if the Department establishes a plan for that state.

MR. CROKE: How about under the local government building section?

MR. STEWART: We are still waiting to see the language to see how that is going to operate. There was some difference between the House-passed version and whatever else we have been hearing about. We intend to fully work with the national associations involved with that, and with local governments, so that they can assist us in determining the best way to proceed under that law.

In short, without new legislation, outside of the pieces that are in the NEA, direct assistance to local governments for generalized conservation activities is quite another matter. We are looking at that



issue again, but we are still at this point. We don't have any legislation.

MS. HOBSON: I understand that DOE will know one day this year how much money has trickled down to state and local governments, right? That is part of an on-going study?

MR. STEWART: That is our intent. I hope we will be able to meet that objective.

MS. HOBSON: Can we say 1977? '78?

MR. BEATTIE: Let me suggest that, certainly we can get involved in these sorts of things, but on the other hand, the whole purpose of this legislation is to put responsibilities where the job has to be done; at the state and local level. It seems to me that, if you have a question as to whether or not you are getting your fair share of what is coming to the state, you must take that up with the state itself and see whether there is a problem. If there is a real problem there, then obviously we want to be aware of it and try to come up with some sort of remedial action, but if you have not on your own attempted to see whether the funding that went to the state has in turn resulted in sufficient funds coming to you, then I think that is the first place where you should start.

MS. HOBSON: All right. Thank you very much.

MR. HUGHES: I just want to make a general comment. I think part of the answer to your question is fairly clear. The states have somewhat different feelings about these matters than do the counties or

the cities, and we are in the position for better or worse of dealing with all three groups, and so is the Congress, incidentally. Whatever the legislation may have provided originally, it tends to reflect, after it is passed through the Congress, the various points of view, pressures and so on that they are subject to.

I guess the moral of my story is that our hands are not completely free. We are well aware of the difficulty of pushing money down through the system. We have struggled to say that in a variety of ways, in plain language, with mandatory pass-through arrangements. HUD has very similar problems that it has been coping with longer and perhaps better than we.

We have some of their examples before us. We want to try for a balanced program, and a balanced program includes one which in some sense is satisfactory to states as well as to the cities and counties.

MS. HOBSON: Thank you. Walter, do you cope better than we do?

MR. JABZANKA: I am not sure if we do. I hope you will say that more often, Mr. Hughes. At any rate, just to mention something you will be interested in Mr. Croke, the National Association of Counties will certainly have a role to play in the implementation of the minimal energy conservation standards for all new construction.

As you know, under Title 3 of ECPA, the Department of Energy and HUD are mandated to promulgate thermal efficiency performance standards--I think I have that right--by 1979. States and localities

are going to be encouraged to adopt those standards into local building codes by February of 1980, for the most part the adoption process will be voluntary. Throughout that adoption process, there will be some technical assistance. There may be some money involved along with that technical assistance. The Department of Energy and HUD are right now discussing the form that the outreach will take.

Again, the implementation process is focused on the local level. We plan to work very closely with county officials, city officials, and state officials to ensure that those new standards are adopted.

MS. HOBSON: Thank you very much. Mary Seelye, American Association of University Women.

MS. SEELYE: Thank you. I am Mary Seelye with the American Association of University Women, and my question takes a somewhat different orientation than what the discussion has taken and what has been characterized this morning, but it is motivated by my being very impressed with this series of meetings you are having, and particularly today's meeting, and by Mr. Beattie's description of the support for small business and investors and the fact that the funding is increasing from \$500,000 to \$1.3 million.

My question is; to what extent is all of this awareness, these programs, this experience of meeting with public interest groups and industry, being shared with the writers of the U.S. paper that is being

prepared for the UN Conference on Science and Technology, to come off in August of 1979?

MS. HOBSON: I will say it is not being shared; not to my knowledge. However, we can make the transcript and the videotapes and the other briefing material available to them and would be happy to do so if you feel that this would be of value to that group.

MS. SEELYE: I think it would be of tremendous importance. Whether they would think it was of value, I don't know, but part of my question is a larger one; to what extent are offices such as yours feeling a responsibility to influence our orientation out around the globe, as well as to the states and the localities in our nation, now that we are in a phase of civilization in which the total globe is our urban scene? That is part of my concern.

I am glad to hear you say the things you say, but it should not be just for this particular occasion. To what extent is this an on-going awareness effort? I do feel that, when you have such important thinking and supporting programs going on, it is incumbent upon you as well as those of us in the public interest groups, to influence and pressure State Department committees to include this.

MS. HOBSON: That is indeed a good thought.

MR. BEATTIE: One of the goals of the appropriate technology program is, in fact, to share what we are learning in appropriate technology with the rest of the world, particularly the lesser-developed countries, and the developing countries.

As I think most of the people in this audience are aware, those types of technologies are especially attractive to such countries that do not and probably never will have major central generating capacity and large energy economies, so we do intend to share this program.

We are working with a number of countries right now on bilateral and multilateral arrangements to share our energy technologies, and I think in the so-called soft technologies, the solar energy areas, there is a real opportunity to share the things that we are learning with these countries. They in general are relatively simple types of technologies, relatively simple to maintain. So, we think there is a real opportunity and we have a number of programs underway to do that.

We also are working with AID to share these programs.

MS. HOBSON: That is at the beginning stage. Al, I think Mary Seelye's question goes beyond that; into input and the kind of response we are getting from people. In your office of policy and evaluation, do you go beyond the territorial limits of the United States?

MR. ALM: Not personally, although I would like to. We are establishing a small international staff, and there will be a couple of things in which I will be particularly interested. One of them is the whole area of appropriate technologies. Obviously, we have got a program underway now of sharing this technology.

We are also reviewing the funding level for that particular program. We will spend a great deal of time just looking at the question of resource availability in other countries for a wide variety of

energy sources, and trying to think through what kinds of assistance the U.S. could provide directly or what assistance multilateral organizations could provide.

I see a great opportunity in the world. As Secretary Schlesinger described his perception of the energy problem at the beginning of the meeting, we are facing a global energy problem of scarcity. We share this problem. The actions of each nation of the world will affect all the others. Indeed, the LDC's will be most adversely affected if we hit a period of great scarcity and soaring prices. Consequently, energy produced or conservation brought about anywhere in the world will affect all countries, as well as the stability of the world order.

MS. SEELYE: The question is; would you be willing to call up Ambassador Jean Wilkovski in the State Department, who is directing the U.S. input into that conference, and talk with her about this kind of input to the U.S. position papers?

MR. ALM: I think so. I would like to know a little bit more about it, but assuming that it is appropriate, the answer is I would be willing to do that.

MS. HOBSON: Could you give that information to Mr. Alm or to me, Mary, and then we will. I do want to mention that there are some people who say that we could learn more from other countries, even less developed countries, about appropriate technology.

Do we have a reverse order where we are learning from others, rather than just selling our own thing?

MR. ALM: I would say probably not as much as there ought to be. Don may want to comment on that. In some of the other technologies that are sort of bridge technologies between hard and soft, there is a great deal to learn from other countries. For example, fluidized bed combustion is on the verge of commercialization. Most of the work that has been done has been in Europe, not in the United States. That is certainly true for gasification also. Maybe you would like to comment on some of the work on other technologies.

MR. BEATTIE: I think I would agree with what Tina is saying. There are things to be learned everywhere on how to generate or use energy in a more efficient way, and of course, that is what appropriate technology is all about. Something that is appropriate in the State of Washington isn't necessarily appropriate in the State of Hawaii or appropriate on Guam, and so there is a whole spectrum of things that can develop in these areas.

What I would hope is that there are some basic lessons to be learned and there are some basic methodologies to be used that are applicable almost anywhere around the world, and that there are some simple types of mechanical systems that can be adapted or adopted by the lesser developed countries and that we will, in fact, be able to share these with them.

We are trying to become as aware as possible of the activities that are going on in many other countries, and to see if there is some application here in the United States.

MS. HOBSON: Yes. I was not personally aware of the meeting, and I am delighted that you brought it up and we certainly will see what kind of information we can give them, and then, hopefully, if they find it valuable, we can expand on it.

Thank you.

Beth Wagner from Sun Day.

MS. WAGNER: I would like to ask why is the National Energy Plan promotive of large-scale fuel plants, when many recent studies indicate more jobs would be created with solar and other decentralized technologies? If our concern is with urban environments and energy plans are localized, why not localize production and create more jobs?

MS. HOBSON: There is an employment connotation here. Who would like to pick it up?

MR. ALM: Let me have a run at it. I think the whole issue of jobs and energy is one that has been given insufficient attention in the past. We are moving ahead rather rapidly to develop the capability to understand more clearly not only the job generating potential of various technologies, but also the location of the jobs, which is a critical issue, and the kinds of skills involved and the like.

In terms of solar energy, I think it is clear in the Department that solar energy (A) has tremendous potential; and (B) is



certainly environmentally the best source, and that we need to push it vigorously and creatively.

I think you will be seeing a lot of initiatives come out of the Department in the near future on solar energy, throughout the Department. Don has spoken throughout the session today about the operations of his office.

In my office, I have a special unit that will deal with advanced energy systems which includes all of the so-called soft technologies. We will be undertaking comprehensive review of all soft technologies, looking to the next national energy plan, and there is very likely going to be a specific review of solar energy. So we are giving a great deal more attention to solar energy.

In terms of the first part of your question, why do we worry about hard technologies at all, there is a difference between the world as we would like to see it, and the world as we do see it. In my opinion, looking at the gravity of our energy problem, we need to pursue a wide range of technologies vigorously and the more vigorously we pursue them, particularly the soft technologies, the more opportunity we have for strategic options. So, I think the strategy of the Department is to pursue both hard and soft technologies with vigor, with a hope that the economics, and any technical, institutional or attitudinal problems with soft technologies, will be overcome, and that we can make significant penetrations using soft technologies.

We are hopeful and we are working on it very hard.

MS. WAGNER: So you do foresee the decentralized sort of technologies being included in future national energy plans?

MR. ALM: Absolutely.

MS. HOBSON: I think Sun Day is doing a lot to help push this. We appreciate the work you are doing at the grass roots level.

MS. WAGNER: Thank you.

MS. HOBSON: Is the gentleman here from Change, Incorporated?

(No response.)

MS. HOBSON: All right. Nell Weekley.

MS. WEEKLEY: I want to pursue the line of questioning that was opened up by the gentleman from the National League of Cities, and followed through a bit more by the county organization man.

We are having some difficulties in dealing through the states and in getting the monies that we need to pursue local energy conservation education projects, and also the weatherization project. I want to discuss with you some of the problems that we are having along that line, and perhaps you might have something to contribute to the solution of those problems.

MS. HOBSON: You might identify where you are from.

MS. WEEKLEY: I am from the City of New Orleans. My name is Nell Weekley, and I work with the City of New Orleans.

We do have hearings when the state energy plan comes up. We also correspond with them, but so far, we feel that there is a very unequal division of the monies that are coming down for weatherization.

projects, and we are also letting a single contract, for the entire state, on energy education work, and that is through the agricultural extension service. This seems to me to be singularly inappropriate for an urban area, and we do feel that the city which inherits all the problems that are created by the financial difficulties that people have is the unit of government that is best suited to address these problems.

We also agree with the Secretary that the greatest opportunities for saving energy are in the urban areas, and yet all of the money so far has been funneled down through the states, and we feel that, until the Department of Energy successfully lobbies this problem in Congress, we will continue to have these problems. My question is two-fold.

Do you have any plans to lobby this particular problem; to get some of the money to the point where it can address these problems and, also, do you have any influence with state governments to see that next year's budget is not let, for example, in a single contract? Do you have any plans to review the apportionment of the weatherization funds to see that it really gets to the place where it is needed? I know that I am giving you a tall order, but I would like to see you address it as best you possibly can.

MS. HOBSON: We are delighted you are here to touch upon three or four of the major problems that we are faced with.

Who would like to pick one?

MR. ALM: Let me start out and then turn the more difficult parts of the problem to my colleagues. I mentioned earlier this study that we are planning to undertake dealing with the role of the local governments. One aspect of that study obviously will be the best mechanisms for working together and working together often involves funding. So, we will be looking at that issue.

I think Sam Hughes gave a pretty good summary of the difficulty we are in. We need to get a more precise understanding about the nature of the problem, the kinds of activities the local governments either are undertaking or would undertake before we can initiate a program that is specific.

I think in the short term, the problem really is the relationship of the state operations to the local governments. I think, over the longer period of time, we will be in a better position to either make that mechanism work better, or to recommend a new mechanism for funding.

MS. HOBSON: Sam?

MR. HUGHES: I just wanted to comment more specifically, but perhaps not completely satisfactorily, on your question. You used the term lobby, and that is a term we use with great care, and usually apply it to somebody else rather than to what we do at the Department of Energy.

However, to try to respond to your question, we do have some influence in a variety of ways on what the Congress chooses to do, and

on the states as well, and we do draft legislation and present it to Congress for consideration. We never lobby for it. When asked, we go up and talk with them about it and try to educate them about the legislation and its significant provisions, including the kinds of provisions that concern you.

All of that, though, is a matter of our having some influence on the product, rather than control in the absolute sense. In the same way, of course, we are working not only with city and county associations, but with states and with the National Association of Governors and so on, and occasionally with individual states.

Pretty clearly, our capacity to influence the Governor of Louisiana is apt to be fairly limited, but we are trying in a variety of ways to more adequately deal with city and country problems, and to establish a better range of communications with them than the predecessor agencies of DOE have.

This is a kind of waffling. I guess it boils down to the fact that we are aware of the problem and we are trying. Hopefully, we can do somewhat better. I think quite clearly the population centers are where a lot of our energy problems are, and we should learn how to focus better on them.

MR. BEATTIE: May I just add very briefly to that? Of course, we addressed this question for the gentleman from Connecticut with the community action agency. It may still be a little premature to be looking for funds. Again, there are not a lot of funds, as we have

mentioned. The total of '77 and '78 is less than \$100 million. Those funds have just gotten out to the states. I am not sure how long it is going to take the states to funnel those down to the local areas. Undoubtedly it will take time. Each state has an option, and you have mentioned that Louisiana apparently is looking at a major contractor to do everything for the state.

We will just have to wait and see what happens. In all these programs, as Frank Stewart mentioned, we will attempt to audit these programs. It is just a little too early for us to get very much data, but we will attempt to audit the program.

The really big move in the weatherization program is in the '79 budget, when we start getting up to \$200 million. Hopefully, when those funds start going out to states, the local levels of government will start to see some real dollars.

MS. WEEKLEY: Just one more brief question; the weatherization funding formulas that are established by the states are really critical, and I was wondering; are you planning to take a look at these formulas, and the actual results of these formulas, to see exactly where the money is going? Even though the funding was small this year, it was the occasion for establishing these formulas, and in many instances, I understand--and certainly in Louisiana--these formulas are not beneficial to the urban areas, so a very close look at that I feel would be in order.

MR. BEATTIE: I assure you we will look at that for all states.

MS. WEEKLEY: Thank you.

MS. HOBSON: Is the representative from Change, Incorporated, here?

(No response.)

MS. HOBSON: No? All right. There are a couple of questions from government people, and I am going to skip them right now because we can generally talk to each other. Often we don't, but I would like to know, in the few minutes we have left, are there any other questions from the audience? Harry Loper is on my left, or Carl Conrad on my right, with microphones. Do you have any spontaneous questions?

MR. SPALDING: Anton Spalding, I am an independent consultant here in town. I would like to call the panel's attention to a couple of realities that could be at hand. Many of the things that you are talking about, and I think we would all be interested in knowing what is going on, have to do with certification, and then also with the standard.

I understand you have contracts with the American Society of Heating and Refrigeration Engineers. You also have a latch-up with the National Bureau of Standards. The National Bureau of Standards is one of the longest-run agencies on dealing with programs in town, and these standards and certifications are badly needed. People cannot get financing for the installations.

MS. HOBSON: Which kind of installations? Solar?

MR. SPALDING: Yes. The full range of solar, you can't get them through building codes. You can't get house financing, and some of the government financing programs do not yet cover it. I think it would be of great interest to know the status of those and when we will have standards that are acceptable.

MR. BEATTIE: The standards we fully recognize are needed, and there is a very vigorous program underway to get those standards developed. I expect that standards will be available for the solar heating area this fall.

In the meantime, however, we do with HUD have intermediate minimum property standards which are now available and should be used by FHA, VA, Farmers Home and other agencies that lend money for home owners. So, there are some things in being.

We are also requiring, for instance, that the hot water initiative in New England have some minimal warranties and standards for the equipment that will be installed in that program. Some people have said that we are probably premature because the standards, even though they are rather minimal at this point in time, many manufacturers are having difficulty meeting them. But, in any case, they are coming out.

There are already in place some standards against which lending institutions can make some judgments and maybe the gentleman from HUD would like to expand on that.



MR. JABZANKA: I will just add a few things. The standards themselves are not simply voluntary, but HUD's ability to police for adherence to the standards is very, very limited. We do take certifications that are offered to us by local builders or municipal officials at face value.

The standards will be changed in the future. As a matter of fact, there is a process underway now, and I think after some of the real detailed technical work is over, they will be opened up for much more public and consumer input than ever before. You may be aware of this from your position and vantage point, Mr. Spalding.

MS. HOBSON: All right. I think his point was that, until we have those standards, it is tough dealing with the financial institutions, and we understand that, and we will see what we can do to speed it up and yet not complicate it by putting out standards that wipe out the whole area of appropriate technology. There are these things to be considered, too.

MR. PAVALEGE: My name is Steven Pavaledge. I am a farmer from California, and I happen to be interested in the sensitive subject of what DOE is doing for high-energy agriculture.

There are very few places in the United States where a dependable source of agriculture products is in being, be it Florida, Texas, Arizona and California, and the fluctuation in agriculture products that come in on a yearly basis is fairly constant.

It would seem to me it is our dependency on irrigation water which makes us a very consistent agricultural force. What can be done and what is being done by the Department of Energy for these high-energy uses?

MS. HOBSON: You mean to assure that you will continue to get them, or what, specifically?

MR. PAVALEGE: Alternative methods--specifically, since 1973, for instance, our irrigation costs for natural gas or electricity has gone up 40 percent, and it is reflected, slowly but surely in the marketplace for consumers, in the price they have to pay for food.

We have absolutely no alternative now on a practical scale as farmers to turn to different energy sources besides natural gas and electricity. When we are in the dependable agricultural areas, such as in California, desert areas of Arizona and southern California, we depend on water 100 percent. They are irrigated acres, which in the State of California is around 17 million acres, and my question here is, that; in the future, if America wants their salad and vegetables and fruits and what have you, are they going to be willing to pay exorbitant prices, or are we going to somehow develop alternative energy sources for those farms?

MS. HOBSON: Like solar and other self-sufficient energy, integrated?

MR. PAVALEGE: On a practical basis, because everything relates to that.

MR. BEATTIE: Okay. There are just innumerable projects we have underway in the solar program, looking at that as an alternative source. We have irrigation projects underway, and in Arizona, New Mexico, Nebraska, we have projects in many states for substituting solar heat for propane for the drying process. There are several in the State of California. California has one of them. Maybe you are aware of that.

We are looking at programs or projects that will use feedlot wastes to generate energy and end up with a rather good fertilizer as a byproduct.

We have another program that is looking at urban wastes where we are, (A), generating energy, and then, (B), looking at a processed material that, again, can be a very nutritious fertilizer.

I guess the best thing I could suggest to you, if you are interested in finding out the full spectrum of things that are underway, is that you write to our Division of Solar Energy, and ask them about the projects that they have going.

The area of geothermal energy is another program where we are looking at using geothermal fluids to do things like drying foods. In your part of the world, that is especially attractive because there is a great geothermal resource in the State of California. So, there are many, many things that are underway, and I guess the best thing I could do is just suggest that you write to those divisions in charge of the programs and ask for material.

MS. HOBSON: I suggest a second way, and I have to put in a plug; our next, and sixth meeting, will be on energy and food, and all the questions will be related to that, so we hope you can come back.

You may have a followup if you want to.

MR. PAVALEGE: The followup, and I am not trying to be negative about the whole situation, is this; it seems as if the different agencies, it doesn't matter whether it is the Department of Energy or USDA or any agency that a farmer may go to, consistency and communication between these particular departments and different divisions is lacking. I have written lots of letters, and I have talked to a lot of people and tried to get responses on the grass roots level or whatever you want to call it. It just seems that things get balled up somewhere in administration, and so USDA is doing their thing, the DOE is doing their thing, and we have the farmer out here trying to survive, and it makes it very difficult because it seems to me that there is just not enough communication.

MS. HOBSON: I think you are right, and we will have the Department of Agriculture on the panel next, on the 25th of May.

MR. BEATTIE: On the other hand, the programs that are underway--and certainly I can speak with great assurance in the solar area--with the Department of Agriculture, are very closely coordinated between the Department of Energy and the Department of Agriculture. We are passing through the Department of Agriculture annually more than \$20 million to fund projects such as the ones I have been mentioning very

briefly, so we are aware of what they are doing. They are aware of what we are doing.

The question of whether, if you write to somebody, you are going to get an answer, I guess I can't say with assurance that you will. Let me do it this way. You write to me, and I will make sure that you get more than you care to read on what we are doing in agriculture.

MS. HOBSON: That's the best commitment that I've heard made today, Don. You get a vote for a special merit badge.

All right. One more over here, please.

MR. FERRY: I am Steve Ferry from the National Consumer Law Center Energy Project. I think the Department and the public slowly are beginning to realize that renewable energy resources may be a long-term solution, and may in the short run be a buffer against the skyrocketing projected costs of traditional fuels.

DOE has decided to implement solar or renewable resources in the market largely through tax credit schemes. For many people in the city who are on fixed incomes or low incomes and not able to avail themselves of these tax credits, or for renters, as we have discussed, there may not be penetration of solar.

In addition, there is the problem of an already-built environment that is dense with shadow zones. Perhaps this isn't properly equipped to handle solar conduits.

This may result in the cities being left out of solar, and having to absorb the large fixed costs for electric utilities who have made 30 and 40-year investments in traditional centralized supply. Solar may become the distinction between insulation against rising fuel costs in the suburbs, and greater absorption of these costs in the city.

My question is; has the Department thought about this problem? If so, what are you going to do, and if you haven't thought about it, what kind of mechanism will you develop, perhaps through Tina's office, to factor these types of concerns in your decision making?

MR. BEATTIE: I think we definitely have thought about it. It is a very, very tough problem to decide how you are going to put solar equipment on a highrise apartment, or do anything very significant--for lots of reasons that you have just mentioned.

We are, however, looking at some programs to try and use city labor to install solar equipment in the city. As I am sure you are aware, there is only one way to get a lot of solar energy, and that is to have a lot of space to locate gatherers of energy coming down from the sun. There is no way, in a city, that you can substitute a large area and get sufficient amounts of energy, so there is a real problem in bringing solar energy to the cities.

Some cities I'm sure will be candidates for windmills just because they are in good wind areas. Many cities will not be good candidates for windmills. Photovoltaic cells are another potential.

Again, whether it will have wide application in big cities is difficult to say. Certainly in urban areas I would expect to see photovoltaics to be a major contributor in the years ahead because areas such as shopping centers and places of this sort, where there are reasonable amounts of land area devoted to the building, you could visualize installing photovoltaic systems that provide part of the electrical use, but I think it will be very difficult for the individual in a city to benefit on a one-for-one basis from solar energy.

We are looking at that problem, and I can't give you any kind of a statement as to when we will have a particular solution, but we are looking at it. Perhaps Linda O'Connor might want to make just a quick reference to some of the work that we have initiated with the Department of Labor to use inexperienced labor in the cities to start looking at the problem.

MS. HOBSON: We are running out of time, and what I think I would like to do is to have Linda add that to the transcript.

This gentleman has been standing about half an hour waiting to ask a question. You have the last word.

MR. GRAVES: Thomas Graves, with the United States Congress of Mayors, and I have enjoyed this discussion about local roles.

I would like to bring to your attention a specific case which may give you an idea of the problem we are facing generally. Under the National Energy Act, utility companies are to be charged with performance of home energy audits in terms of retrofit and the tax credit.

For the last two years, there are scores of local governments which, in response to constituent pressure, have begun to offer this service at no charge. You have a variety of mechanisms. Utility companies are commonly the ones that are doing it, or charging for this service, and there is some discrepancy between what the local governments will be recommending in the way of insulation and retrofit, and what the utility company will be doing.

What is the Department planning to do to avoid overlap, and really destroying the local initiative? We are very concerned, if it goes totally to the utility companies, that local governments are going to say we are not going to get out in front any more. We are going to wait, and that is not what we want to do.

MS. HOBSON: All right. Panelists, who would like to take a crack at that?

MR. BEATTIE: Well, I'm afraid I can't give you a good answer, but let me say that certainly we will try and provide more information in the record on this matter, because I am not completely familiar with what is happening in the utility retrofit program. At this point in time, we are familiar with the services that you mention; that they are being offered.

We are working now to develop a program under the utility retrofit program. Certainly we would hope that we could very clearly enunciate the differences between programs so that there will not be that possibility that will drive one mechanism out of the market.



MS. HOBSON: Al?

MR. ALM: The requirements are that the utilities offer to provide these services. We put these provisions in the national energy plan, because of a lack of such information. To my knowledge, the utilities are not--at least as a general rule--opposed to a local government role. I would not think that this would in any way inhibit creative local programs. In other words, I would think most utilities would be delighted having a local government take over this responsibility.

MR. GRAVES: I think that's right. This is endemic of the problem. Without Federal guidance at the local level, we get this kind of confusion, and this kind of problem surfaces in a number of different areas.

MR. HUGHES: We will try to do better, I guess is the answer on that one also. We appreciate the comment and the question.

In closing, I want to thank the resource people who are here sitting quietly. They also serve. Some of them you have heard from. We do very much appreciate your backup and support. It gives the panelists, and me too, a little more confidence.

I would also like to thank Mary Liebert of Tina's staff for her work in putting together the arrangements here. Things have gone reasonably well, and where they didn't go well, it was not Mary Liebert's doing.

Thank you all, and I look forward to seeing as many of you as possible in about a month.

(Whereupon, at 12 Noon, the meeting was adjourned.)

#### ADDENDUM

The following questions were submitted in writing:

1. "With the rising costs of utilities, what type of provisions have been made to address the impact of these costs on persons with fixed incomes, and on the elderly?" Submitted by Patrice White, Council Member, Arrington Dixon's Office.
2. "Does the state energy planning program include emergency planning to cope with problems such as last winter's electric power shortage?" Submitted by Bob Frandsen, FPA/GSA.
3. "Other than tax credits and weatherization programs, what is DOE policy related to retrofitting existing buildings in the urban community? Sweden, for example, has started a 10 billion dollar program of education and implementation for dealing with existing buildings; for a country with eight million people, this represents a significant commitment." Submitted by Charles Ince, American Institute of Architects.

APPENDIX

The following questions were submitted prior to the public briefing. The answers were prepared by appropriate DOE program offices.

Question #1

What is DOE doing to attract top minority staff to help make (urban) policy decisions on a day-to-day basis?

Answer

The Department is doing several things to attract top minority staff:

1. The Department has scheduled staffing and employment exhibits at eleven minority conferences this year. The purpose of the exhibits is to inform minority communities of Departmental needs and interest.
2. Individual staff openings are regularly communicated to minority organizations.
3. Personnel and EEO officials initiate contacts to solicit applications from high level minority individuals.
4. Minority applications from all sources are regularly referred and called to the attention of selection officials.
5. The Department is in the process of establishing minority hiring goals for all its employment activities.

Question #2

What input did the Department have in the formulation of the Administration's new urban policy? How does that policy complement/supplement the NEP policy?

Answer

The Department of Energy provided to the Assistant to the President for Domestic Affairs and Policy summaries of existing and proposed energy programs affecting urban areas for his consideration in the development of the Urban Message. Because of the pending legislation proposed as a part of the National Energy Act, the Department did not propose any new initiatives for inclusion in the Urban Message.

Although new programs directed primarily at the conservation or production of energy were not incorporated in the Urban Message, many of the underlying principles of the message are supportive of the energy policies set forth in the National Energy Plan.

As centers of population and commerce, our Nation's urban areas are major users of all forms of energy. Consequently, the success of any national policy to conserve energy depends largely on the actions taken by institutions, businesses and consumers located in urban areas. Fortunately, the cities have many characteristics which give them the potential to become very energy efficient environments in which to live and work. To realize this potential, however, will require a renewed commitment to maintaining and improving the existing physical plant and transportation systems of our cities. This objective is supported by both the President's recent Urban Message and the National Energy Plan proposed last year. Both would provide a wide range of Federal financial incentives and other programs directed at housing rehabilitation, increasing the efficiency of existing urban transportation systems, and encouraging urban businesses to modernize and expand.

A few examples of programs proposed as a part of the Urban Message which are likely to be supportive of the National Energy Plan include:

1. increased funding for housing rehabilitation through the Department of Housing and Urban Development's Sec. 312 loan program;
2. intermodal transit programs to complement urban economic development;
3. federal grants for local planning of solid waste resource recovery systems;
4. a new "Soft Public Works" program to rehabilitate and renovate public facilities; and
5. a variety of new programs which will support local neighborhoods and volunteer organizations.

In turn, some examples of programs now contained in the pending National Energy Act which will support the objectives of the Urban Message are:

1. a significant expansion of the Federal financial assistance program to retrofit the homes of low-income persons;
2. a variety of additional tax incentives to encourage businesses and individuals to make investments for energy conservation in their existing plants and homes;
3. a new financial assistance program to help schools and hospitals in making energy conserving modifications to their existing buildings; and
4. assistance to local governments to help them identify the conservation actions they should take in local public buildings.

The success of these Federal energy and urban programs depends largely on the actions of individuals, businesses, and State and local governments. An essential first step is improved awareness among all those concerned of the importance of energy to community development and rehabilitation. How efficiently energy is used, as well as the type of energy upon which communities rely, may well be as important to the future of the cities as any other single factor. The Department of Energy intends to continue to expand its effort to build this awareness and will be working with other Federal departments and agencies to ensure that energy programs are coordinated with those proposed in the Urban Message.

### Question #3

For 30 years, our national policy has been to improve the economic status of the urban poor. Now they are being asked to sacrifice on behalf of the National Energy Policy. How do you explain this inconsistency?

### Answer

A number of provisions in the National Energy Plan (NEP) as proposed by the President last year were designed specifically to assist low-income persons in conserving energy and to ensure that the effects of rising energy costs of the poor were minimized. For example, it was proposed that the crude oil equalization tax be rebated to individuals through reduced income taxes and direct payments which, on average, would result in an increase in the disposable income of low-income persons. Homeowners relying on fuel oil for space heating would be eligible for additional rebates. The National Energy Act (NEA) would also significantly increase the existing weatherization grant program for low-income persons and

help assure that supplies of natural gas continue to be available at reasonable costs for residential consumers. The net effect of the NEA on the household income of low and moderate income families would be positive compared to the effects of no further legislation. Specifically, it was estimated that families with annual incomes of less than \$6000 would have enjoyed an increase in disposable income of approximately \$200 per year if the NEP, as proposed, were enacted.

Although some changes continue to be made in the original proposal, we believe that the ultimate impact of the legislation on the poor is likely to be minimal. Of course, certain sacrifices must be a part of any effective national energy policy. Nevertheless, it is our objective to ensure that these sacrifices are shared fairly among all energy users, with special regard to minimizing adverse impacts upon those with low incomes, particularly the elderly and the handicapped.

#### Question #4

How is DOE working with other Federal and State agencies which have urban specific programs to ensure energy problems are addressed? How is DOE coordinating its programs with other government agencies which have urban policies and programs with major energy considerations?

#### Answer

The Department of Energy (DOE) begins its work with other Federal agencies through a written agreement which establishes basic policy and guidelines and a mechanism for coordinating cooperative activities. This agreement is known as a Memorandum of Understanding. DOE has such agreements with most major Departments and Agencies which impact the DOE programs.

A pertinent example of such cooperation on a program with major impact on urban areas is the Weatherization Program, a joint effort of the Department of Energy, the Community Services Administration and the Department of Labor.

Another example is the statutory responsibility shared by DOE and HUD for the promulgation and enforcement of energy conservation standards for new buildings (Title III, Energy Conservation and Production Act). This program is designed to establish minimum energy performance standards for all classes of construction. DOE is responsible for the development and promulgation of the standards and has entered into an interagency agreement with HUD's Office of Policy Development and Research to assist in this effort. HUD's Office of Neighborhoods, Voluntary Associations and Consumer Protection is responsible for implementation of the standards. The respective staff from DOE and HUD meet on a weekly basis and have developed an integrated implementation work plan that fully utilizes existing DOE projects. DOE also administers the State Energy Conservation Program, an element of which relates to energy standards for new buildings, i.e., thermal efficiency standards and lighting requirements.

Even such Departments and agencies as the Treasury, VA and FHA have direct impacts on urban areas by keeping the commercial mortgage markets abreast of the latest acceptable energy efficient home construction practices.

Cooperation with State agencies is secured through the State Energy Offices, which have been partially funded by DOE. DOE looks to these offices for information regarding State and local energy needs as well



as a conduit for policies and programs. The majority of other major Federal agencies have State offices through which pertinent cooperative programs are directed.

Question #5

What is being done to build the urban (city/county) government's capacity to address our energy problems?

What has DOE done to stimulate the establishment of community energy planning committees--i.e., committees of local citizens, government officials, business representatives, academic people, etc., who work to put together an energy plan for a given community designed to meet the city or town's energy needs via conservation, renewable resources, and other tactics?

Answer

In order to increase the capacity of urban governments to address energy problems, the DOE has increased communication capabilities with local governments and inaugurated programs of direct assistance to them.

An office of City/County Relations has been established within the Intergovernmental Relations Division to increase the effectiveness of communications between DOE and local governments and, at the direction of the Secretary, a Local Energy Policy Advisory Committee is being formed of members from city and county governments to provide a more direct and meaningful communication of urban energy problems to the Secretary. In addition, DOE is now considering draft legislation for a State Energy Management and Planning Program which would encourage states to involve local government in energy planning activities and would allow for some state funding of such efforts.

One existing effort in assisting communities is in the development and application of a methodology for Comprehensive Community Planning for energy management and conservation. Ten to fifteen communities will be selected in 1978 to demonstrate Comprehensive Community Energy Management Planning techniques. The demonstrations are intended to address some of the needs raised by increasing local interest in energy management and to promote more extensive use of energy management in local planning and decision making. Because experience with energy management is relatively limited, the demonstration will explore alternative institutional arrangements for planning and implementing energy programs. The demonstrations will also provide tests of the methods and procedures for Comprehensive Community Energy Management Planning previously developed within the community systems program and will provide for updating and modification of the methodology. A key element in this methodology is the establishment of an organization at the local level to define energy objectives, initial issues and actors who will conduct and/or monitor the development of the action plans. In addition, we have provided assistance to five communities: Hobbs, New Mexico; Clarksburg, West Virginia; Alaska's new State Capitol; Mercer County, North Dakota; and the City of Atlantic City, New Jersey, in the development of energy plans. All of these plans have included community input.

#### Question #6

Is DOE contemplating making Federal funds available to cities and towns to undertake energy planning programs using a format similar to that now employed by State Energy Offices under the auspices of the Energy Policy and Conservation and the Energy Conservation and Production Acts--i.e.,

providing planning funds to communities to prepare community energy plans that meet minimum standard criteria set by the Federal government (e.g., 5 percent energy use reduction or 5 percent reliance on alternative energy systems) plus whatever other goals are set by the local governments themselves?

Answer

The Department of Energy does not now have, nor are there any immediate plans to seek, authority to provide general financial assistance directly to cities and towns for energy planning programs. However, there are a number of programs which DOE is implementing or has proposed which would provide financial assistance to local governments for the demonstration of selected conservation efforts. In addition, DOE is undertaking a review of the role of local governments in achieving national energy objectives and of the effectiveness of various existing or proposed Federal programs supporting such activity. The Department is currently in the process of selecting ten to fifteen communities to prepare a Comprehensive Community Energy Management program. Each award made will cover two areas of activity. The first is the development of an organizational arrangement for undertaking a Comprehensive Community Energy Management Plan process in the community. The CCEMP will require serious local commitment, involving the local decision makers, mayors, county executives and council members, department heads, representatives of the energy community, and the participation of local interest groups and the public. The second effort is to test, evaluate and improve energy planning methodologies. The methodology developed under contract to DOE will be provided to the local governments as a starting point. Each community

will develop goals, objectives and policies, evaluate alternative energy conservation options and adopt an action plan which will represent a coordinated application of energy technology and energy conservation in a framework of economic, environmental and community development considerations.

Under the proposed National Energy Act, DOE will provide local governments with financial assistance to identify appropriate conservation measures in local government buildings, in addition to financial assistance for retrofitting public and non-profit schools and hospitals.

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Question #7

Healthy urban areas can grow from the stake that small business and small inventors have in their local area. What is DOE doing to protect small business and small inventors from being gobbled up by large energy companies who have no dependence on nurturing urban communities?

Answer

The Department of Energy is attempting to provide the support and the conditions which help make it possible for small businesses and small inventors to survive and flourish in a competitive environment.

Under the Energy-Related Inventions Program we are providing grants to individuals and small businesses with promising inventions. These grants help move the invention toward commercialization.

Some inventions are still in the applied research stages; in other cases inventors need assistance in market surveys or writing business plans. We provide help in both situations. For example, we have an Interagency Agreement with the Small Business Administration that provides for the National Bureau of Standards to evaluate the technical validity of inventions in support of an inventor's application for a loan from the Small Business Administration. The agreement also provides for referrals from DOE to SBA in cases where a small business recommended under the program needs capital in order to produce and market the energy-related invention. This fall we will be publishing a Small Business and Inventors Handbook that will be a do-it-yourself guideline for taking a new energy-related idea through development, business planning, and implementation.

The Appropriate Technology Program established by Public Law 95-39 has had a very successful pilot program on the West Coast. This small grant program is to provide a coordinated and expanded effort for the development and demonstration of energy-related systems appropriate to the needs of local communities and the enhancement of community self-reliance through the use of available resources. The program encourages the conservation of non-renewable resources and the use of renewable resources and existing technologies applied to novel uses.

Additional pilot programs are planned for the Northeast and Midwest U.S. this fiscal year with program expansion scheduled for Fiscal Year 1979.

Both the Energy-Related Inventions and the Appropriate Technology Programs are relatively new and provide grants throughout the nation to support individual efforts to help solve our energy problem. The Office of Procurement Business Affairs under the Director of Procurement assists small companies in doing business directly with the Department and more particularly with our technical programs through research, development and demonstration contracts.

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Question #8

During the March hearings of the Joint Economic Committee's Subcommittee on Energy, DOE confessed that there was no input from DOL into the National Energy Plan. Witnesses from DOE and DOL further admitted that no integrated employment energy impact analysis mechanism on different energy sources existed then, nor does it exist now. Why? Witnesses further admitted that the conservation and solar families of energy technologies--unlike other sources of energy--could create jobs in urban settings and particularly in crisis cities where the hard core unemployment problems exist.

During those hearings in March, 1978, Secretary Schlesinger said that developing energy employment impact analysis--particularly of conservation and small-scale appropriate energy technologies vs. traditional big energy employment impact--would be one of DOE's top priorities.

- What has DOE done since March to implement this priority?
- What is DOE's plan after this briefing on employment impact analysis and what resources are committed to having EIA's this year?
- What data sources will be used to link DOE's EIAs to hard inner city unemployment data?

Answer

The assessment of the impacts of energy developments on employment is one of the major concerns of the Department of Energy. The major responsibility for making such assessments rests with the Energy Information Administration, and the Assistant Secretary for Policy and Evaluation, but the Regional Assessment Program under the Assistant Secretary for Environment, and the Office of Education, Business and Labor Affairs under the Assistant Secretary for Intergovernmental and Institutional Relations, as well as all organizational components engaged in implementing energy projects have some responsibility for assessing employment impacts.

Initially, employment impact assessment focused on aggregate employment to assess the impact of energy development and policy proposals on the economy as a whole since these impacts could be assessed using data and analytic methods already available. Analytical tools are being developed to analyze employment impacts on particular sectors and groups of the economy. DOE currently has an interindustry model which analyzes the impacts of energy developments on 470 occupations in each of 129 industrial sectors. Work is currently in progress under an interagency agreement with the Bureau of Labor Statistics to expand the capability of this model to deal with the energy sector of the economy. DOE also has several models to analyze the impacts of energy developments on a regional basis and a model which will analyze the economic impacts of energy developments on specific socio-economic and demographic groups. In addition, DOE is studying the feasibility of models which can be used to assess economic impacts at the urban or SMSA (Standard Metropolitan Statistical Area) level with a view toward financing their development. DOE is also attempting to develop and improve the data feeding into these models, especially concerning the types and numbers of the persons employed in the various energy sectors.

Assessment of the impacts of energy developments on specific areas and demographic groups pose very difficult analytic problems. Questions concerning the impact of specific conservation proposals and/or the selection of one of several alternative energy supply sources for



particular areas require information that is difficult to specify and obtain with sufficient detail and reliability. For example, comparative analysis of the employment impact of a solar-conservation initiative and a nuclear or other plan depends on the specification of technological characteristics that are quite often very site-specific. Similarly, questions involving particular geographic areas or demographic groups require specific information about the affected group which may not exist.

Case studies are also being pursued. For example, DOE is participating in the funding of the Council on Economic Priorities project comparing the impacts of conservation/solar energy investments with fossil fuel/nuclear energy investments on Long Island. Other case study projects are under development in DOE.

At the request of the Office of Conservation and Solar Applications, DOE is developing an assessment of the jobs impact of the national goal of having solar installations on 2.5 million homes by 1985. The Office of the Assistant Secretary for Conservation and Solar Applications is also examining the employment impact of auto fuel economy standards, industrial efficiency improvements, and retrofitting 90% of existing residences.

#### Question #9

What specific mechanisms, if any, does DOE use to assess the potential employment effects of the various long- and short-term conservation and supply strategies it has under consideration?

- How are these effects taken into account by DOE in deciding which of these strategies to pursue?
- On what basis does DOE know, if it does, the short-, middle-, and long-term employment impacts between a supply strategy which places greater emphasis on the development of decentralized solar, on the one hand, as opposed to centralized nuclear and/or fossil fuel power generation on the other hand?
- If DOE has no reliable basis to make such an assessment, what specific steps is the agency taking to remedy this deficiency?

Answer

The assessment of the employment impacts of energy conservation and supply strategies requires information and analytic tools that are quite different from those used to analyze the impacts of other types of energy developments affecting the economy as a whole. The impacts of conservation and supply strategies depend on the specific conditions of the geographical areas in which they would be implemented. Indeed, the specific details of conservation and supply strategies are critically dependent on local conditions. In addition, technological innovation in both renewable and non-renewable energies makes the building of energy employment models difficult. Each new development changes the technological configuration of the energy system under consideration and therefore changes the impact on employment. As a result of these factors, it is useful to perform employment impact assessments on a case-by-case basis. For example, employment impact assessments of home solar installations are being developed. DOE is currently working on the development of further case studies of this type and is supporting projects already under way. Over time, case studies of conservation and

supply strategies may provide the information needed to formulate a general analytic approach to the assessment of the employment impacts of these types of energy developments.

DOE has already undertaken to assess the impacts of conservation and alternative energy supply sources on an aggregate basis. Because of the limitations noted above, such assessments have been confined to analyzing the effects on conservation programs or new energy sources on the economy as a whole. For example, the analysis of the National Energy Plan included data on the effects of conservation programs on business investment and on the level of U.S. petroleum imports. DOE will continue to perform this type of employment impact assessment along with the more detailed case-by-case assessments already noted.

DOE inherited interest in many socio-economic assessment models and is presently attempting to integrate some of these in order to produce more sophisticated data. For example, an effort is underway to link models which are available at the Battelle Pacific Northwest Laboratories, Oak Ridge and Brookhaven National Laboratories so that secondary employment impacts can be assessed for various policy options. The Department is also considering funding additional work at the Lawrence Livermore Laboratory in Berkeley, California which, although directed toward the conservation potential of mandatory building and appliance standards, has come to positive conclusions concerning the employment impacts of conservation.

Question #10

Under the President's proposed Urban Aid Program, \$400 million are being advocated for job training subsidies with the hope of providing 100,000 "hard-core unemployed" citizens on-the-job training. Has DOE considered what measures it will undertake to spur the energy organizations into providing on-the-job training programs in energy related fields, and, if so, what guarantees can the Department make to assure that the skills learned will be applicable in the open employment market?

Answer

The pending National Energy Act (NEA) is expected to spur the public and private sectors to expand significantly energy-related investments and employment, particularly in the area of energy conservation. Specifically, additional tax incentives, Federal grants and various regulatory requirements contained in the NEA are designed to encourage increased conservation investments in existing residential and commercial buildings and industrial plants. Such investments will create new jobs in the private sector and many of these jobs will be located in urban areas, which have the preponderance of existing buildings and industries.

To ensure the adequacy of trained manpower to implement the NEA and other conservation programs, DOE is working with States and a number of other Federal agencies. For example, under the Labor Department's CETA program, para-professionals are trained to conduct energy audits. These skills could be utilized under the NEA's Schools and Hospitals Program, as well as the retrofit programs directed at other commercial and residential buildings, such as the Residential Energy Conservation Source.

In another area, the Department of Energy's Weatherization Program for low-income homeowners, particularly the elderly and handicapped, uses labor funded under the Comprehensive Employment and Training Act (CETA), including many "hard-core unemployed."

Question #11

What has DOE done to encourage the development of labor-intensive alternative energy businesses in inner city areas to assist in resolving some unemployment problems? What is DOE's position on the Humphrey-Hawkins bill insofar as providing public service jobs in the fields of solar technicians, wind-mill mechanics, and weatherization experts? Why isn't DOE developing programs around the employment and economic development potential of low cost solar, passive and other appropriate technologies?

Answer

As described in the response to question #10, the NEA would provide a wide range of incentives for increased investments in conservation and renewable energy resources. Such investments, particularly the retrofit of existing buildings, will encourage the expansion of labor-intensive businesses in urban areas. Although the Department of Energy is not independently undertaking programs designed to train or provide jobs for the urban unemployed, it will be working with other departments and agencies to urge that energy concerns be integrated with existing or proposed employment and public works programs. This type of inter-agency coordination has already proven to be effective under the Weatherization Program for low-income persons.

In another area, DOE is currently discussing with the Department of Labor and the Community Services Administration the feasibility of establishing a pilot program to combine training and job creation programs with energy assistance programs. Unemployed workers eligible under the Comprehensive Employment and Training Act (CETA) would be trained in skills needed to install solar systems on the homes of low-income and

elderly persons. In connection with these discussions, DOE is actively investigating means of assuring that skills taught related to the solar space and water heating system design, construction, and installation will be transferable to other efforts.

We have also determined that HUD subsidized loans for housing rehabilitation, provided through chief elected officials of cities and counties, are applicable for solar retrofit purposes. This means that, once training and CETA-subsidized jobs in the solar area have been completed, workers could hopefully go on to establish or find jobs in solar-related businesses.

Question #12

Has there been any effort by the Department of Energy to coordinate plans with other agencies to put unemployed youth to work during the summer months in energy conservation programs?

Answer

DOE is working to coordinate energy employment opportunities with other agencies. Such programs include a joint HUD-Department of Labor pilot program to renovate public housing by employing 16-19 year old youths in 10 pilot sites across the country.

In addition, DOE has discussed with ACTION and the Department of Labor the possibility of using unemployed youth in the Weatherization Program, which currently uses Comprehensive Employment and Training Act (CETA) labor.

Question #13

How does the operation of DOE's weatherization program for low-income persons ensure that all necessary housing rehabilitation work, including burner or furnace repairs, will be concurrently performed, together with their weatherization activities?

Answer

The weatherization assistance program is intended to reduce energy consumed in the dwellings of low-income persons, thus reducing the fuel bills of persons least able to afford the increasing costs of energy and also helping to conserve the nation's resources. The weatherization program is not a rehabilitation program, as that term is commonly understood. However, consistent with the corrective actions allowed by the Energy Conservation and Production Act, it may be that some rehabilitation is achieved through insulating, caulking, patching and weatherstripping. Moreover, subgrantees under the program may choose to utilize funds available under other programs to supplement the weatherization work. This decision would be made on a case-by-case basis. No statutory authority presently exists coordinating the weatherization program with other more general rehabilitation programs. Finally, under the present weatherization program, burner and furnace repairs are not allowed. However, mechanical equipment, not exceeding the value of \$50 per dwelling unit, may be installed. Mechanical equipment includes such devices as flue dampers, clock thermostats, filters and replacement switches.

Question

Specifically, what funds will be available to perform such rehabilitation work?

Answer

No funds are available for rehabilitation work.

Question

What are the specific dollar limits on using weatherization funds for this purpose in regards to an individual residence?

Answer

No funds may be used for this purpose on individual residences..

Question

How will it be assured that DOE's weatherization program will adequately reach the urban rental market, particularly low-income apartments?

Answer

The statute requires that: (i) the benefits of weatherization assistance in connection with leased dwelling units will accrue primarily to low-income tenants; (ii) the rents on such dwelling units will not be raised because of any increase in the value thereof due solely to weatherization assistance; and (iii) no undue or excessive enhancement will occur to the value of such dwelling units. These requirements have made it difficult for grantees to significantly impact the stock of renter-occupied housing.

Question

What steps are being taken by DOE to assume extensive weatherization of the nation's assisted housing stock?



Answer

Section 414(b)(2) of the statute requires the grantee to establish priorities, as the grantee deems appropriate, to specific categories of dwelling units. DOE has therefore established no such priorities.

Question

What, if any, discussions has DOE had with HUD on the question of weatherizing assisted housing stock, and what has HUD and/or DOE promised to do?

Answer

DOE has had few discussions with HUD on the question of weatherizing the assisted housing stock. However, there is no prohibition in the regulations against weatherizing assisted housing, and HUD funds may be integrated with DOE funds at the local level for such purpose.

Currently, HUD is undertaking a study to assess the condition of the assisted housing stock. This study will examine the potential for energy conservation in the various building and construction types.

Question #14

The prime thrust of the conservation and alternative energy elements of the Administration's energy effort has been to provide incentives for owners to weatherize, insulate and install solar equipment, etc. What incentives will the Department of Energy undertake to ensure penetration of solar and conservation technologies to those segments of the urban population which do not benefit from such incentives? Specifically, what actions will DOE undertake to cause these technologies to benefit construction of inner-city low-cost rental housing?

Answer

The National Energy Act contains provisions which would make available loans and loan insurance for energy-conserving improvements, including solar energy systems for residential buildings. One of these

programs is specifically aimed at the owners of multi-family housing. These financing programs would be implemented as an extension of existing home loan programs administered by the Department of Housing and Urban Development.

DOE expects the Weatherization Program to help reach those segments of the population which do not directly benefit from NEA incentives. However, we recognize that neither this program nor the NEA incentives will be effective in insulating most rental housing. We are studying alternative policies which could ensure the efficiency improvements are made to these buildings.

DOE is exploring with other Federal agencies, including Labor, HUD, and the Community Services Administration, the possibility of joint programs to reach these groups. Discussions have been held with HUD, specifically concerning joint programs linking solar energy systems to the improvement of public housing in urban areas.

#### Question #15

Has the Department made an effort to assure that the forthcoming revisions in the HUD minimum property standards will be as effective as feasible in reducing residential energy consumption?

#### Answer

DOE is in the process of reviewing a draft revision of the HUD minimum property standards. An important factor in determining the most appropriate standards is the anticipated future price of energy. Although future energy prices are highly uncertain, DOE will be developing price forecasts for use in the evaluation of proposed building standards and other conservation efforts.

In a closely related area, DOE and HUD are now in the process of developing, promulgating and implementing energy performance standards for new buildings, including residential. These standards, when adopted by state and local governments, will override the minimum property standards.

Question #16

The provisions for weatherization funds as outlined by the Community Services Administration (CSA) provide for services for low-income homeowners only. What considerations are being made for low-income apartment dwellers or house tenants who are unsuccessful in forcing landlords to make weatherization repairs and renovations?

Answer

Low-income tenants are eligible for weatherization assistance through the DOE Weatherization Program, although certain specific assurances must be obtained from landlords before rented buildings may be weatherized. Many States receiving funds for the DOE Weatherization Program have chosen to restrict the program to owner-occupied buildings, and others have had difficulty developing releases that large numbers of landlords are willing to sign.

Providing effective incentives for conservation in rented buildings regardless of the occupant's income is one of the most difficult policy issues we face in improving energy efficiency. Three modest proposals are included in the National Energy Plan and, in addition, one or two others are likely to be included in the National Energy Act.

The NEA will also require a 6-month study to be conducted of ways of involving utilities and others in weatherizing apartment buildings. As part of the development of the 1979 National Energy Plan, we will examine new initiatives in this area, including possible mandatory actions.

#### Question

Under the funding provisions for weatherization, CSA allows 125 percent of the poverty guidelines set forth by the Office of Management and Budget (OMB) as the income eligibility level for low-income homeowners. For example, this provision would allow a \$7,313 income ceiling for a family of four. HUD, on the hand, has a low-income ceiling range of \$10,000 to \$16,200 for a family of four under section eight (8) assistance. DOE maintains its poverty ceiling at the \$5,850 poverty guidelines designated by OMB. Why is there such a fluctuation between the income ceiling guidelines, and why doesn't DOE raise its income ceiling level to reflect a more accurate assessment of family income levels for homeowners as evidenced by HUD's higher figures?

#### Answer

The income eligibility requirements used in the DOE program are dictated by the statutory provisions of the Energy Conservation and Production Act (P.L. 44-385). Pursuant to DOE's request, the National Energy Act proposes to amend the statute to make the DOE income eligibility requirements consistent with those of CSA.

#### Question #17

Why is DOE seeking to seize control of the home weatherization program when the CSA and the 800 Community Action Agencies (CAAs) across the country have already demonstrated an excellent track record in performing such work?

Answer

President Carter's National Energy Plan proposes a comprehensive energy program to be developed and administered by a single agency, with a focus on energy, that includes the full spectrum of American society. To exclude programs for the low-income would leave a significant gap in that energy program. Accordingly, the Administration has recommended that responsibility for the weatherization of low-income homes be placed in the DOE.

The statute mandates that DOE's Weatherization Assistance Program utilize the same delivery mechanism used by CSA, the Community Action Agencies. The CAAs have demonstrated their capacity to deal effectively with the energy problems of the low-income. We have no doubt that the CAAs will continue to do so under a program administered by DOE, and DOE has endorsed the continued use of the CAAs.

Question #18

What is DOE doing to support the development and marketing of electric cars that would reduce pollution in the urban areas and take advantage of power during low electricity demand periods? Is it possible to gear battery chargers to periods of minimum electric loads?

Answer

The Department of Energy is implementing the Electric and Hybrid Vehicle Research, Development, and Demonstration Act of 1976 (P.L. 44-113). This program consists primarily of:

1. Research and development;
2. Financial incentives to encourage the use of electric and hybrid vehicles; and

### 3. Demonstration of such vehicles.

While any electrical device can be constrained to off-peak use, the electric vehicle may be particularly amenable to off-peak charging because of typical usage patterns which result in the vehicle being garaged or parked at night.

Finally, it should be emphasized that the Act contains provisions encouraging small business concerns to participate in the research, development, and demonstration of electric and hybrid vehicles. As noted above, various forms of financial incentives are provided under the Act.

#### Question #19

Alcohol as an alternative fuel appears to offer considerable promise in reducing reliance on petroleum based fuels. Alcohol fuels should help ease pollution problems in urban areas and provide a market for surplus crops or agriculture waste. What is DOE's position on alcohol? On gasohol? On methanol? On ethanol? On mixes of alcohol? On small scale ethanol production to serve the needs of the community?

#### Answer

The Department is encouraged by the potential of alcohol fuels to become an important part of our national energy supply. In December, 1977, a special Department-wide Alcohol Fuels Task Force was established to examine the potential of alcohol fuels. Findings of the Task Force are encouraging and indicate that alcohols are suitable fuels not only for internal combustion engines but also for gas turbine peaking units, utility boilers, industrial heating, and fuel cells. Although the economics of alcohol fuels is an obstacle to high volume production, certain states, such as Nebraska and Illinois, are currently marketing blends of 10% ethanol and gasoline at prices which are competitive with premium unleaded

gasoline. When ethanol is blended with gasoline, the octane is increased and the fuel is therefore comparable to premium gasoline rather than leaded regular.

Such state initiatives are encouraging, and indicate that blended fuels can be sold competitively with gasoline. The Department currently is embarking on a series of short-term studies which address questions of economics, including scale, supply potential, and end-use applications. These studies are to be concluded by January 1979, in order to allow decisions on the commercialization of alcohol fuels to be made in conjunction with decisions about other liquid fuels as part of the Department's second National Energy Plan.

#### Question #20

In most urban areas, mass transportation is sorely inadequate. In this area, what specifically is DOE doing with its authorities and resources to encourage vastly expanded urban and suburban mass transportation system? Is DOE encouraging the use of less polluting, more energy efficient, smaller mass transportation vehicles for low passenger periods? Although the economics of such vehicles may not be altogether favorable, the energy savings and pollution abatement advantages may well outweigh the disadvantages.

#### Answer

DOE has two principal efforts to cope with the inadequacies of existing public transportation service. The State Energy Conservation Grant Program, authorized by the Energy Policy and Conservation Act (P.L. 44-163), requires each State to promote the availability and use of carpooling, vanpooling and public transportation in order to be eligible for grants. These efforts are directed primarily toward more efficient use of existing systems.

In addition, DOE has vigorously promoted the concept of commuter vanpooling. The economics of vanpooling make it a very desirable means of transportation for commuters who travel more than 15 miles one way, a distance not serviced by most transit systems. Thus vanpooling increases the opportunities available for the use of multi-occupant energy efficient transportation. These two efforts, the ride sharing program and the vanpooling program, can achieve a substantial reduction in energy use in urban transportation.

We have not advocated that transit systems acquire small vehicles for nonpeak use. This and other operational changes in public transit systems could have some energy conservation payoff. However, it is important to keep in mind the relatively small amount of energy that urban mass transit uses. Projections from the Project Independence Report indicated that in 1980 mass transit will account for only approximately 3 percent of the total urban passenger miles and only 1.5 percent of urban energy use. Accordingly, other less efficient transportation systems warrant more immediate attention in order to reduce energy waste.

#### Question #21

We understand that transportation of food is one of the most energy intensive components in the food production-food consumption cycle. This energy intensive component can be reduced by more direct producer-consumer relationships. Is DOE working with USDA to advance these relationships? Is DOE encouraging GSA, HEW, DOD, DOI and other major purchasers of food to encourage energy saving practices in terms of local buying, transportation and marketing practices?



Answer

DOE has completed negotiations with DOE and USDA on a Memorandum of Understanding which will implement, among other provisions, energy saving practices including transportation. In addition, Section 656 of the DOE Organization Act provides for the designation of an energy conservation officer from DOE, DOC, HUD, DOT, USDA, Interior, GSA, and the Postal Service, to coordinate indirectly with DOE on energy matters and the planning and implementation of conservation matters. Programs to achieve near-term energy conservation in the transportation system have been developed to provide to consumers, the business community, and public officials the information necessary to assure energy conserving vehicle and equipment purchasing and operating practices, and to reduce or eliminate regulatory and institutional barriers in the transportation sector. This is accomplished through the development, publication and dissemination of conservation materials, the conduct of energy-conserving transportation component and system demonstrations, intervention in energy related procedures of Federal and State regulatory agencies, and the promotion of revisions and clarifications of regulations and laws. Within this approach, we have applied our very limited resources where the greatest return in energy conserved per dollar spent can be expected to be achieved. For instance, activities resulting in the saving of energy in the trucking and railroad industries, especially those relating to the distribution problems of freight, would probably have a favorable impact on the conservation of energy in the transportation of food purchased by Federal agencies. Additionally, the conservation information we have developed is available for use by other Federal agencies.

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Question #22

What policies does DOE have for encouraging non-polluting energy conserving transportation within the Department itself, i.e., bus transports, motor pools, etc.?

Answer

The Department of Energy (DOE) employs the traditional shuttle service between major DOE office buildings to minimize use of the private automobile and taxis. For commuting, DOE encourages the use of public transit, participates in the regionwide carpool matching program, and offers priority parking for carpools. DOE is planning new DOE-wide carpool and vanpool campaigns. For example, in the past year a DOE facility established 24 new vanpools which carry approximately 10 percent of the employees. As a result, approximately 200 cars have been removed from the highway saving approximately 150,000 gallons of gasoline per year. DOE has also been instrumental in the development of new insurance classifications and lower rates for vanpools, and in eliminating other institutional obstacles to vanpools.

Question #23

Why has DOE invested so little funds and done virtually nothing to promote Federal legislation that would either mandate or support urban bikeways as an alternative to cars and buses?

Answer

The Department of Energy does support the use of bicycles as an energy conserving mode of transportation, and we have utilized the provisions of the Energy Policy and Conservation Act (EPCA) to promote them. EPCA established a State Energy Conservation Program with funding of \$50 million a year; the regulations developed for this program specifically include bicycles and bikeways as appropriate energy conservation program measures.

The Department of Transportation (DOT) has legislative authority and funding to support bikeways. DOT funds a special demonstration program for bikeways, and permits States and urban areas to devote highway funds to bikeways. The DOE Transportation Energy Conservation Program is currently developing a brochure on bicycle use and the forms of Federal, State and local aid available for bikeways.

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Question #24

How does the Department of Energy plan to utilize the energy efficiencies of public transit as an urban strategy for energy conservation?

The Department of Energy has supported and publicized the use of car and van pools. How does the Department of Energy plan to coordinate these alternatives to single passenger automobiles with public transit in its urban strategy?

Answer

The Department of Energy fully supports the increased use of energy efficient public transit. In order for State energy conservation programs to be eligible for Federal assistance, a State must include programs to promote the availability and use of carpools, vanpools and public transportation.

DOE has supported all forms of high occupancy commuter travel including carpools, vanpools, buses and fixed rail transit. Each mode of travel has its advantages and is encouraged where it is most effective. While buses and fixed rail transit serve travelers with an average trip length of about 6 miles, the vanpool serves the long distance commuter with an average trip length of 25 miles. Thus vanpools are often best suited to serve the 27 percent of commuters who travel in excess of 10 miles one-way to work yet consume 68 percent of the gasoline used by commuters. However, public transit can often be more effective in serving the 73 percent of the commuters traveling less than 10 miles to work. DOE supports efforts to substantially increase energy efficient transit use.

The primary Federal responsibility for transit issues rests with the Urban Mass Transportation Administration (UMTA). The Department of Energy supports UMTA's efforts to maximize operating and vehicular energy efficiencies.

The Department of Energy analysis of public transportations' energy conservation potential, however, has shown that public transportation has a limited role in energy conservation unless restraints to low occupancy automobile travel are also implemented. Policies to discourage single occupant automobile travel include user charges, parking fees, and area or facility restrictions. DOE will work with other Federal agencies to consider measures for achieving energy savings through increased use of public transportation.

Question #25

Vast amounts of public funds have been expended to construct energy intensive consolidated waste water treatment plants in metropolitan areas. These plans basically benefit metropolitan industries and developers at the expense of the city taxpayers. What is DOE doing to influence EPA to go after the industries that avoid pretreatment and force the public to clean up the mess in an energy intensive, centralized system? In addition, the urban parks and gardens as well as the fringe farms are not able to use the valuable nutrients that can be routinely reclaimed from wisely managed waste treatment facilities due to the problem of heavy metals that could be removed by pretreatment. How is DOE working with EPA and USDA to prevent this energy and basic nutrient loss?

Answer

Many economic and environmental factors are involved in the assignment of pretreatment responsibility for industrial waste waters, all of which are considered by EPA in implementing Federal water quality regulations.

DOE, through its Urban Waste Technology Program, is developing systems to recover and utilize energy and energy intensive materials from urban solid and liquid wastes and is also examining and developing systems to accomplish municipal functions such as water and waste water treatment in a more energy conserving manner. Through the Industrial Energy Conservation program, the Department is developing systems to utilize materials now discarded in industrial waste streams.

DOE is working closely with EPA in a variety of ways to accomplish the above objectives. For example, we participate in the Resource Conservation Committee which includes other government agencies in addition to DOE and EPA.

DOE is working directly with EPA to determine the total energy consumption and the potential areas for reducing energy consumption of waste water treatment and to initiate development of a design manual on energy conserving techniques. DOE is also following closely current EPA efforts to develop systems for land application of sewage and the environmental effects of such application.

DOE is sponsoring research directed at energy conservation waste water treatment systems, enhancing anaerobic digesters to recover methane, identifying energy uses for sludges and integrating solid waste and waste water treatment plants for energy conservation.

Large centralized sewage treatment plants still have many positive features, including economies of scale, high reliability, and financial capability to support highly trained, responsible personnel. Such plants

were designed during the 1950's and 1960's, when energy costs and the economic value of nitrogen and phosphorous in waste water were insignificant factors in design decisions. With the advent of rapidly increasing energy and fertilizer prices, both factors are now important and EPA's policies are changing to reflect this. DOE researchers have frequent contact with EPA and USDA to coordinate efforts to recover energy from various forms of municipal waste, both liquid and solid, and to reduce energy consumption in waste water treatment plants.

#### Question #26

The production of methane from the anaerobic digestion of organic matter is a well established technology. There is a huge amount of organic waste in urban areas. What is DOE doing to explore and develop practical programs that will capture the methane energy available in urban areas? Is DOE working with HUD, Labor, CSA and other agencies to encourage small community owned and managed business to exploit this wasted energy resource? Could you also address fluidized bed and pyrolysis operations as similar questions?

#### Answer

DOE's Urban Waste Technology program is actively developing means to recover methane from urban wastes. The centerpiece is a "proof of concept" facility now being tested near Pompano Beach, Florida. This facility is designed to anaerobically digest 50 to 100 tons per day of urban waste to produce methane. The basic process receives waste, reduces its size, recovers ferrous metal, separates grit and glass, separates the inorganics and mixes the organics with sewage sludge and

nutrients for introduction into a digester. In the digester, organisms convert the organics to methane (60 to 70 percent) and carbon dioxide (30 to 40 percent). Groundwork is being laid to develop this technology in a full-scale plan assuming the concept is successfully tested.

We have been working with a variety of Federal agencies in the wastes-to-energy and energy intensive materials area including EPA, DOC, HUD, HEW and DOD.

We are particularly sensitive to the requirements of small communities. In April, 1978, DOE sponsored a workshop of small community leaders (mayors, city managers and public work personnel) to draw upon their experience and to obtain their perspective of energy and materials recovery from waste. In addition, we have initiated a research program to develop systems which would be viable on the small scale to impact both the small community and smaller segments of large communities.

The subject of fluid-bed thermal and pyrolysis/gasifier systems is addressed, in part, by the small-scale systems mentioned above. Specifically, in the fluid-bed area we are supporting a development program that is expected to lead to a full scale fluid-bed system recovering steam from urban wastes as a first step. Assuming success in this effort, future efforts will look at using fluid-beds as gasifiers/pyrolyzers. We are also encouraging studies that could lead to demonstration of the pyrolysis systems in several cities of varying size.



The DOE program concerns itself not only with the recovery of energy, but also with the recovery of energy intensive materials. As an example, recovering a pound of aluminum conserves 100,000 Btus.

The systems we develop should be self-sustaining for their life cycle at a cost that is equal to or less than other methods of waste collection and disposal.

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#### Question #27

In many of our urban areas we have extensive parks, greenbelt areas and rights-of-way under cultivation of some sort, usually grass, trees or ornamentals. The maintenance of these areas are generally energy intensive in terms of fertilizers, pesticides and herbicides as well as mechanized equipment. Instead of an energy draw-down, these areas could be net energy producers through the harvest and utilization by biomass fuels. In addition, this process could generate urban jobs and help clean up the environment through the process of photosynthesis. What is DOE doing about this small, but highly visible opportunity to both conserve and produce energy?

#### Answer

Wastes from normal city parks and green area maintenance activities now find their way into the urban collection and waste handling system. Therefore, they are available to energy recovery systems. In actual practice, these wastes are frequently returned to the ecosystem. Grass clippings remain on the lawn area as mulch and soil conditioner. Wood wastes such as tree limbs, discarded christmas trees, etc., are chipped and used as nature trail material, plant mulch, etc.

The DOE program for plant conversion to energy is part of the Fuels from Biomass program. The present emphasis is on improved methods of converting the energy stored by photosynthesis in plants. Research and development is aimed at improved production of clean fuels through anaerobic digestion, fermentation and thermochemical conversion of plant feedstocks. Improved and more economical methods of conversion are needed before such small projects as urban green space use would be practical. Present activity by DOE is directed toward development of larger energy plantations that would produce significant amounts of fuels from biomass conversion. There is in existence the technology for small gasifiers which could conceivably be fed with small stocks of urban biomass, though the economics of such units do not at present look promising.

The more promising approach to job creation and energy conservation in the urban area would revolve around source separation of selected components such as glass, metals and newspaper. These materials then could be conditioned into a marketable product. A problem would be that the markets for recovered products are very volatile. Such a plant would have some economic risk. For example, waste newsprint, which sold for \$30 to \$40 November, 1974, today demands \$60 to \$70 per ton for resale to the cellulose insulation trade.

#### Question #28

What studies has DOE completed on the energy savings potential of returnable beverage containers (such as the Oregon experience)? List such studies and summarize the findings. What is DOE doing to encourage State and local governments to take advantage of such savings?

Answer

The Department of Energy has completed one study on the energy savings potential of returnable beverage containers. The study was conducted by Research Triangle Institute and was titled "Energy and Economic Impacts of Mandatory Deposits." Although the study was completed in September, 1976, it still remains the most detailed and accurate assessment of this issue.

The study found that the exact impact of National Deposit Legislation could not be specified, since any results would depend on individual consumer responses to a deposit as well as industry's perception of those responses. Within a range of realistic assumptions about the extent and types of responses, it was predicted that from 70-81,000 barrels per day of oil could be saved with national legislation. By comparison, a new shale oil plant would produce about 50,000 BPD and the 55 m.p.h. speed limit is estimated to save between 100,000 and 200,000 BPD.

Currently the Department is participating on an interagency Resource Conservation Committee where Federal policy related to this and other issues is being debated. As yet, there is no resolution concerning the desirability of national deposit legislation. DOE provides information on request to State and local governments concerning the deposit issue, including a methodology for States to use in determining the local impacts of local legislation.

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Question #29

What will DOE do to support the Federal building bill in NEA? Will it force energy self-sufficient Federal buildings such as the Manchester, New Hampshire Federal Building in every Federal situation?

Answer

DOE supports the Federal buildings provision of the proposed NEA. These provisions will be incorporated in the Federal Government's program to reduce energy consumption in Federal buildings which was strengthened substantially by the issuance of Executive Order 12003 on July 20, 1977.

The proposed provisions of NEA would require that each Federal agency perform preliminary energy audits on buildings under its control to determine such things as energy usage, type of fuel used and major energy using systems. From these preliminary energy audits, Federal agencies will select appropriate Federal buildings for retrofit measures to improve the energy efficiency in general and the life cycle cost in particular. By no later than January 1, 1990, all Federal buildings will have been the subject of such retrofit measures as will assure their minimum life cycle cost.

Not all Federal buildings will be subjected to the same level of energy efficiency as the Manchester Federal Building. The Manchester building was designed as an "energy conservation demonstration project" to study energy conservation techniques in the design and operation of a contemporary office building. It is a "laboratory" which includes different systems for comparison of energy usage.

The National Bureau of Standards designed an instrumentation and monitoring system to evaluate the building's actual performance. Evaluation results will be available for use throughout the construction industry.

Question #30

The conservation and solar technologies can be of real benefit to many financial, employment, and environmental problems plaguing citizens and small business in urban areas--particularly the cities. Yet cities face a real problem with the financial community in obtaining loans for energy conservation and solar technology.

- What is DOE doing to promote across the financial community examples like the Seattle, Washington, bank which gives consumers and business low interest loans for energy conservation and solar investments?
- What priority does DOE place on changing the financial community's reluctance to finance these energy investments?
- How much staff and money is devoted to analyzing and directly impacting the financial community's lack of support to these priority national energy goals in conservation and renewable energy resources?

Answer

Loans are generally available from private financial institutions for qualified borrowers seeking to improve the efficiency of their energy use by making conservation investments. The basic problems arise when the loan size is small or the conservation measures are not well known or understood. In addition, some public utilities have conservation loan programs.

- o An information dissemination component, principally aimed at board members, which details the energy situation and the merits of energy conservation at conferences, seminars and articles in financial trade organs.
- o A training curriculum for appraisers, loan officers and realtors which modify their daily professional perspective so that energy efficiency becomes a consideration in the

real estate financing process. Key trade associations have committed to review the course and deliver it to their constituencies, where appropriate.

- o A Federal financial assistance program review and alteration of policies and procedures of implementing agencies to make energy efficiency a condition of the financial assistance.

Field tests of the curriculum are scheduled this fiscal year in one energy extension state and with at least two trade associations. A series of speeches at national trade conventions have also been scheduled.

In addition to FIP, a nine-city demonstration program is underway for first mortgage lenders. The basic objective is to have first mortgage lenders incorporate the retrofit costs of bringing a house up to a specified level of energy efficiency into the long-term mortgage.

This programmatic area has recently been given a high priority due to the leverage of financial institutions in effecting conservation investments. To date, approximately \$1 million has been expended in this area to develop the programs mentioned and the supporting data. Contract funding for FY 78 is \$250,000, with one professional each, plus support, assigned to FIP and the demonstration programs.

### Question #31

At the last session (February) there was a question as to where cities and private groups or citizen coalitions in cities can go to find a "smorgasbord" of options, projects, funding, technical assistance, consultants, and other direct help easily and with minimal red tape when they want to take the initiatives on energy conservation and locally based alternative energy sources. Is there a central Federal source of information? If not, please list contacts in DOE who could provide such information.

Answer

Within the Department, the Division of City and County Relations, Office of Intergovernmental and Institutional Relations (IR) is seeking to embark on an information and data gathering undertaking in order to accumulate knowledge of energy programs which affect local government entities.

Specifically, this effort will achieve the following:

1. A complete data bank of such efforts;
2. A system for updating and making additions and deletions; and
3. Capability for responding on an immediate and substantive basis to requests for this information.

This information will be made available to all government agencies, as well as the general public, and will facilitate cooperative activities such as cost-sharing funding efforts, joint planning efforts and related undertakings to address local government energy needs on a coordinated and broad basis. It will be the first attempt to gather together the entire range of available technical, financial and advisory assistance and will truly comprise a genuine "smorgasbord" of energy information related to local government needs.

Question #32

There has been considerable talk about providing tax incentives or rebates to homeowners who make weatherization repairs or renovations, or to those who use alternative energy sources for home consumption. What is DOE's view on energy related tax incentives or rebates, and how would DOE propose to implement such a program.

Answer

The Department of Energy has proposed as a part of the National Energy Act (NEA), and strongly supports, a variety of tax incentives to encourage individuals and businesses to make energy conserving investments in their existing homes, offices and industrial plants. Specifically, the NEA now being considered by the House/Senate conferees would provide tax credits for: (1) 20 percent of the costs up to \$2,000 of retrofitting existing homes with various conservation measures; (2) 30 percent of costs up to \$1,500 and 20 percent of costs exceeding \$1,500 but not more than \$10,000 for installing solar energy systems on new or existing homes; and (3) 10 percent of the costs of making a wide range of energy conserving investments in existing offices and plants. In addition to these tax incentives, the NEA would establish a matching grant program to assist schools and hospitals in retrofitting their existing buildings with conservation or solar measures and would substantially expand the existing Federal programs assisting low-income persons in retrofitting their homes.

Finally, the NEA would require utilities to offer to identify needed conservation measures in the homes of their customers and to arrange for the financing and installation of these measures. This program will be supported by a new Federal loan purchase program which will help ensure that adequate financing is available for this purpose at reasonable rates.



Question #33

The Federal Home Administration, the Veterans Administration and the Farmers Home Loan Administration have major influences over new housing and building starts in this Nation. What is DOE doing to ensure that those new starts funded on loans guaranteed by the taxpayers are as energy efficient as is technically and economically feasible?

We understand that purchasers seeking loan guarantees from these Administrations must agree to fossil fuel (or electric) energy systems before the loan is authorized. Is this possible under today's energy realities? If so, what is DOE doing to correct this energy affront?

Answer

All new homes financed by FHA, VA, or FmHA mortgage insurance programs must meet minimum property standards (MPS) which include energy conservation features. The DOE has worked in the past and will continue to work with these agencies to ensure that the conservation standards used are consistent with national energy policy. Requiring fossil fuel heating systems in new homes which receive Federal financial assistance does not inhibit the use of existing solar energy systems at this time. Current commercialized solar technology is such that a backup space conditioning system is necessary in solar assisted housing. This policy is prudent and actuarially sound.

A Federal Financial Assistance Program is currently underway. The principal objectives of this effort are to review the policies and procedures of each agency operating a financial assistance program and effect changes so that energy efficiency is a condition of financial assistance. To date, a joint HUD/FEA study has reviewed the appraisal and loan application forms of all relevant organizations. Subjects investigated were whether utility costs are requested, how they are developed, and how are they used, if at all, in underwriting tests.

An interagency task force with the U.S. Department of Agriculture (USDA) has, as an objective, the consideration of energy efficiency in all USDA loan programs. Task force activity has just been initiated but several facts are already known. First, if energy efficiency is to be a consideration, then price projections of each type of energy must be made available to those performing the loan analysis. Secondly, actual utility bills should be the basis for estimating utility costs, and such costs should appear on the appraisal and loan application forms. Also, utility costs and retrofit investments, to improve a building's thermal efficiency, must somehow be included in loan underwriting tests.

It should also be mentioned that Title III of the Energy Conservation and Production Act requires energy conservation standards for new buildings and also requires housing finance agencies to alter their policies and procedures so that only buildings meeting such standards receive Federal financial assistance.

Question #34

DOE has not developed specific energy conservation programs for low-income, fixed-income people nor a delivery system of getting this information/technology to the very people who need it the most. When will this come about and how is DOE going to evaluate whether the program is adequate?

Answer

DOE has developed and implemented the weatherization assistance program for low-income persons. It provides home insulation assistance for those low-incomes, particularly the elderly and handicapped. The local

delivery system utilized in this program is primarily the Community Action Agencies (CAAs). The CAA, which delivers programs to the poverty community, mobilizes funds from a wide variety of Federal sources, including CSA, HEW, DOC and DOE. The CAA's have been very active in consumer education activities in the area of energy conservation.

Question #35

Vocational educational or vocational agriculture schools are technically oriented, publicly supported institutions. What is DOE doing to encourage such institutions (and HEW) to more effectively include in their curriculum materials on energy oriented, locally appropriate technologies? How does DOE ensure that the HEW (OE) material represents the "state of the art" and does not mislead the students in support of or in opposition of these technologies?

Answer

The Office of Education, Business, Labor and Manpower Assessments (EBLA) has recently established a new program within the Education Programs Division to work with vocational-technical schools and community colleges. This new program office is concerned with ensuring a sufficient supply of trained technical manpower to implement the National Energy Plan. In order to accomplish this goal, the first objective is to assess the vocational energy-related programs now in existence through the country and then serve as a catalyst to encourage institutions to develop programs in needed energy areas.

DOE's Program Manager of Vocational-Technical Education recently met with the State Directors of Community Colleges and will meet with the State Directors of Vocational Education the first week in May to establish a working relationship with the community colleges and vocational schools

within each state. Each state director will designate a contact person which will create a National Communication Network whereby information from the states can be fed into DOE and energy-related information can be forwarded from DOE to the states. The National Communication Network will link DOE with approximately 1200 community and technical colleges and 2108 vocational and trade schools for a total of 3308 public and private postsecondary institutions.

This new program office will serve as a clearinghouse for energy-related vocational activities and will distribute and/or identify sources for curriculum models, course materials, teaching materials and other instructional aids that will assist vocational-technical schools and community colleges to implement energy-related programs. Meetings, conferences, curriculum development, course development, and other such activities are among the future plans of the DOE Vocational-Technical Education Program.

DOE has no control over HEW material. However, by working closely with the Office of Education, the American Vocational Association, the American Association of Community and Junior Colleges and other agencies, DOE is attempting to ensure that current information is available and that such agencies are able to be responsive to vocational energy education needs.

At the present time, the Office of Marketing and Education, under the Assistant Secretary for Conservation and Solar Applications, is developing a set of ten curriculum modules specifically for two-year colleges, community colleges, and vocational schools. The modules will

discuss energy sources, energy conservation, and energy use in business, transportation and daily living. Each module is designed for a classroom session of from one to three hours, and could be adapted for use by community civic groups. We expect these modules to be available in August, 1978. We will work with the American Association of Community and Junior Colleges and the American Vocational Association to be sure that their member schools are aware of the availability of these materials.

Module titles are as follows:

- I. The Role of Energy in Our Lives
- II. Energy Utilization: Commercial, Residential and Industrial
- III. Energy Utilization: Transportation
- IV. Air Flow and Insulation in Building Construction
- V. Energy Conservation Through Recycling
- VI. Alternate Energy Sources
- VII. Nuclear Energy Sources
- VIII. Solar Energy: Past, Present and Future
- IX. Environmental Trade-Offs
- X. Citizen Participation

DOE will establish liaison with HEW to ensure that all HEW energy education publications provide accurate information with respect to energy sources and energy technologies.

Question #36

Why isn't DOE using "in place" appropriate technology organizations to accomplish both economic and development demonstrations?

Answer

The Appropriate Technology Small Grants Program has been using "in-place" appropriate technology organizations in the pilot regional program. The California Office of Appropriate Technology (OAT), and the National Center for Appropriate Technology (NCAT) were consulted and contributed to the development of the regional pilot program. OAT managed the program in California and the NCAT information dissemination network was used to solicit proposals. NCAT also was used to evaluate some of the proposals submitted. Both the Peer Review Process and the Technical Review Process utilized as evaluators persons who are involved in appropriate technology.

A number of appropriate technology persons and organizations as well as community development groups, were selected for funding in the pilot regional program. It is not possible to name them all but a few are mentioned for illustrative purposes: Farallones Institute; Central Valley Community Development Corp.; Davis Appropriate Technology Group; Aptech Collective; Citizens for Survival; and the Shasta County Community Action Agency.

It is planned that other regions will use existing appropriate technology groups in the development and implementation of each regional program. It is anticipated that recognized appropriate technology persons and groups will submit proposals that will be selected for funding.

Question #37.a.

What specific mechanisms and analytical tools does DOE utilize to assess the effects of its proposed pricing policies (e.g., natural gas) on low-income persons living in cities?

Answer

DOE is concerned about the potential impacts of energy policies on low-income persons both in cities and rural areas, and the Energy Information Administration (EIA) has developed a methodology for analyzing such impacts.

A large scale demographic socio-economic model, the Comprehensive Human Resource Data System (CHRDS), capable of generating information for numerous subgroups on a disaggregated basis has been developed and is currently being implemented.

CHRDS is a micro-economic simulation model which projects a synthetic data base that includes estimates of the impacts of changes in economic or energy policies on household energy consumption.

The CHRDS System projects energy expenditures as a function of changes in the determinants of energy usage: housing stock, appliance ownership, automobile ownership and usage, appliance and automobile efficiency, and income and energy prices. The projects of energy expenditures can be made for subgroups of the population characterized by:

- Income class,
- Regional location,
- Family size,
- Age, race and sex of household head,
- Rural vs. urban,
- Level of poverty, and
- Housing type.

The impact of increased natural gas prices on expenditures of households classified by income level could be estimated using CHRDS. It would also be possible to evaluate alternative energy subsidy and rebate transfer programs which could offset the impact of higher energy prices on the urban poor.

Question #37.b.

Precisely, how are these undoubtedly severe effects taken into account, if at all, by DOE in choosing among various available policy scenarios?

Answer

The anticipated effects of existing and proposed energy programs on low-income persons are given serious attention at all stages of the development and implementation of national energy policy. Where possible, the probable effects of energy policies are determined analytically and, if not, assessments of the likely effects are made. The conclusions of such analyses are always given serious attention in order to minimize any potential negative impacts on consumers, particularly low-income persons.

It should be emphasized that the consequence of no action by the Federal Government with respect to energy is likely to be very severe, especially for low-income persons. Although we cannot escape the changes made essential by rising energy costs and the reduced reliability of supplies, the National Energy Plan was designed to ease this transition. As evidence of our pursuit of this objective, it has been estimated that the National Energy Act, as proposed, would slightly increase the average disposable income of all income groups--with low-income persons enjoying



the largest percent increase. Of course, the specific effects of a single element of the NEP may differ from the overall effects of the entire plan. While the impact of increased well-head prices for new natural gas supplies by itself may be to reduce real income of some consumers, the net effect of the entire plan is still like to be positive.

Question #37.c.

What specific policy options in the form of permanent and lasting answers is DOE considering, either by itself or in conjunction with other Federal agencies to alleviate the impact on low-income persons of skyrocketing energy costs?

Answer

There is no permanent answer to rising energy costs. All consumers, to varying degrees, will have to make adjustments to this fact. Given the instability of the supply of depletable resources from international and/or domestic sources and the likely technological improvements in renewable energy systems, it is wrong to think that the "solution" we adopt today will be considered appropriate for decades to come. The most that any national energy policy can achieve is the moderation of these increases in order to ease the necessary transition and the provision for special assistance to those most in need. The National Energy Plan is designed to achieve this goal. Taxes on crude oil would be rebated to all energy users and steps would be taken to ensure that adequate supplies of natural gas, at reasonable prices, remain available

to consumers. State Public Utility Commissions would be required to take into consideration the actual cost-of-serve to each customer class in establishing electric utility rates. In addition, existing programs to weatherize the homes of low-income persons would be expanded and special tax credits would be made available to other consumers.

Question #38

In many urban areas across the country, severe problems have occurred in the delivery of fuel oil for residential heating. In particular, low-income urban areas often must pay higher prices, must make immediate cash payment and often are unable to obtain delivery of necessary quantities of fuel oil. What is the Department doing to combat de facto energy "redlining," and what will it do for urban consumers to ensure that alternative energy sources are made available in the future for low-income persons through either grants or demonstration programs?

Answer

Information available to the Department of Energy (DOE) does not indicate that low-income urban residents have experienced significant problems obtaining home heating oil or that such residents are paying higher prices for heating oil, except in isolated instances. The home heating oil industry appears competitive at the retail level with over 18,000 dealers nationally. For example, in the Boston area, residents can choose from more than 500 heating oil dealers in the yellow pages.

The Department of Energy has, however, taken steps to monitor the availability and prices of home heating oil for the past two heating seasons. The Department also established a toll-free hotline to receive home heating oil supply and price complaints from January to March during the 1978 heating season.

A review of heating oil price data for the past (1977-78) heating season indicates that residential consumers paid an average of 47.6 cents per gallon for heating oil in November, 1977; 47.9 cents in December, 1977; and 48.4 cents in January, 1978. While these are national averages, DOE-collected data do not show any significant variations from these price ranges in urban areas.

It does appear that retailers are changing historic payment practices as a result of changed credit terms of suppliers and increased interest rates. The DOE is not currently in a position to evaluate the impact of these changed business practices on low-income urban residents. The DOE is in the process of contracting a comprehensive study of the home heating oil market which will include an assessment of the impact of changed business practices throughout the heating oil market.

In spite of these measures, the Department recognizes that many low-income urban residents still cannot afford the high cost of fuel. With respect to Federal programs aimed at assisting such low-income residents, the National Energy Act will significantly expand the existing Federal grant program to weatherize the homes of low-income persons, as well as provide tax credits and easier access to financing for energy conserving or solar investments.

#### Question #39

With the National Energy Plan (NEP) pushing for increased use of coal, won't the urban areas be forced to endure even higher levels of air pollution than at present?

Answer

The effects on air quality impacts of the NEP arise from both conservation measures and the coal conversion program. In general, conservation has a beneficial impact on air quality, while the coal conversion program would adversely impact air quality in some regions. In regard to urban areas, it is important to note that the National Energy Act would provide for environmental exemptions from the coal conversion program. These exemptions would be granted to facilities which could not meet applicable air quality standards if they were forced to convert to coal. These provisions should prevent any further air quality degradation in most urban areas as a result of the energy legislation.

DOE has conducted several analyses of the potential air quality impact of the NEP, including both the conservation and coal conversion measures. These analyses have shown that the greatest increase in air pollutant emissions is most likely to occur in areas, such as the Southwest, which currently rely heavily on natural gas for industries and utilities. In fact, the urbanized areas of the East and West coasts are not projected to experience any significant increases in air pollutant emissions as a result of the NEP.

While DOE analysis does not indicate that higher levels of urban air pollution will result from the coal conversion provisions of the NEA, DOE does recognize that these areas will experience particular problems in increasing the use of coal. The environmental exemption mentioned above and additional joint programs with EPA, such as promotion of low or medium-Btu gasification in place of direct coal use, will be designed to address the problems of these areas.

Question #40

In the formulation of the National Energy Plan, did the Department of Energy fully consider the implications of the Clean Air Act Amendments of 1977 and their implementation?

Answer

The NEP was developed with advice from EPA, and the implications of the Clean Air Act Amendments for NEP implementation were considered wherever possible. Since the NEP was proposed, both EPA and DOE have analyzed the air pollution impact of the NEP and the extent to which air pollution regulations could limit potential coal use. The primary constraints on increased coal use are expected to arise from non-attainment and air quality maintenance considerations.

It is clear that in some areas the level of coal use will be limited because of air quality constraints. However, consideration of this constraint was an integral part of the DOE determination of the level of increase in coal use originally projected to result from the NEP.

ADDENDUM

The following three questions were submitted in writing after the meeting was adjourned:

Question #1

With the rising costs of utilities, what type of provisions have been made to address the impact of these costs on persons with fixed incomes, and on the elderly?

Answer

The National Energy Plan includes many provisions which were designed to help minimize the effects of rising energy prices on low-income persons. These provisions are described in the responses to

questions 3, 13, 14, 16, 32, 37, and 39. They were also discussed by several of the panel members during the briefing.

#### Question #2

Does the State energy planning program include emergency planning to cope with problems such as last winter's electric power shortage?

#### Answer

The State Energy Management and Planning Act, recently proposed by the Department of Energy (DOE), would require States to develop plans for energy emergencies, such as severe winter shortages of fuels. These energy emergency plans would be part of overall plans addressing the full-range of energy problems within each State. Under the proposal, DOE would provide financial assistance to States for the development and implementation of these plans.

Under current authorities, States may be required in some instances to implement specific emergency measures mandated at the Federal level, but there is no financial assistance provided to States for the development of contingency plans.

#### Question #3

Other than tax credits and weatherization programs, what is DOE policy related to retrofitting existing buildings in the urban community? Sweden, for example, has started a 10 billion dollar program of education and implementation for dealing with existing buildings; for a country with eight million people, this represents a significant commitment.

Answer

Enactment of the pending National Energy Act, together with the continued implementation of several existing DOE programs, will establish a comprehensive Federal policy for energy conservation in both existing and new buildings. This policy includes, among others, provisions for:

- o Tax credits for conservation and solar investments by homeowners and businesses;
- o Grants for the weatherization of low-income homes and schools and hospitals;
- o Federally-supported conservation and solar loans;
- o Federally-mandated utility conservation services for homeowners;
- o Mandatory energy efficiency standards and labeling for appliances;
- o Energy performance standards for all new buildings;
- o Extensive research, development and demonstration of energy conservation and renewable energy technologies.

Together, these programs represent a multi-billion dollar commitment by the United States to the retrofit of existing buildings. Although the programs do address most of the major areas for potential energy savings, we continue to examine possible improvements.

The responses to questions 2, 10, 11, 13, 14, 15, 16, 29, 30, 32, 33 and 36 provide additional relevant information.