

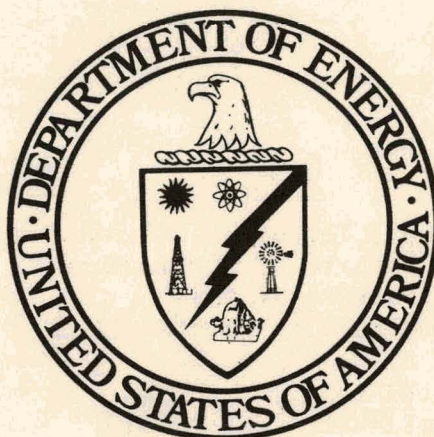
Dr. 254

Utility Rate Structuring

Official Transcript of Public Briefing

February 28, 1978

Washington, D.C.



June 1978

MASTER

Sponsored by

U.S. Department of Energy

**Assistant Secretary for Intergovernmental and
Institutional Relations**

Office of Consumer Affairs

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89

DEPARTMENT OF ENERGY
CONSUMER INFORMATION SERIES
PUBLIC BRIEFING NUMBER 3

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UTILITY RATE STRUCTURING :
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GSA Auditorium
18th and F Streets, NW.
Washington, DC

Tuesday, February 28, 1978

Met, pursuant to notice, at 9:10 a.m.

SAM HUGHES, Assistant Secretary for
Intergovernmental and Institutional
Relations, Department of Energy

TINA HOBSON, Moderator, Director,
Office of Consumer Affairs,
Intergovernmental and Institutional
Relations, DOE

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Regulatory Administration

✓ CHARLES CURTIS, Chairman, Federal
Energy Regulatory Commission

✓ ROBERT R. NORDHAUS
General Counsel, Federal Energy
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Office of Utility Systems, Economic
Regulatory Administration

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Assistant Director of Solar Geothermal
Energy, Office of Communications,
Office of Energy Technology

INDEX OF QUESTIONS

The following is an index of the questions raised relative to the DOE public briefing on utility rate structuring. Where the questions are numbered, they were submitted by consumer and public interest groups prior to the briefing (Questions 1 through 36). The answers to these questions are, of course, included.

* * * * *

QUESTION:

PAGE:

- #1 - Is it possible to structure utility rates so that general cuts in usage and individual cuts in usage will result in reduced bills? Is it necessary that consumers be caught in the bind of having high energy bills because they use energy, or having high energy bills because the companies need revenue? 96
- #2 - What will be DOE's position on lower rates for basic residential use when intervening in a local rate structure case? Under its authority to participate in State utility regulatory proceedings, will DOE recommend lifeline rates? If so, what kind? If not, why not? What utilities are currently using lifeline rates (nationally)? What are the specific lifeline rate designs that are being used or have been rejected (nationally)? 97
- #3 - Have any studies been made to determine the load factor of residential customers without air conditioning? Or electric heating? 98
- #4 - What are the most successful types of equipment for measuring both demand and consumption for purposes of implementing peak load pricing for each class of customer? What are the actual costs of equipment used in implementing time-of-day rates, including installation and operation? What are the various types of financing methods being used or proposed to finance time-of-day equipment and installations? 100
- #5 - What data are available concerning consumer behavior -- including energy conservation realized, shifting from peak and electricity of demand -- as a consequence of time-of-day pricing? 102
- #6 - Does a construction work in progress (CWIP) provision in utility rate structures adequately apportion costs to consumers? For example, what benefit do senior citizens receive from their increased rates if they are dead by the time the promised lower rates occur? 103

QUESTION:

PAGE:

- #7 - When it intervenes in State regulatory commission electricity rate setting or rate structure cases, will the Department support: 106
- the abolition of residential customer charges;
 - mandatory residential time-of-day pricing;
 - optional residential time-of-day pricing;
 - inverted rates? If so, why? If not, why not?
 - penalties for excess generating capacity and associated over-construction of generating plant;
 - construction of relatively small generating plant to prepare more flexibly for variations in load growth?
- #8 - What information regarding costs of service will FERC recommend be gathered by utilities and made available to the public? 109
- #9 - List all utilities that now have load management programs in effect and indicate the load growth experienced for each during the existence of the program. 111
- #10 - Is there a way to build fuel loan programs into utility rate structures? Programs such as Special Crisis Intervention and fuel loans through CSA are hit or miss as far as any particular consumer is concerned; they are sporadic and unpredictable as to occurrence and administratively cumbersome. Might it be better to build subsidy programs (from general government rate structure) into the rate structure by allowing application and approval more easily through utility companies? 114
- #11 - What is the Department's recommended method of long-term electricity peak-load growth forecasts? 115
- #12 - What criteria or methodology will the Federal Energy Regulatory Commission (FERC) use to determine whether or not a rate, such as time-of-day, is cost-justified? Specifically, how will the FERC take account of the manner in which costs of producing electricity change with increments of output or physical capacity in developing the Federal advisory guidelines? In computing the costs of service for the purpose of developing rate structuring standards, what costs does FERC believe should be included, which excluded, and will FERC propose that average or replacement (i.e., marginal) costs be reflected in computing rates? Will these guidelines be designed such that rates will actually reflect marginal production costs? 116
- #13 - What measures will the Department take to assure that the eleven rate-making guidelines set forth in H.R. 4018 will be "considered" by the non-regulated Federal utilities? 117

QUESTION:

PAGE:

- #14 - Could you describe intervention plans, if any, in proceedings involving natural gas utilities? Will DOE support incremental pricing of natural gas before FERC and State regulatory agencies? 118
- #15 - Inasmuch as the National Energy Plan calls for pricing energy at its replacement cost (i.e., at its marginal or long-run incremental cost), what steps will the several components of the DOE take to promote the restructuring of electricity rates to conform with that principle? (How does DOE define marginal cost pricing?) 118
- #16 - What can DOE do to assure that the large Federal power generating and marketing systems (Bonneville Power Administration, Southeastern Power Administration, etc.) will play a leadership role in load management techniques and marginal cost accounting methodology? In supervising these systems, what policies and processes will DOE pursue to promote energy conservation-efficient resource utilization and transition to renewable energy resources? 120
- #17 - Should the Department strive to transform these Federal electric utilities into energy conservation models which can serve as an example to the private utility industry? If so, what changes in existing practice or legal authority will be necessary or desirable? If not, what is the rationale for declining to take these steps? 121
- #18 - Legislation has been introduced in Congress which would exempt private electric companies from the Federal income tax, and substitute a gross usage charge on electricity to make up the revenues. The idea is to eliminate Federal pressures for unneeded expansion, to return control of utility policy to State administrators, and to some extent to encourage conservation. From the point of view of a national energy policy, how do you feel about this proposal? 121
- #19 - Is DOE planning to investigate the accounting procedures followed by major utilities? Their tax deferral, and other tax programs of questionable value to customers? 123
- #20 - What criteria will the Economic Regulatory Administration use in deciding whether or not to intervene in State ratemaking proceedings and what issues to raise? What specific steps does DOE plan to take upon intervening in a local rate structure proceeding to ensure proper coordination and communication with local consumer, environmental, and low-income groups? What access will these groups have to DOE resources such as expert witnesses, computer facilities and internal Department reports and data? 126

QUESTION:

PAGE:

#21 - The Department of Energy has a utility intervention program. Could you provide the level of appropriations, staffing, etc.? Do you think the present appropriations are sufficient to do the job? If not, what changes are necessary? 127

#22 - Under the organizational structure of the Department, all legal personnel are under the General Counsel. Therefore, the utility intervention program does not have control over its legal staff. Could you explain why the Department is structured in that way? Could you also describe your understanding of how differences will be resolved? 128

#23 - What are the different electrical rates for customers to use as a back-up to solar energy? What research or possible pilot projects might DOE originate to see what provisions can be made to give a fair rate to solar homeowners for back-up systems? What will DOE's position be, pro/con, for separating the development of solar from existing utilities? 129

#24 - Does DOE plan to help people understand that, while getting into new and small-scale technologies, electric utilities will still have to have sufficient plants to supply back-up systems? 130

#25 - During FY '75 and FY '76, FEA funded nine electric rate demonstration projects in various parts of the country. If the data has been evaluated, what are the conclusions? Are data available to public and private utilities, public service commissions, and interested citizens? Does DOE contemplate any recommendations or further action on the basis of these studies? 131

#26 - Will DOE have funds for grants to consumer offices that have been established and need funds to adequately prepare cases on behalf of consumers to the PUC and to advocate rate reform? In dispensing grant monies to State offices of consumer services under Section 205 of the Energy Production and Conservation Act, what steps will the Department of Energy take to assure that such offices advocate positions advantageous to consumers (including environmentalists)? 133

#27 - In dispensing grant monies to State utility regulatory commissions under the authority of the new legislation (H.R. 4018), how will the Department of Energy assure that the monies are spent pursuant to the purposes of that Act? 135

QUESTION:

PAGE:

- #28 - Does the Department contemplate making such grant monies available specifically for the purpose of funding State-conducted demand growth studies which could serve as an alternative analysis and a benchmark against which data tendered by the utilities could be evaluated? If so, please describe the dimensions of the program anticipated by DOE. If not, why not? 136
- #29 - Is DOE planning to provide information on growth models under different scenarios for typical utilities, using different assumptions, so that commissions and consumer groups have comparative data against which to judge utility growth projections? 137
- #30 - What research will the Department conduct or oversee regarding the relationship between income and both residential gas and electricity consumption? Please provide details of research designs. The CHRD System is currently only capable of using average residential State prices per kwh as the primary input to correlate disposable income and usage which is defined in terms of dollars expended for energy, and not defined in terms of physical quantities consumed. Therefore, analyses which would examine the consumption levels of consumers or predicted responses to alternative gas and electric rate structures require revisions in the CHRD data base. 139
- #31 - What research will the Department conduct or oversee regarding long-term electricity peak-load growth forecasting, price elasticity at the time of system peak and the effect thereon of load management? Please provide details of research designs. 142
- #32 - In reviewing rate applications, on what basis will DOE/FERC determine whether automatic adjustment clauses assure efficient utilization of resources? 143
- #33 - What are the Department's views on the types of advertising expenses which should be paid for by ratepayers as contrasted to those which should be paid for by shareholders of the regulated utilities? 146
- #34 - What is the Department's position concerning State regulation of heating oil prices? What would its attitude be toward an inverted rate structure for heating oil? 147
- #35 - In light of the Congressional Conference agreement for States to consider procedures which prohibit "abrupt terminations," what procedures will DOE recommend to the States to implement this provision if it is signed into law? 149

QUESTION:

PAGE:

#36 - What does DOE plan to propose, if anything, to deal with the problem of the cost of meters for low-income people if mandatory time-of-day rates are adopted? Specifically, does DOE have any plans to propose refundable tax credits for this purpose? What other approaches to alleviate this problem is DOE exploring? How will DOE deal with the problem of "cream skimming" if optional time-of-day rates are adopted for the residential class? 150

The following are questions read into the record after the conclusion of this public briefing; and the answers to those questions as prepared by DOE program offices.

Assuming you are an individual American homeowner wanting to actively halt a proposed utility rate increase to your home, what steps (intervention) would you take to accomplish your goal? 152

In what ways is DOE working to reduce the electrical growth rate by means of rate reform? 153

The "Connecticut Peak Load Pricing Test: Final Report," issued May, 1977, and partially funded by FEA, shows that the largest residential users increased their energy consumption while reducing their contributions to coincident system peaks. The report suggested that, in the long run, peak load pricing would encourage the increased use of electricity. What pricing mechanisms would DOE recommend to prevent growth in energy use with a peak load pricing rate structure? 154

In DOE studying the design of inverted rates, so as to maximize energy conservation within existing utility revenue constraints? What recommendations have you developed in this regard? 155

Does DOE have any plans to fund experimental implementation of rate structures based on the principle of marginal cost pricing, where margin is defined as current cost of the next unit? 156

Are any studies being conducted of the conservation potential of long-run incremental cost (LRIC) pricing of electricity? 157

In what pilot utility programs under Title II of ECPA is district heating being promoted? 157

QUESTION:

PAGE:

Are there any studies underway or planned to determine methods for encouraging cogeneration by industries and utilities?	158
Does the Department of Energy intend to assume a leadership role in moving towards a more just distribution of total energy costs through a restructuring of the present rate scales?	159
Does the Department of Energy intend to monitor the insulation industry to assure that the public can obtain safe and efficient materials at a reasonable cost?	160
Will DOE interpret the size requirement to exclude single-family dwelling size systems, such as windmills and photovoltaic arrays?	160
Under what circumstances will DOE provide aid to plaintiffs? Will the aid involve DOE intervention, funding, or legal/technical assistance?	160
You make a distinction between "consumers" and "industry." Industry is a consumer. Industry has provided considerable leadership in energy conservation. As such, it has absorbed significantly increased prices. Do you take into consideration in your deliberations the fact that industry, following absorption of cost increases to the extent possible, must pass through the remainder? To that extent, the individual consumer will pay for energy in the price paid for goods or services.	161
Does the DOE consider utilities such as electric, gas, telephone service, luxury items available to those according to their ability to pay, or are utilities considered necessities to be distributed according to need and accessible to all citizens, regardless of income level? If the latter is the case, what provisions are being made to ensure a minimal availability of energy for survival for all North Americans?	161

The following are questions raised from the floor during the public briefing on utility rate structuring:

There is a common feeling among many environmental, consumer, and low-income groups that it is consistent with marginal incremental cost concepts to have a lower rate for basic residential use of both gas and electricity. I realize that you have not fully gone through this within the Department, but I wonder whether you have any feelings that there may be a way to adopt such a lower rate for basic residential use, through your auspices?	13
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QUESTION:

PAGE:

To the extent there is intervention and there is policy by FERC, would you at least be willing to say that you would not oppose consumer groups; and, to the extent that you do have regulatory policy, particularly in the area of regulating Bonneville Power Authority, for instance, where there is a certain amount of regulatory authority, that you would at least not, again, oppose changing the rate design in some of the directions you referred to?

17

What steps are being taken to move toward long-range incremental cost pricing, specifically? The three functions I am interested in are: the promulgation of Federal advisory guidelines, the State intervention program, and the supervision of the Federal utility administrations. To the extent that a judgment is being made that there should be a deviation from replacement-cost pricing in those programs, I am wondering what criteria are being employed.

18

On the premise that the National Energy Act will be enacted into law, you will have a very central role, indeed, (reference is to FERC - Ed.) in articulating the guidelines that the States must consider in a very disciplined way when they undertake their rate-making considerations. In that regard, I wonder what pricing principle, what methodology you expect to urge upon the States?

21

What can DOE and FERC do about the problem of overbuilding in the utility industry, and how can the Administration justify its standing on the investment-tax code for utilities?

25

Because it is so difficult to understand the utility-rate structuring area, I believe that consumers are very interested in intervention funding, so that they can have an opportunity to get the experts who are qualified to deal with this issue. I would just like to ask for your thoughts on your position on intervention funding.

34

In our region, which is the West, even though we are a producing State, one of the things that we all look to as the future is solar. We are concerned about utilities owning the Sun. We want to know what the Department of Energy is doing to help assure consumers that the utilities won't end up owning the Sun.

38

QUESTION:

PAGE:

- A three-part question; it has been our understanding that the Department of Energy, following its present policy, is against the present declining block rate, which we have in Rhode Island, for residential users. Secondly, in the current case, we were wondering whether the Department of Energy would be supportive in helping some way or other by intervening in our case, especially in the case involving Newport Electric. The reason for that, and this is the third part of the question, is that the major opposition to the inverted rate case that we are proposing is coming from the United States Navy. 41
- What is the methodology and criteria the Federal Energy Regulatory Commission will use to evaluate big utilities' push for centralized solar energy versus decentralized solar power? 44
- Does FERC see itself getting involved in cases that are going to be dealing with that issue? 47
- How can a straight gas utility, which has been under the jurisdiction of the Maryland Public Service Commission, which has kept its accounts according to the Federal Power Commission, get out from under the Department of Energy, when the Department of Energy, the old FEA people, admitted that the writers of regulations for the sale of propane did not know there was such a thing as a propane utility? 49
- Back in April of 1977, President Carter pledged his support for cogeneration and wheeling legislation. But, when the Senate took up the utility reform bill, Senator Sasser proposed a cogeneration amendment. Consumer and environmental groups supported both of these amendments. But, essentially, this Administration could have possibly been sitting on its hands, and the private utilities won and got what they wanted. Why didn't DOE help support what is NEP policy in the Senate? What are you going to do now? Will you support wheeling and cogeneration legislation? 52
- Has DOE intervened in any recent utility rate hearings, and with what results? And, how many people do you have working in this area right now? 58
- What do we (as consumers) do if we want to intervene based on any successful intervention on your part? 59
- What has DOE done about interventions by other Federal departments, such as GSA and the Department of Defense, in State rate proceedings where they have fought rate reforms such as time-of-day pricing? If you haven't done anything, what can you contemplate doing in the future? 60

QUESTION:

PAGE:

What will the Department of Energy's role be in encouraging Congress to enact laws to impose on the utility companies to create a more uniform utility rate structure, as far as charging customers and consumers who use utilities?

62

I wondered if the Administration is considering, or people in your position and your policy advisory role -- I know Mr. Alm's office is primarily responsible for this -- have ever considered a life-line rate concept as a conservation rate concept instead of as a social policy concept?

67

What specific mechanisms will the Department have in order to insure proper citizen, consumer, and environmental input into those advisory guidelines as those guidelines are being developed by the Department; as opposed to reacting to those guidelines after they are developed by the Department?

71

One of the most direct ways that people in a particular locality can do something to retard the increase in utility rates is to change the demand forecast for that area. To do that, of course, involves a concerted conservation and alternative technology effort. Where in the Department can people in a locality, who want to do something about the conservation and alternative technology on a local basis, go for help? Is there someplace right now where you can go for a package, for a smorgasbord, for an agenda, menu, of things that local groups can do right now; for technical assistance, for funding, for expert panels to come and do energy assessments for a particular locality? Is there one place for that sort of service to local groups and coalitions of local groups?

73

Is there some explanation for why it is taking so long for conservation and solar (of DOE) to get organized?

75

The energy portion of the fixed low-income budget is rapidly ballooning, and causing the poor to reduce such discretionary budget areas as food. While the low-income people certainly appreciate the need for caution in adjusting the utility rate structures, what is the Administration's interim policy to alleviate this rapidly growing impact on the poor while you are agonizing over rate structure adjustments in the next several years?

81

QUESTION:

PAGE:

Are there any other programs besides the crisis intervention program?

82

There has been a lot of talk this morning about the benefits of public intervention in local utility proceedings. That intervention requires not only money, but it requires information. Yet, FERC is presently considering a proposal to stop publication of the utility fuel cost data that the utilities report on Form 423. Is this not an inconsistent decision on the part of the Commission?

83

In light of the Congressional Conference agreement for States to consider procedures which prohibit abrupt terminations, what procedures will DOE recommend to the States to implement this provision if it is signed into law?

84

In view of the Congress' position on the proper Federal role in rate making, what is your position now on this kind of enterprise (for seven investor-owned utilities in New York State to form a joint holding company) by investor-owned utilities?

87

The cost of fossil fuel has basically been stabilized; therefore, how can we eliminate the fuel adjustment clause? What does DOE think about this?

89

PROCEEDINGS

MR. HUGHES: It is a bit after 9:00. Some of our participants have other engagements. I think, although people will be coming in for a few minutes yet, that it is just as well if we proceed.

I am Sam Hughes. I am an Assistant Secretary in the Department of Energy. My mission here is to launch this third in our series of consumer information briefings.

This one, as I think you all know, is on the subject of "Utility Rate Structuring" and the Department of Energy role with respect to that.

The purpose of the briefings -- again, as I think most of you know -- is to respond to questions which consumer and public interest groups have raised about energy issues that concern them.

We know, from the letters that our Office of Consumer Affairs has received, that increases in utility bills is one of the main concerns of all consumers.

I think each of us can speak from his own heart and pocketbook on that subject.

I would also like to mention three additional briefings, all of which are now scheduled: one, in March, on "Energy and Consumer Protection, Competition and Fraud," Thursday, March 30, 1978, the same time and the same location; in April, we have a scheduled briefing

on "Energy and Urban Policies/Programs." That will be Thursday, April 27; again, same time and same location; in May, a briefing on "Energy and Food," Thursday, May 25, the same time and same station.

Let me now introduce our panelists. We are sorry that we are short one individual; Al Alm is ill with the flu and will not be able to be here.

Our other panelists are: Hazel Rollins, Deputy Director of the Economic Regulatory Administration. She is responsible for overseeing the day-to-day activities of most of the Department's regulatory programs. Hazel served as the Director of Consumer Affairs in the Federal Energy Administration two years ago.

Doug Bauer, on my left, your right, is the Assistant Administrator for Utility Systems in the Economic Regulatory Administration. Doug Bauer is responsible for administering the Department's utility regulatory assistance programs, including the grant and demonstration programs. In addition, he is responsible for the utility regulatory intervention and the power supply and reliability programs and functions.

Robert Nordhaus is the General Counsel for the Energy Regulatory Commission. Bob Nordhaus is responsible for the legal services of the FERC, the organization which superseded the Federal Power Commission. Previously, Bob served as Assistant Administrator of the Office of Regulatory Programs in the Federal Energy Administration.

So you can see that, even without Al Alm's presence, we have a well qualified and knowledgeable panel.

We also have with us the Administrator of the Economic Regulatory Administration, David Bardin, who will talk with us about the overall responsibility of his office in utility rate structuring.

Rather than give an outline of the programs under his direction, which I think will probably evolve during the course of our discussion, David will talk about what he is up to in the ERA and address matters to distinguish his functions from those of the FERC.

David Bardin.

MR. BARDIN: Thank you, Sam.

The Economic Regulatory Administration is heavily involved in the regulation of oil products -- a subject we won't be discussing here today -- and some activities in the natural gas and electric utilities sphere. I am going to try to outline what those are.

On the electric utility side, ERA is responsible for imports and exports, for the exercise of emergency authorities under the Federal Power Act, and for voluntary reliability and coordination activities under the Federal Power Act.

ERA is not responsible for other critical provisions of the Federal Power Act which are entrusted to the FERC, including the regulation of sales for resale; for the rates in terms of conditions of sales for resale, one utility to another; and the hydroelectric project jurisdiction.

Then ERA comes into the picture again at the retail level; not as a regulator, but as an intervenor before State regulatory commissions, and as a funder of the consumer and consumer-grant programs as Hazel Rollins and Doug Bauer will describe for you.

On the natural gas side, ERA is the regulator of imports of natural gas and has some emergency responsibilities. Then, again, the FERC is the regulator at the wholesale level of sales for resale and construction of gas pipeline facilities, related facilities for moving gas from points of production or points of import to the city gate, to the local gas retail distributor.

Then, again, ERA will come into the picture, not as a regulator, but as an advisor of gas buys, perhaps, an intervenor in the State commission proceedings, which involve retail rates.

In exercising the intervention function, the ERA will be attempting to illuminate major issues that need to be exposed.

It will be seizing critical opportunities, in our judgment, to advance the basic supply mission of the Department of Energy, including conservation and alternative technology opportunities as a form of supply, every bit as much as conventional generation of electricity or supply of natural gas.

In the case of utility rate design, which the Congress is deciding should be handled by the State commissions with Federal guidance and

intervention rather than Federal supervision, we will try systematically, and hopefully intelligently, to use our limited resources to get a point across successfully toward the continued accelerated reform and restructuring of the electric utility rate design and ultimately gas rate designs as well, without actually taking over the sorting out that has to be done at the State level to distinguish service areas, economies, geographies and social goals, which are very important to the States.

The Congress, through the decision of the conferees on the utility regulatory reform legislation, which apparently will be part of the National Energy Act soon to be passed and sent to President Carter, suggests to us three basic goals for our intervention policy which are worth repeating to you.

First is the conservation of energy and capital; second, optimization of the efficiency of the use of facilities and resources; and third, equitable rates to consumers.

Now, that is as much as I wanted to say formally on the subject. If I have a couple of minutes left, let me think aloud with you informally, not officially, in the way of Department policy.

One of the major issues coming up could be called incremental versus rolled-in pricing. The cost of new energy supplies coming on line today and tomorrow is higher than the average historic cost of the supplies that electric utilities and natural gas utilities have available.

It is every bit as true of solar energy as it is of nuclear power.

It is true of exotic forms of natural gas that may come up domestically and of imported sources of natural gas.

In these circumstances, there are going to be fundamental institutional choices to be made at the appropriate social levels -- in many cases, the State commission retail level and, to some extent, the Federal level -- which seem to be very important to the future of our energy economy and the future of the interests which you, one way or another, seek to represent.

We see situation after situation in which a technology or resource should be as economical and probably as desirable incrementally as any other incremental source. But choices are made, in fact, by consumers or the industries between one source and another in terms of the way in which the pricing system of the utility works: whether you have to pay separately for that resource or pay it on a rolled-in basis.

Let me give you one example that fascinates me. A gas utility in New Jersey tells me that its incremental cost for a new supply of natural gas is right in line with the incremental cost of solar energy for hot-water heating, and perhaps even space heating, in its service area.

But the fellow who wants to install solar in his house has to put up front-end capital, all himself, all in an incremental basis.

The fellow who wants to buy natural gas, if the utility is attaching the hookups, is going to have the right to buy at a rolled-in basis.

Isn't there some way institutionally where we can get the advantage of rolled-in pricing for that second case, for the solar case, just as we do for conventional gas supplies?

I throw that idea at you. Perhaps, you will ask me some questions about it and give me another chance to discuss it.

MR. HUGHES: Thank you very much, David Bardin.

I now would like to introduce to you the Chairman of the Federal Energy Regulatory Commission, Charles Curtis, who will briefly explain the responsibilities of his Commission in utility rate making and deal with matters of concern to him in somewhat the same fashion as David Bardin.

Charles.

MR. CURTIS: Thank you, Sam.

The Federal Energy Regulatory Commission is an independent agency which exists within the Department of Energy; a five-member panel, it is entrusted by the Congress with the discharge of important pricing and licensing decision-making authority.

The Congress intended, by giving these powers to an independent commission, to assure that there was a multiplicity of viewpoints

brought to these important decisions and that the decision-making process would, in the balance, be viewed by those who are participants in the process as fair and reasoned.

That is a great challenge to us in the Commission, to not only assure that the decision-making process, in fact, is a fair and reasoned and responsive process, but one that is perceived as such.

Among the many authorities that the Commission exercises, I would like to comment only briefly today on the rate-making functions.

The Federal Energy Regulatory Commission regulates the wholesale market by judging the just and reasonableness of rates for electric power sold by one electric utility to another and by one natural gas company to another.

Interposed at the wholesale segment of the market, the work of the Commission is not often appreciated as having a direct and significant impact on individual consumers; but it does.

Indeed as the Chairman of this agency, it is sobering to realize the significance of the effect that the Commission's decision-making authorities have, or the discharge of those authorities have, on consumers.

We are literally dealing with multitudes of millions of dollars and issues of great significance to the consumers.

As Sam indicated in his introductory remarks, the Federal Energy

Regulatory Commission, although technically not the successor to the Federal Power Commission, is in large measure charged with the functions previously exercised by the Federal Power Commission.

The basic question is whether the rose that was the Federal Power Commission will smell any sweeter as the Federal Energy Regulatory Commission.

We truly do hope and have a commitment to doing more than merely changing the name.

Now, the task for making that rose smell sweeter will be to reform the decision-making processes so that they are truly more responsive and efficient and to restore consumer confidence in the work of the agency, which has been badly damaged over the past years.

One method that we are employing to do that is to conclude plans for the creation of a separate consumer office within the Federal Energy Regulatory Commission to improve lines of communication with consumer groups and to not only invite, but assist their participation in the proceedings of the Commission. Because, only as participants in the proceedings will the consumers feel that they have a stake in their outcome; and only as participants in the proceedings, will the consumers have an appreciation for the complexity of the choice that is presented to the government agency.

It is our fundamental responsibility to assure consumers an abundant supply of energy at the lowest reasonable cost.

But in these times when the marginal cost exceeds the average cost of electric utility, that balance is a very difficult one to strike.

The reality of our energy future is that costs will increase for our basic energy services. The function of this agency, and its difficult responsibility, is to assure that this path of increasing costs proceeds at a pace which can be digested by the consumer.

After the creation of the Federal Energy Regulatory Commission, less than five months ago, one of our first acts to solicit consumer input in our decision-making processes was to establish a mailing list of consumer organizations across the country.

We have already utilized this service to seek consumer comments in two important proceedings: one involving the proposal to remove price and allocation controls on motor gasoline; and the other on a petition filed by a coalition of consumer groups that had asked this Commission to take certain actions respecting the natural gas pricing and supply situation, which the petitioners believed required the Commission to reverse past policies of the Federal Power Commission which they found adverse to consumer interests.

We plan soon to expand this service so that we will send notices of all rate increases to interested consumer groups, thus, notifying them that a rate increase application has been filed and advising them of the deadline for submitting comments or protests.

To accomplish this and other types of consumer services, as I indicated, plans to establish a Division of Consumer Affairs are now being completed.

The Division will be responsible for serving as liaison between consumers and the Commission and for responding to consumer requests, as well as keeping consumer groups informed of new and pending Commission cases.

It will assure, we hope, that the consumers' views are solicited for consideration in our decision-making processes. It will also provide professional assistance, to the extent that we can within our available resources, to help consumers actively and effectively participate in our proceedings.

Some of the consumer information and assistance activities are now underway in our Office of Public Information, but that staff is seriously deficient in the resources that have been committed to the task.

The Commission is presently engaged in seeking before the Congress an appropriation of additional funds to help us augment this activity in a material and, hopefully, a significant way.

In summary, I want to assure you that the Commission is developing a program to give the consumer a meaningful and active role in our proceedings and to convince the consumer that he or she has a stake in our activities and an opportunity to participate in them.

We hope to accomplish this during the next year. Confidence in the decision-making process must be restored; having been severely damaged in the past few years by a lack of confidence existing not only in the consumer segment, but also in regulated industry. We look forward to your partnership in this effort.

Thank you.

MR. HUGHES: Thank you very much, Charlie Curtis.

Now, I would like to introduce and turn the meeting over to our moderator and facilitator for this and previous briefings, Tina Hobson, who is the Director of the Office of Consumer Affairs of the Department of Energy.

Tina is responsible for helping to facilitate communication between the Department and the public, helping us to better understand the needs, concerns, and viewpoints which all of you have and which we individually have concerning energy policies and programs.

She is arranging, through this and other means, to bring us together to discuss these concerns. Tina will outline the format for the remainder of our meeting and will also discuss some changes which we have made in response to suggestions from some of you in an effort to bring some of the action a little bit earlier in the meeting.

Tina.

MS. HOBSON: Thank you very much, Sam. We do welcome you. This particular briefing is being videotaped. The videotapes will be sent to our regional offices for viewing. We're also having a complete transcript made.

In order to break up the canned portion this time, at the request of the last briefing's participants and because of the time constraints, we have asked, before we go any further, three of the public interest groups to offer questions to Charlie and to David right now.

I wonder if Gregg Thomas is here; Elliot Taubman, or Richard Morgan? Would they please come forward? I wonder if I could ask you two to take those seats so that you can speak right into the microphones.

Thank you. Elliot Taubman is with the National Consumer Law Center in Boston. We are going to run this like a Presidential press conference. He can ask any question he chooses, and he has one followup.

MR. TAUBMAN: This is a question for both you gentlemen, because you have joint responsibility in the area.

There is a common feeling among many environmental, consumer, and low-income groups that it is consistent with marginal incremental cost concepts to have a lower rate for basic residential use of both gas and electricity.

I realize that you have not fully gone through this within the Department, but I wonder whether you have any feelings that there may be a way to adopt such a lower rate for basic residential use, through your auspices?

MR. BARDIN: Let me express a personal opinion. Again, you are quite right, the Department has not thrashed out a Departmental position.

Marginal-cost pricing, as a principle, when and to the extent implemented and practiced, at the retail level in today's economic climate, may well result in rates that generate revenues that would be higher than the revenues that result from normal utility rate-making principles. It is not necessarily the case, but under at least one method of marginal-cost pricing, the effect would be a marginal-cost, a relatively high-cost, rate across the board, leading to excess revenue collection.

Then on the principles of just and reasonable rate making, which prevail in virtually all of our States, something would have to be done about it.

One possible way of avoiding that result would be a so-called inverted rate structure in which some class of customers or some class of usage is deliberately given a below-marginal-cost rate, via a below-average-cost rate, so as to avoid revenue over-collection.

Presumably, you would select a usage or customer class whose elasticity of demand, with respect to price, is very low. Alternatively, you aim at some social purpose. These are several ways of doing it.

Other ways of doing it would be to tax away the excess revenues; or, in the case of municipally-owned utilities, you can use the excess

revenue for other municipal purposes. In effect, then you are shifting some of your tax base from income property or what-have-you toward energy.

The third possible use of that kind of excess revenue would be to use it as consumer-contributed capital, as it were, for an activity that you want to especially encourage; that might be pollution control equipment to which the old FPC has spoken in general terms on accounting principles, as far as construction work in process. Or, it might be my example earlier of solar energy, if you could conceive of a way in which the utility, say the gas utility, was financing the installation of solar panels at those locations in a service area where they could best be put to use.

I am going way beyond your question, Elliot. But I would give you other examples to emphasize my own feeling that when we get to a decision, I doubt whether ERA would try to point the State regulatory agencies firmly in one exclusive direction.

There are many choices that can be made here, but certainly one of the possibilities is the one that you suggested.

MS. HOBSON: Charlie, do you have anything to add?

MR. CURTIS: I guess I would share the latter part of David's comment, that it is difficult to discover a singular truth in rate-reform matters.

There are various potential courses one might take in designing a rate which takes into consideration the needs of an individual residential consumer as compared to the community at large in supporting its industrial base.

The common inclination, I think, of the Department-at-large is that, to the extent marginal pricing features can be built in the rate design, they should be built in the rate design -- so that the individual residential consumer is not subsidizing the industrial base.

However, to have that expression of inclination translated into a particular policy that has any force and effect on the Federal level is an unwise course and one which the Congress has determined is an unwise course, leaving the Department, then, to its intervention function, which will have to be exercised through David's side.

As far as the Federal Energy Regulatory Commission goes; as you know, we regulate the wholesale rate, which is less than 20 percent of the sales of electricity today.

To try to accomplish rate reform through the wholesale side of the rate formula is a little bit like attempting to push a rope.

What we are looking forward to is working more closely with those States which have determined to reform their rate design on their own initiative so that we might harmonize the Federal regulatory policies with those of the State to at least make sure we get out of the way of a State which wishes to accomplish some particular economic purpose.

MS. HOBSON: Have we given you a helpful answer?

MR. TAUBMAN: May I have a followup?

MS. HOBSON: Yes.

MR. TAUBMAN: To the extent there is intervention and there is policy by FERC, would you at least be willing to say that you would not oppose consumer groups; and, to the extent that you do have regulatory policy, particularly in the area of regulating Bonneville Power Authority for instance, where there is a certain amount of regulatory authority, that you would at least not, again, oppose changing the rate design in some of the directions you referred to?

MR. BARDIN: I think that is a safe surmise. You have to remember that the Administration's initial National Energy Act was quite explicit that we reserve, on the electric utility rate-reform proposal, to the States the right to make a judgment, on social grounds or economic grounds or whatever grounds the States saw fit, on the question of inverted rates.

So it would, in my judgment, be inconsistent with the thrust of that policy. I have no reason to consider, at this juncture, opposing that kind of State position.

Now, we may wish to illuminate it. We may wish to illuminate alternative ways of dealing with it. On the gas side, there is actually

a feature of the National Energy Act which has passed the House and is before the conference, if I am not mistaken, today. Many of the people in this room know the conference better than I.

The process of passing on higher costs to the industrial, the more elastic users, quickly defers the rate at which the residential sector will have to absorb these higher costs. That has some policy implications as well.

MS. HOBSON: Charlie, anything to add?

MR. CURTIS: What I think Elliot's question really goes to, Dave, is the rate confirmation authority being with ERA as well as the intervention function. So I will pass.

MS. HOBSON: : All right; fine. Thank you, Elliot.

Gregg Thomas from the Sierra Club.

MR. THOMAS: I, too, would like to pursue, at Dave Bardin's invitation, the fundamental pricing principle that the President articulated in the National Energy Plan as underlying the pricing of energy; namely, the replacement-cost pricing, and inquire into at least three functions that the Department of Energy now has with regard to restructuring of utility rates.

What steps are being taken to move toward long-range incremental-cost pricing, specifically? The three functions I am interested in are: the promulgation of Federal advisory guidelines; the State intervention program; and the supervision of the Federal utility administrations.

To the extent that a judgment is being made that there should be a deviation from replacement-cost pricing in those programs, I am wondering what criteria are being employed.

MR. BARDIN: I have to emphasize that the rate-design decisions by utilities and by regulatory agencies and rate-design recommendations by responsible intervenors must always take account of complex and different issues.

Marginal-cost pricing is a doctrine; it is not a set of rates. It is a doctrine, incidentally, which is something like a red blanket in front of the bull, it really gets the people agitated out there. I understand that bulls are color blind. I think sometimes they are getting agitated pro and con on the doctrine without focusing enough on the practical results.

There certainly has to be careful attention, one, to the abruptness, and the principle of continuity -- you can't introduce change too quickly -- and two, to competitive market areas. If you have two utilities working side by side, businesses that are trying to attract industry, there has got to be some effort to help them time changes so they can work along various reasonable paths.

You have social values, which you alluded to in the previous questions, in terms, perhaps, of the elderly, and in terms of one sector of society; perhaps, agricultural or rural life, and urban life.

There are many values that legitimately come into play in the formulation of actual rates and in the application of rate-design principles to decision making.

I think one of the hardest issues that we confront -- and I deal with it now with the decision-making for gas import cases, and I get around to it on the types of work that you are asking me about -- is which marginal cost do you use: the marginal cost today, the marginal cost a year from now, or five years from now?

Probably there has got to be some practical rolling in of the marginal in order to come up with a realistic appraisal.

When you have several different sources of energy on the five- and ten-year horizon, I think it is impractical to price each and every single one separately to individual consumers, so I think there has to be some give there.

MS. HOBSON: Charlie.

MR. CURTIS: Again, the functions I think your question addresses reside in David's arena of responsibility.

As far as the Federal Energy Regulatory Commission goes, we certainly would not discourage -- indeed, we would encourage -- participation in our proceedings and the advancement of rate-design question which may properly be addressed within the wholesale rate-making function.

We are running into this with the so-called price-squeeze issues. The Commission, in proceedings, is inquiring into the relationship of rate design in the competitive balance between investor-owned utilities to supply electricity to their competitor municipalities and still compete with those municipalities for individual industrial consumers.

But what I hear your question basically saying is: does this Department maintain the commitment to marginal pricing; and on what basis is it to depart from that commitment?

I think David has outlined the problems in implementation so that the policy becomes one of inclination and problem solving to the extent that groups assist the Department in suggesting solutions to those problems, because the implementation of the principle is very, very difficult.

But I have not, from my observation of the other components of the Department, noticed at this point yet a retreat from principle, but, perhaps, a growing awareness of the difficulties of the problems of implementation.

MS. HOBSON: Do you want to follow up?

MR. BARDIN: I don't know if I answered your question fully.

MR. THOMAS: I want to pose a question for Charlie. On the premise that the National Energy Act will be enacted into law, you will have a very central role, indeed, in articulating the guidelines that the States must consider in a very disciplined way when they undertake their rate-making considerations.

In that regard, I wonder what pricing principle, what methodology you expect to urge upon the States?

MR. CURTIS: Would that the Congress had the wisdom to lodge that authority in the Commission; however, it decided to lodge it in the Economic Regulatory Administration.

MR. THOMAS: Is that correct?

MR. CURTIS: Yes.

MR. BARDIN: Secretary Schlesinger, in addressing the Governors Sunday afternoon, made it very clear that the principle of the incremental-pricing approach was one that we would be pressing upon the States.

I think you asked questions both of principle and practical application. Let me share some tentative thoughts with you, although Doug Bauer knows more than I about where we stand on the power marketing agencies.

In all candor, my sense is the power marketing agencies of today are, by and large, less of a factor in the electric utility industry than they were, or could have been, many years ago; the notable exceptions are the two Federal systems; Bonneville, within the Department of Energy, and TVA, not in the Department of Energy.

I think there is opportunity for experimentation and, for various reasons, more in TVA than in Bonneville. Bonneville is confronted with a whole host of problems due to its previous reliance on very low-cost hydro and the relatively abrupt changes in adjusting to the much higher-cost thermal.

This kind of strain is giving rise to proposed legislation now pending on the Hill.

The TVA has a considerably more homogeneous economic technology service area and institutional relationship where the TVA, for all practical purposes, supplies power at wholesale to the entire region. It doesn't have the coalescence problem that others do.

I feel that most of the power marketing agencies, while they are important in rendering significant services, should be working with the rest of the Department toward realizing these goals, even if they are not the critical agencies, the cutting edge of retail rate design.

I think that the intervention program, and the guidelines we work out for it, and the progress the States make, will be the cutting edge.

We are talking process more than substance. I hope that the guideline setting process develops enough momentum that even though they will be guidelines only and will not produce anything like the mandatory force of law, we will get to a point of following the common law principles, when enough States have accepted the set of guidelines that it becomes the norm in State utility rate making throughout the country.

To my mind, that process is a critical one. The sensitivity and intelligence with which that is conducted is, perhaps, critical to the success of the other interventionist functions.

In writing guidelines, it seems to me, the Federal government has to be prepared to learn from States who are out front, and from States who have held back, concerned about one or another aspect of marginal-cost pricing. We must march together and achieve the opportunity to realize a goal, not through direct Federal mandate, but through indirect persuasion.

MS. HOBSON: Gregg, I know we could go on, but I would like to give Richard Morgan a chance to ask his question. Richard is from the Environmental Action Foundation.

MR. MORGAN: Thank you Tina. My original question has been pretty well answered by now, but I will try another one.

Our office did a survey of the Nation's major utility companies last year. We found that over 90 percent of the companies had over-projected their peak demands during the past three years. We also found an industry-wide reserve margin of around 30 percent, which is about twice what utilities need for reliable power systems.

Part of the problem is that the utility industry has some built-in incentives for expansion; one being the rate-base regulation and another being the 10-percent investment tax credit.

Now, the House and Senate have voted to roughly double the investment-tax credit for utilities. The Administration, in its tax package, proposes to broaden the investment-tax credit further.

My question is: what can DOE and FERC do about the problem of overbuilding in the utility industry, and how can the Administration justify its standing on the investment-tax code for utilities?

MS. HOBSON: Very good. Who would like to answer first?

MR. BARDIN: I don't know all the answers to all those questions.

MR. MORGAN: I guess I asked more than I should have.

MR. BARDIN: First of all, I understand the concern as to overbuilding as a legitimate area to scrutinize; but I also have a concern about underbuilding.

If I had a choice, I would rather have too much reserve, all things equal, than not enough.

Worrying as I have been for some days now about power in an area of the country which is subject to interruption of its normal fuel supply and resulting strain on the generating and transmission resources, I appreciate every bit of redundancy that we have available, including the nuclear power plants that are able to defer their refueling and, thereby, give us a little slack in the system.

As we think of the kinds of strains and turmoils that the Carter Administration projects for the country over the next ten years, we

are going to need to take advantage of whatever redundancy we have in the collective electric, gas, oil, and other energy systems in the country.

The fundamental question, though, is an institutional one: how the tax code and the regulatory code should interact. I don't know that the Carter Administration has focused on that as a separate specific subject, except in the separate context of the National Energy Act where, for example, I have no difficulty explaining a proposal to tax utility use of oil and gas at very high levels in order to encourage utilities to convert from oil and gas to coal or biomass or what-have-you -- and then to give them a credit out of that very tax to pay for the cost of the conversion. This proposal, however, is not built into the general tax bill, but is built into a special conversion-encouraging kind of tax.

There has been an idea kicking around for a long time that utilities should have no special tax credits and depreciation treatment, an idea on which I personally testified back in 1969, as some of my friends like to remind me. We prevailed for a week in the Ways and Means Committee then.

There is another idea that Chairman Batinovich, and other members of the Commission he chairs, hold, which is that Federal income taxes shouldn't apply to investor-owned utilities --

to the extent of their utility function -- any more than they apply to publicly owned utilities, on the grounds that this is an effective flow-through cost which the consumer picks up. It is not performing any useful function by creating distorted signals.

The Department has not finished its study of that proposal, so we haven't taken any position. I personally would be very interested in learning what the consumer community, the environmental community, and the broader utility community thinks of these proposals for a difference in the general tax-law treatment of electric and natural gas utilities than in the past.

MR. CURTIS: The question on excess capacity is a very difficult one. What can be done about it, of course, is to judge the expenditures as imprudently incurred and disallow their recovery in the rate base.

Now, that can be done either at the Federal or State level.

Some States, as you know, are inquiring into this very specifically at the moment. As in any course of human events, one must observe balance and prudence in such inquiries for fear that we aren't shooting ourselves in the foot.

This country has a big stake in maintaining adequate and reliable delivery of its energy resources, especially electric utility.

We have to be cautious, however, that our concern for the short-term price impact of utility rates on consumers and the very real problems that it presents for, especially, the low income and poor, does not materially impair our ability to provide energy for our future.

In my opinion, today's consumer has the responsibility to invest for the benefit of future consumers, as well; and that requires the development of capacity that may, through an error in planning, result in excess capacity to the detriment of an individual consumer's near-term interest.

Now, I think your concern really goes to motive; of whether that is an error of planning or whether that was built into the system. Are there regulatory-process incentives to invest in capacity beyond the needs of the service area, simply to enhance the revenue stream to the operating utilities?

Obviously, that is a proper inquiry and the duty of the regulator, and we intend, at the Federal level, to consider such questions, but not with the type of presumed improper motive, I guess, but let me just say with a healthy skepticism that is not necessarily of the view that today's existing excess capacity, as it varies in some areas, results from improper motive and action on the part of existing management.

My personal opinion is that it is much more often the result of poor planning and an inability to see or focus on the broader opportunity to share power with other electrical systems and to perceive, in planning, a common call upon reserve capacity which would minimize the need for individual electrical systems building up significant and large reserves.

So, what I think should be done primarily is to encourage greater interconnection and interreliance in the delivery of the electricity, and by economic dispatch achieve the potential economies that would result there. By this planning effort, the over-capacity that results from error or too narrow a focus of management can at least be avoided.

MS. HOBSON: All right. Do you have a followup?

MR. MORGAN: Yes. I think you have also raised another question which has been burning inside of me for a couple of years, which is: do you feel, as Mr. Bardin stated, that it is better to have too much capacity than not enough?

The fact is, if we always want to err on the high side, we might as well have 100 percent reserve margin.

Somewhere there is a happy medium, where you are better off right at that point than having more or less.

Historically, the Federal Power Commission has recommended reserves of around 20 percent. Now, the reserves are around 30 percent.

We estimate that is costing consumers about \$700 million a year in this country.

We didn't do a study to find out. We don't know what the best answer is; and that 20 percent number was put together probably 20 years ago. There have been an awful lot of changes since then.

I wonder whether it isn't time for us to sit down and try to figure out what kind of reserve margin we ought to have in the utility industry and what is justified.

Then, if the utilities are overburdened, let's do something about those incentives that cause them to do it, or somehow force them into doing a better job of projecting our power usages.

MR. BARDIN: I think there have been too many strictly extrapolated or mechanical projections of demand.

Sophisticated people of the electric utility community are now finding out different techniques to get a better predictive capability. We should be concerned about these projections on the national scale, too.

One of the things the Carter Administration is hoping to accomplish is a relationship with the States in which we build up a mosaic out of very specific studies of service areas in terms of State economies and State goals for their economies. If there is an electric power need, we must determine the regional as well as national power implications.

Also, on the factual side, there is another element, the uncertainty over how long it actually takes to plan, get permission to build, and construct a given facility. It is an extremely serious problem in terms of the more efficient type of baseload plants, which are usually the least oil-consuming plants in the country.

You have a situation where the utilities and the States that choose to go nuclear don't know if they will ever build that facility. This will not be healthy for the consumer, to put it mildly. The consumer ends up paying money for proposed projects which drag on and which may not get built in the end. It is not healthy for rational decision making as to what the needs will be five, ten, fifteen years from now and how to act on a timely basis to meet those needs.

There is a great danger of using peaking units -- the quick, easy-to-build, cheap, but energy inefficient peaking units -- as a crutch for last minute decision making.

Third, while we have accumulated very large reserve margins in some parts of the country with the benefit of hindsight, we can ask ourselves, and I think utilities are asking themselves: where did they go wrong by deferring units as a result?

Keep in mind that just a few weeks ago, before we worried about coal supplies, three of the largest utilities in the country, as a result of forced outages, were right down to two or three percentage

points reserve margin for a utility which had a reputation for being well-managed. Yet, there they were, curtailing voltage in order to avoid brownouts or blackouts.

So, whereas one part of the country might have an extreme redundancy problem, you have in another part of the country, at least for a period of time, a manifestation of the other side.

The answer is to create the kinds of institutions which will force us to plan better, force the utilities to plan better, and to plan on the right scale, to enable decisions to be made step-by-step in time and in tune with the results of our planning.

MR. CURTIS: I would like to comment on this, because it is a matter that concerns me. I started out by saying, "Yes, I think it is our duty to inquire." A number of States have very actively pursued that inquiry. I believe it is our duty to inquire, but I think we must be very sanguine about what is our potential for dealing with this problem, from the standpoint of hindsight in judging the prudence of costs already incurred, because of the consequences of the decision to disallow.

I think that the powers of government are very, very circumscribed in this area. We must not, through comments that we make here or by the activities we engage in, overpromise a result that is unlikely to be forthcoming.

In my opinion, the regulatory agency is not going to have a very good handle in dealing with excess capacity.

MS. HOBSON: I am going to be impolite. Our first 60-minute television tape is nearing its end, I want to have an opportunity to thank both the Chairman and the Administrator for dealing with the questions, and we hope you will come back after our coffee break. We will be videotaping this entire 3-hour session. I didn't want you to leave without having an opportunity to publicly thank you.

MR CURTIS: The point is that a much more meaningful opportunity to deal with the problem lies in incremental-cost unit pricing and rate design; though those mechanisms impose a discipline on management's decision so that electricity priced at the margin will inhibit these inclinations toward excess capacity.

If those types of simulations of disciplines and rewards in the competitive market can be injected into the regulatory environment, then I think we can much more effectively deal with this problem than we are going to be able to by any attempt to exercise pure regulatory muscle and hindsight in controlling the passthrough of those costs.

MS. HOBSON: Thank you very much.

I think it certainly is obvious that this is a consumer-information series. We are trying, through this series, to give some tools to energy consumers with which to better evaluate the system.

I think I will take the opportunity now to ask you one last question for comment. Because it is so difficult to understand the utility-rate structuring area, I believe that consumers are very interested in intervention funding, so that they can have an opportunity to get the experts who are qualified to deal with this issue.

I would just like to ask for your thoughts -- and then we will let you go -- on your position of intervention funding.

MR. CURTIS: The position of the Federal Energy Regulatory Commission is in support of intervenor funding. The Congress, in preliminary agreement in its conference on the National Energy Plan, I believe, has determined to grant to the Commission the authority to assist, through intervenor funding, direct participation in our proceedings.

As I say, the Commission, as a body, has determined to support that policy and will commit to make that program work effectively.

In the interim, in the absence of funds, the Commission is bound by the current law which prevents our making monies available to assist intervenors, but we are able to make our staff available to offer counsel and explanation to intervenors; and we are doing that.

MS. HOBSON: Thank you.

MR. BARDIN: The ERA, like the FEA before, interprets its statutory authority to permit intervenor funding. We have, indeed, had intervenor

funding applications in the case of intervenor groups who feel it is necessary to have such funding in order to tell me what I ought and ought not to be doing. They should apply to the Office of Administrative Review in the ERA.

We also have a funding program, Congressionally mandated and funded, for grants to State consumer offices and a proposal to continue that program in President Carter's fiscal '79 budget.

I hope you will give Hazel Rollins an opportunity to give this group the details of the fiscal '79 budget so everybody has precise information as to what we are proposing and what will be before the Authorization and Appropriation Committees.

MS. HOBSON: All right; thank you.

We are now going to have a coffee break. When everyone comes back, we will be directing questions to the panel. Fill out your question cards. We ought to be able to conduct this informally, so just fill out your card with your questions so we can turn it in to the recorder.

We will see you back here in about 15 minutes.

(A brief recess was taken)

MS. HOBSON: We are back for the second part of our DOE briefing on "Utility Rate Structuring."

We are going to conduct this question-and-answer session in a more informal manner and see how that works.

I know this is a very complex subject and something we consumers here and consumers elsewhere around the country need to know more about.

Therefore, we appreciate having the panelists and the resource people, who are sitting on my right, who were involved in preparing answers to the 36 representative questions that were submitted in advance for this briefing.

Rather than go into answers to pre-selected questions by the panelists right now, we thought we would give the audience greater latitude. We are going to begin with your questions.

We are going to ask you which questions you would like answered, and you can direct them at one or more of the panelists.

They will answer the questions themselves or call upon resource people to help them.

In the past, we have used the categories of: consumer representatives, environmental representatives, and industry representatives.

This time we are videotaping the whole program. Speakers will have to come to this podium on my right to ask a question and any follow-up question, so we can get you on the videotape.

I understand that you also have to sign a release so that we can take the videotape and distribute it.

If you prefer not to be in this videotape, or don't care, there are two standing microphones in the aisles which you can use. However, we would like to have you on the videotape, if possible.

I also want to point out that advance questions for our next briefing are due today, and we have given you a slip of paper for your questions on "Energy and Consumer Protection, Competition and Fraud."

So, if you have questions you would like to ask, I would like you to hand them to a staff person on your way out.

Several people had put their names on the list before they understood that we were not assigning numbers to the questions. So, I am going to call one or two of them to begin the proceedings and we will see how it works.

I also have my gong here. This is our Federal gong show, and this is basically to make sure that the panelists don't talk too long. They have five minutes to answer questions and, preferably, they will take only three at this stage.

Will the following people come to the podium to ask their questions? I would like Pauline Eisenstadt, Energy Consumers of New Mexico. Pauline, would you come to the podium, and Henry Shelton, Rhode Island Coalition? They will be our first two.

When you come to the podium, please identify yourself and the organization.

So, if Henry Shelton would come and also Jack Werner, we will have the first three. Then we will just take people in order.

Pauline?

MS. EISENSTADT: I am Pauline Eisenstadt; I am the Executive Director of Energy Consumers of New Mexico. That is a public interest group in the State.

In our region, which is the West, even though we are a producing State, one of the things that we all look to as the future is solar.

We are concerned about utilities owning the Sun. We want to know what the Department of Energy is doing to help ensure consumers that the utilities won't end up owning the Sun. For example, we see that a great amount of money is being put into research for such things as solar power towers.

We feel that the great potential for solar energy should come in a decentralized way, so that we do not have to pay a monthly rent to the utility companies for the use of the Sun.

MS. HOBSON: All right. Who can address this question?

MR. BAUER: It is true that in the Energy Research and Development Administration's early days, among some of the technical marvels we looked at was the notion of this sun tower.

It was maturing to the point of a demonstration project that would be done somewhere in the far West part of the country.

Someone bright enough to think of economics, as well as technology, started to calculate what the cost per kilowatt would be for such an installation and discovered that it is not the best thing since sliced bread.

My understanding is that the amounts of money being dedicated now and in the future to these large central projects are under very intensive review and reconsideration.

Just to quote a number that has been the number that I have kept in my mind as to the relative cost of central solar power -- as distinct from some of the other alternatives for central electricity production -- electricity produced by some of the current means centrally, if used by solar, runs as high as \$4,000 a kilowatt, in comparison with the most expensive cost quoted on the margin now for nuclear in the order of \$1,000 to \$1,100 per kilowatt.

I think your instincts with respect to favoring small, spreadout, decentralized solar activities are on the mark.

I think that is what you will find in Sierra and some of the other agencies of heating and cooling applications of solar; and that is the thrust of the research and development programs that are proceeding now.

MS. HOBSON: Followup, Pauline?

MS. EISENSTADT: No, I'll let it go. Thank you very much.

MS. HOBSON: Thank you.

Henry Shelton?

MR. SHELTON: Thank you.

My name is Henry Shelton; I am a member of the Coalition for Consumer Justice, which is a Statewide community organization in Rhode Island made up of senior citizens, working class people, low-income people, church groups, and labor unions.

We have been involved in rate reform or requests for rate reform for about three years.

Presently, we are involved in three electrical utility cases. One case has just been finished, and they have awarded the electric company an amount of money, but they have kept a freeze that we were able to win three years ago -- a freeze on the first 300 kilowatt hours of residential use.

The second company is proposing a discount rate for the elderly on Social Security, which is a very limited group, probably 2,000 in our territory in Rhode Island.

We think it's good they can get a discount. We think that discount should be applied to a wider number of people; maybe all families, for instance, under \$5,000.

The third case we are involved in is the Newport Electric case,

where we are presenting a request for an inverted rate structure for residential users; excepting people who have all-electric heat and excepting people who have electric water heaters.

So, again, it is a limited class of residential users. All residential users they call R-10. This is our proposal.

We feel there are three stages; one, the stage of freezing rates, secondly, giving some type of a discount rate, and, thirdly, an inverted rate, eventually based on marginal-cost pricing.

I have a three-part question:

One is: it has been our understanding that the Department of Energy, following the present policy, is against the present declining block rate, which we have in Rhode Island, for residential users.

Secondly, in the current case, we were wondering whether the Department of Energy would be supportive in helping some way or other by intervening in our case, especially in the case involving Newport Electric.

The reason for that, and this is the third part of the question, is that the major opposition to the inverted rate case that we are proposing is coming from the United States Navy.

Now, for those of you who maybe don't know Rhode Island history, the United States Navy is not exactly the best friend of Newport residents, because much of the Navy pulled out two years ago.

In the present case, we don't know of any other major opposition to an inverted rate, except the U.S. Navy.

They have formally intervened. They brought a lawyer up from Philadelphia for the first day of the hearings -- which was the day of the blizzard, by the way -- and they asked that the case be postponed for a few months until they could get their figures together.

MS. HOBSON: All right. I think we have those questions now. Why don't we try to tackle them?

As I understand the question, and you correct me if I'm wrong: "Is the Department of Energy against the declining block rate for residential users?"

MS. ROLLINS: The answer is yes it is, except when you can show that a declining block rate, based on marginal-cost pricing, is the most cost effective. I would submit to you that that could rarely be done.

On the issue of intervention, we do have a growing intervention program in ERA within the Office of Utility Systems, which Doug Bauer heads.

Generally, we take requests for intervention or participation as a party from the State Commission or active parties in the case.

I would suggest to you that a filing to the Office of Utility Systems would be appropriate at this time. It is probably very late

in the process, but before you leave here today, I think it would be useful if you would take the opportunity to chat with Doug and, also, with Howard Perry, who is sitting over there; and we can tell you how you would do that.

MS. HOBSON: Howard, do you want to raise your hand?

(Mr. Perry complying.)

MS. HOBSON: Okay Mr. Shelton, why don't you talk with Howard Perry before you leave to see if you can get help on that intervention.

MR. SHELTON: The reason for the intervention we are requesting at this point -- and I agree it's late in the case -- is because we did not expect the Navy to come in.

MS. ROLLINS: I got your point.

MS. HOBSON: We understand your problem, so do talk with Mr. Perry. We would like to know how it comes out. Thank you very much.

Jack Werner?

MR. WERNER: My name is Jack Werner, for the Solar Energy Institute of America, as well as for some other consumer and environmental groups here in the D.C. area.

My question is probably somewhat of a followup to Pauline's question.

The key question is not whether or not we are going to have solar energy, but what kind of solar energy.

The big utilities do want centralized energy so that they can sell it to us over their wires.

This means using the term "power tower" for electric generation plants or, perhaps far worse, satellites will collect the energy and beam it back to someone like Con Edison so they can sell it to us. This beaming back will come via dangerous microwaves.

Now, my question is: what is the methodology and criteria the Federal Energy Regulatory Commission will use to evaluate big utilities' push for centralized solar energy versus decentralized solar power?

I would like to have a bit more direct answer to the question of decentralized solar power than how FERC views this particular method of providing electricity.

MR. NORDHAUS: Let me preface my remarks by saying that the FERC has fairly limited regulatory authority in this area. We regulate only interstate wholesale rates of electricity.

We do not have certification or facilities approval authority; so that our review of utility building programs -- I guess that would be the context in which this would be conducted -- is limited, in most cases, to a post hoc review of whether the utilities' expenditure for a particular purpose was prudent.

I don't think the Commission has been faced with the issue of whether a particular utility program, with respect to solar facilities, is lawful or in the best interest of consumers.

If the issue did come up, I think the Commission would tend probably to look to the State commissions to some extent for guidance because of the fact that we have very limited authority in this area.

Beyond that, you may want to get a response from my colleagues on my left who have a more direct role before the State commissions than we do.

MS. HOBSON: You might explain a little more your direct work role in this area.

MR. BAUER: I think it is important, in terms of answering your question, to recognize that the tire meets the road in your local public utility commission.

That is when the utility comes forth with its building program, its needs, the consumers come forth with their views. A public utility commission, by law, must decide whether a rate will be approved or whether sufficient revenues for construction will be approved or not.

That is where the debate is joined. By the time you come up to either FERC or ERA, you are dealing much more diffusely with these issues.

You deal with them, in fact, in the context of the priorities of research and development programs, or in the context of a persuasive role that we in ERA might have, as one party, in a particular regulatory proceeding, if that particular issue is a simple one in illuminating national energy policy; that is, whether you build large, central solar plants or whether you have diverse kinds of activities for solar heating and cooling.

Now, I think it is very important to recognize that a lot of utilities today -- at least it has been my experience in just the past year and a half talking with them -- are beginning to think small themselves and beginning to question themselves as to the appropriateness of larger and larger central power stations.

A lot of them are moving to the other end of the spectrum, both with respect to power plants and with respect to alternative forms of energy.

I think that is a development to watch very closely because the true litmus, if it will answer your question, will be, "what are the costs?"

I cannot conceive of a utility with the ability to come up and build a plant for \$1,000 per kilowatt, coming up and building one for \$4,000 per kilowatt, when that option doesn't have some very, very

clear advantages to offset that incredible capital deficit and the financing difficulties it would have to go through in meeting that deficit.

MS. HOBSON: Did that answer your question, Jack?

MR. WERNER: The answer doesn't really deal with my question on decentralized power.

The fact is that solar energy is being used in a number of homes today. In Florida, for instance, there was one case where a home had been able to install solar energy, and sort of reverse their electric meter.

Does FERC see itself getting involved in cases that are going to be dealing with that issue?

MR. NORDHAUS: To some extent, the answer to this question depends on what comes out of the conference in Congress on the National Energy Act.

Under the tentative agreement that the conferees have reached, the FERC would be given some regulatory authority with respect to small power producers. To the extent that a residential photovoltaic system would be regarded as a small power producer, the Commission would, under the tentative conference agreement, be directed to adopt policies and prescribe rules designed to overcome discrimination against that type of power production and, in fact, to require utilities to purchase power from such a system.

Now, whether Congress in its wisdom will pass the tentative conference agreement, we don't know at this point.

But if they do, obviously, the Commission will implement it.

MS. HOBSON: All right; thank you.

I would like a volunteer industry person now to come to the podium.

(TV lights went out at this point.)

I think we have had a little power outage here. Is that correct, Roger?

MR. LINDSAY: That is correct, ma'am.

MS. HOBSON: Even here at DOE, we have to cope with those. I think it is an appropriate place to have the utilities go off; but, in any event, everyone here will have an opportunity to ask a question, either during the period before 12:00, or to read it into the record, to have it answered as part of the full transcript.

So, remember to fill out your question card. We will read it into the record for you if you have to leave; but please understand that you will get your question answered.

Do I have a person from industry or the utility companies that would like to ask a question? We have a lot of utility people here, and we would like to hear from you.

Yes?

MR. RUNDE: My name is O. H. Runde from the Eastern Shore of Maryland. I operate a small gas utility down there.

The thrust of this meeting apparently is to beat the utility companies over the head. It almost seems that everybody thinks they have a right to utility service.

It might be our concept that they have a right to utility service if they can afford it.

Now, we have heard cases here this morning about the big, bad utilities, if they don't fight the electric company. God knows I have fought the electric companies since 1946.

I know what it is. I am not on the side of the electric company.

But when we are talking about the big, bad electric companies, let's not forget that there are thousands of portable generators available, and permanent generators available. If someone wants to generate their own electricity, there is nothing to stop them from doing it.

We keep hearing about all the different rate structures. If there isn't any money left, there isn't going to be any electricity; and the same holds true of gas.

MS. HOBSON: Would you like to ask a question of the Panel on how they plan to deal with this? We are not here just to answer questions from consumer and public interest groups.

We are here to answer questions from everyone who would like to ask a question.

MR. RUNDE: My question would be: how can a straight gas utility, which has been under the jurisdiction of the Maryland Public Service

Commission, which has kept its accounts according to the Federal Power Commission, get out from under the Department of Energy, when the Department of Energy, the old FEA people, admitted that the writers of regulations for the sale of propane did not know there was such a thing as a propane utility?

We are one of the few in the United States, and now comes the regulation, that the Department is trying to squeeze into a mold to fit a situation that it was never intended to fit.

MS. HOBSON: Who would like to pick that up?

MS. ROLLINS: First of all, I would like to respond to your comment, and put it into a perspective that I think will be useful to many of the people in the room.

I can recall my first consumer conference on utility issues, which was held in Philadelphia some four and one-half years ago, where opinions and attitudes were hot and high.

People on both sides of the issue had no understanding for the technical terms that were being used by the utility.

Consumers, in general, tended to use the kind of rhetoric we use when we don't understand the system and we don't understand the terms of art or the language.

I would submit to you, sir, that the people in this room who are representing consumers, and indeed, what is left of FEA in the

Department of Energy, have come a long way in terms of trying to understand both your problems as the operator of a utility and a gas utility -- and I will speak to that later -- and in terms of trying to really become educated so that we can speak to the issues.

We are beyond this phase of strident rhetoric, and I think we are mostly here to learn. I would like to ask you to spend some time listening to us, and also, later in the day, I would like to have an opportunity to talk to you about our propane regulations in the ERA.

We are in the process of revising those regulations, and, in point of fact, we have not understood some things about your industry, which admittedly is not within the ordinary purview of the propane industry.

I would like to have you sit down with some of our staff people so that we don't make mistakes, and do not misunderstand what you do and how your gas utility is run.

Thank you.

MS. HOBSON: Thank you.

Do you have any followup?

MR. RUNDE: No, ma'am.

MS. HOBSON: We are glad you came, and we thank you for asking a question.

Ed Slavin and Stan Slater; are they here? Will they come to the podium, along with Shelley Fidler, and then we can save a little time.

Roger, are we going to get these lights back on?

MR. LINDSAY: Yes, ma'am.

MR. SLAVIN: I am Ed Slavin, and I am a consultant for the Consumer Federation of America. Last year, I was here as Senator Sasser's research assistant for energy issues. My question is rooted in that experience.

My question relates to the sincerity of this Administration's commitment to promote energy conservation in the electric utility sector.

Back in April of 1977, President Carter pledged his support for cogeneration and wheeling legislation. But, when the Senate took up the utility reform bill, Senator Sasser proposed a cogeneration amendment.

Consumer and environmental groups supported both of these amendments. But, essentially, this Administration could have possibly been sitting on its hands, and the private utilities won and got what they wanted.

I have two questions. Number one, why didn't DOE help support what is NEP policy in the Senate? Number two, what are you going to do now? Will you support wheeling and cogeneration legislation?

MS. HOBSON: Who would like to tackle that first?

MR. NORDHAUS: I can't speak to what the Administration's position was on the Sasser amendment, because that, I think, occurred after I left to take my present job.

But, I do think that one of the things that has come out of this whole exercise is, as you know, a tentative conference agreement which does provide the FERC with some major new authorities in the area of requiring interconnection and wheeling, and encouraging cogeneration.

As far as I know, the Administration does support the tentative conference agreement. I understand the Administration would have supported something a good deal stronger, if they had been in a position to get it out of the Senate.

MS. HOBSON: Hazel? Doug?

MR. BAUER: I would like to talk some about wheeling -- before addressing the legislative capability, which would be in FERC -- and indicate that as far as the effort to persuade institutions to wheel substantial amounts of power around this country over the past four weeks, it has been going on apace. And this effort has been central in the process of being able to keep the midwestern part of the country, very heavily coal-dependent, able to avoid what otherwise would be the implications of elimination of those residual coal piles.

We are importing something close to 6,000 to 8,000 megawatts every day of electricity from eastern, western, and southern utilities, as well as from Ontario into that part of the country.

The importance of that wheeling authority, the importance of strengthening it and of utilizing it, lies not only in its original purpose in the legislative process -- namely improving reliability, enhancing efficiency by picking up diversity, and all of the other things that we would do in a normal operational mode -- but also in keeping utilities able to serve their customers in the midst of these periodic turmoils. Whether these turmoils are caused by an embargo or a coal strike, strengthened wheeling authority is absolutely central, absolutely crucial, to being able to avoid what otherwise would be the impacts on a good number of citizens and on a very substantial chunk of the United States' industry.

MS. HOBSON: Do you have a followup?

MR. SLAVIN: I have a followup to what Mr. Nordhaus said. We had something stronger than what is found in the National Energy Act. And, essentially, the Administration told us that they lost so many ballots in the Senate over energy in September and October that they weren't going to support any amendments anymore, unless they were sure of winning.

I would just emphasize that you can't just take the position of only supporting sure things, if you are going to get any sort of a program.

We have come to a point where the Edison Electric Institute and the National Association of Electric Companies are running our energy policies as far as electricity is concerned; and if that is going to change, you are going to have to change your posture as far as supporting amendments in the Senate.

MR. NORDHAUS: I wish Al Alm were here, because he could perhaps speak to your question better than I can, since he has a more central role in the decision.

MS. ROLLINS: I want to make a comment. As I recall those days, first of all, the proposals and the counter-proposals were fast and heavy.

We had taken quite a beating on many of the amendments. I know of the hindsight that Doug speaks of, in terms of what we have learned in the ECAR Region during the coal strike.

I probably would now have a different attitude if those issues were raised. I don't think, in the fast and intense negotiations that were going on at the time, that it is even possible to go back and apologize or attempt to explain away why decisions were made and why they were not made.

Simply stated, I think many of us have learned a lesson and, hopefully, we will at least be in tune in moving faster with you.

It may well turn out that we are not, in which case you will be back here, and I think you'll have the perfect right to try this again.

MR. BAUER: Just very quickly, I think there is somebody here from the Edison Electric Institute. I doubt very much if the Federal Government's policies, with respect to electric utilities, are those written by the Edison Electric Institute.

There is something about that predicate that is troublesome to me, and I would like very much to talk to you afterwards, if we can.

MR. NORDHAUS: Maybe somebody from EEI could tell us whether the policies they advocated were adopted by the Department.

MR. LOVIN: My name is Glenn Lovin. I am from the Edison Electric Institute. We do not, in fact, set the policies for the Federal energy agencies in any respect.

MR. NORDHAUS: We are very comforted to know that.

MR. LOVIN: I am a bit surprised that you didn't elaborate a little more on the question concerning cogeneration.

Within Dr. Bauer's group, there is extensive research and studies concerning cogeneration. In the Office of Conservation and Solar Applications there is even more.

I think the Federal Government is taking a leadership role in cogeneration.

MS. HOBSON: Why don't you ask a question to that effect? Would you like to ask them to elaborate?

MS. ROLLINS: He just did, in the question and the answer.

MR. SLAVIN: The fact of the matter is that you were circulating, on the cogeneration when Gary Hart had it, a scandal sheet, which essentially told lies.

The first sentence of that scandal sheet was in red, and said, "this is a divestiture amendment." The reason you said that was because the amendment included one minor provision requiring the study of competition with regard to our power cells.

MS. HOBSON: All right. That is a question. You have a chance to answer it, and then we will go on.

MR. LOVIN: I am not sure I would interpret that statement the way you do. We did not, in fact, say that. We, as an industry, support cogeneration or any decentralized systems based on the economic consideration that Mr. Bauer talked about a few minutes ago.

MR. SLAVIN: You talked about competition from our power cells.

MR. LOVIN: I have no qualms about competition.

MS. HOBSON: All right. With that, I think we will go on.

Thank you very much.

The next person will be Stan Slater.

MR. SLATER: My name is Stan Slater, and I am with the Virginia Citizens' Consumer Council, a non-profit organization.

I have two questions. Has DOE intervened in any recent utility rate hearings, and with what results? And, how many people do you have working in this area right now? That is one question.

MS. ROLLINS: We have intervened recently, I think our last case being the Idaho case.

Yes, help me over there, Howard.

MR. PERRY: We are currently intervening in Hawaii and Colorado.

MS. ROLLINS: Fine. Since the inception of the office which used to be called Utilities, in Conservation and subsequently moved to the ERA, and which is now the Office of Utility Systems, we have had some 24 intervention activities.

It is frankly difficult to assess success or failure in espousing a point of view or advocating a position, basically because of the way decisions are finally rendered by PUC's.

However, by our fine calculation, we believe that, in over 50 percent of the cases in which we have appeared as a party or amicus, we have been successful in espousing a point of view and having it adopted by the PUC.

The Intervention Office, when it was a part of the Older Office of Conservation in FEA, had in point of fact one full-time staff person in that office -- I am looking at him at the moment -- with support of maybe one and one-quarter lawyer from the Office of General Counsel.

For this fiscal year, it is planned that we will have at least eight professionals in that office, with support, hopefully, from at least four attorneys working from the Office of General Counsel.

I think what you will see over the ensuing years is a more increased and active program in the intervention area coming out of this new Office of Utility Systems.

MR. SLATER: How do we as consumers receive the results? In other words, what do we do if we want to intervene based on any successful intervention on your part?

MS. ROLLINS: We do publish both our formal reports and our economic studies. Our briefs are available. Before you leave, I would like to take your card, and make sure that you are on our mailing list.

Maybe this is something that Tina will want to work with us in. Perhaps we are not reaching as many groups as we should.

I, too, would like to talk to you before I leave today, so we can find out how to get you on our mailing list.

MR. SLATER: Thank you. I have a second question. As we all are aware --

MS. HOBSON: I'm sorry. We have to wait until everybody is through, and then you can have your second question, if that is all right.

MR. SLATER: Sure.

MS. HOBSON: Hold it a while, so everyone may have a chance.

Do we have now another industry representative who would like to make a comment? Remember, this is an educational process, and there are a lot of people who are going to be reading the transcript. We would like some industry positions in the transcript, if you would care to, because we are not trying to make this just consumer-oriented, although we do have a responsibility to answer consumer, individual, and residential consumer questions on DOE policy.

If anyone would care to, please feel free.

All right. Shelley?

MS. FIDLER: My name is Shelley Fidler. I am on the staff of Congressman Phil Sharp.

I wanted to ask a question that was raised by our second questioner. What has DOE done about interventions by other Federal departments, such as GSA and the Department of Defense, in State rate proceedings where they have fought rate reforms such as time-of-day pricing?

If you haven't done anything, what can you contemplate doing in the future?

MR. BAUER: We are well aware, and have been for at least a year and a half, of these interventions, which, to be quite frank, offer a certain degree of awkwardness.

The GSA has a responsibility which is different from our responsibility. Their responsibility is to represent the consumer

interests of the GSA, DOD, and the Navy, and a whole lot of other organizations under delegation from consumer interest of a Federal installation that might be in a particular area.

Now, that is not our interest. Our issue is dealing with national energy policy and with what kinds of incentives might be set in place, and what kinds of equity interests might exist from different kinds of tariffs.

We have met with GSA people at a reasonably high level to express our concern that our policies be coordinated. We are making arrangements now to make sure that briefs that are presented are presented and available for review on either side before these interventions occur.

I am not impressed, quite frankly, that our coordination is adequate or that we are well enough aware of this two-headed problem too and have done something with it as directly as it should be dealt with.

All I can assure you is that we will try to get the Federal family together on basic principles of rate making. Let the responsibilities of one institution that have to be fulfilled for a particular customer be fulfilled, but at the same time let's not have the same degree of inconsistency of the Federal family, as has been a chronic and very irritating problem.

MS. FIDLER: There is no question that it presents a problem in terms of what the interest is. But, it seems to us that some

unified point of effort or some unified kind of policy is probably in the long-range interest of the country rather than worrying about some short-range small savings.

MR. BAUER: You are absolutely right. And, the issue with a particular destroyer that is tied up along side the pier in Newport is not precisely the energy problem that confronts people in the State of Rhode Island. I couldn't agree more with you.

MS. FIDLER: Thank you.

MS. HOBSON: All right.

MS. ROLLINS: Tina, just one point. On the things you are going to check up with us later on, you ought to put that on your list. It is a problem that we have been scuffling with for some two years.

MS. HOBSON: All right.

MS. ROLLINS: Keep our score card for us.

MS. HOBSON: Albert Bryant? Is he here?

MR. BRYANT: My name is Albert Bryant. I am with the Alexandria Office of Consumer Affairs. I would like to address my question to Ms. Rollins.

I would like to know: what will the Department of Energy's role be in encouraging Congress to enact laws to impose on the utility companies to create a more uniform utility-rate structure, as far as charging customers and consumers who use utilities?

MS. ROLLINS: Well, I just talked about our history over the fall and winter. I would like to think and say that the Department of Energy's role, in encouraging Congress to not so much adopt a uniform rate design, but adopt uniform principles with which to deal with rate-design questions, had been most vigorous.

There are probably a few people in the room who would tend to disagree with me. However, what finally appears to be coming out of Congress is at least a set of voluntary guidelines which each utility commission must take into account in considering requests for rate increase.

That is not the proposal that we started out with. It is the happy compromise we end up with. The standard party line that I next utter says we will spend a year or two carefully examining how State utility commissions in fact use these voluntary guidelines to address the problem of rate reform and rate design.

If we see that more stringent guidelines, that is mandatory guidelines, should be applied, then we will be back before the Congress requesting the same.

They actually have a bill that has not yet come off the Hill under which we will have to implement those guidelines in the program that it appears we are going to receive.

Then, we will take a look at it, and we hope you will take a look at it with us, to see how we did.

MS. HOBSON: Does that make sense to you?

MR. BRYANT: Yes, it does. I would hope that your effort, as well as the Department of Energy's, will be brought into this bill with positive results. We will prevail, because it would mean a lot to the people that I come in contact with from day-to-day, regarding utility and utility-rate structure, to have more confidence not only in paying their bills, but in understanding the utility-rate structure, having a better overall view of why they are paying their utility bills, and what they are really paying for.

MS. ROLLINS: I understand the problem of trying to educate the consumer to understand exactly what the components of the bill are.

Perhaps Tina might provide you, before you leave here, with some booklets and information that might be useful to your constituents and the people that you serve in Alexandria.

But, we will keep your charge in mind. We hope from time-to-time you will come before us, and let us know whether we have done our job or not.

MS. HOBSON: You are going to have to let us know what those booklets are.

MS. ROLLINS: You don't have them?

MS. HOBSON: No. We are going to have to do something about that.

MS. ROLLINS: Okay. From the old Office of Consumer Affairs and also from the old Conservation Office, there are some -- we have this problem with the printing budget -- but, there are some, I think, useful booklets, which explain the components of utility billing, and how to read the bill.

If in point of fact they are out of print and no longer available, they are something you and I ought to talk about.

("How to Understand Your Utility Bill." 1977. 12 pages. Available -- free -- from U.S. Department of Energy, Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830. - Editor.)

MS. HOBSON: That is right. We should get them so that we can help people learn. Thank you very much.

Are there any questions from the audience? You might take a look at the 36 questions* in front of you, and see if any of you would like any of those answered by our panel before we leave.

You can just give us the question number, and we will be happy to answer any of those or any other questions that you might have. You can just stand at your seat, if you want, at this point in time.

All right. Garry?

MR. DE LOSS: My name is Garry DeLoss, and I am with the Environmental Policy Center here in Washington.

* See Appendix A

My question is one that perhaps looks at the role of the people on this panel more as advisors to the President and the Congress than in their regulatory capacity. It has to do with the issue of marginal-cost pricing of utility services, an issue that has been much discussed here this morning, and the problem that I see in the energy conservation area in this regard.

For example, if we were to get some of the rate reforms that were discussed, such as ending the discount rates to large commercial and industrial users where they are not cost-justified, and therefore, ending what we suspect is a cross-subsidy of those users by the smaller residential user, it seems to me that what that means is that the rates to residential users are not going to rise as fast as they would under the present circumstances. In other words, you are going to have lower rates for residential users than for business users, which seems to work against conservation.

The other marginal-cost pricing proposal, besides ending of unfair discount rates, that is most talked about is time-of-day prices.

One of the advantages there, is that it gets at the excess capacity problem that Rick Morgan was concerned about, which again would tend to hold down rates.

So, in my mind, marginal-cost pricing in those contexts is far from a panacea; and what I am really interested in is a proposition for higher than marginal-cost pricing.

The way to get the public to accept it, it seems to me, politically, is to protect them in their initial block, something like the life-line rate, and then charge them a higher than marginal-cost rate for the second block of use.

In fact, I think the life-line rate concept should be sold as a conservation rate concept, and perhaps titled as a conservation rate concept, so that we can get something like a higher than marginal-cost rate in the second block.

I wondered if the Administration is considering, or people in your position and your policy advisory role -- I know Mr. Alm's office is primarily responsible for this -- have ever considered a life-line rate concept as a conservation rate concept instead of as a social policy concept.

MR. NORDHAUS: When we were working on the National Energy Plan a year ago, inverted rates and the so-called life-line rates were among the concepts we discussed.

At that point, there was a good deal of argument in favor of it, principally on conservation grounds. The inverted rate could be an excellent conservation tool.

Eventually, the Administration's position was to permit departure from strictly cost-based rates in order to permit an inverted rate or life-line rate for residential users.

However, they did not at that time advocate that it be required as a Federal standard.

MR. BAUER: You can get life-line rates on any of a potpourri of motivations. One of them might be to assist those with explicit economic needs who are incapable of dealing with the rising costs of energy -- which are going to keep rising under almost any conditions.

Another might be to promote conservation on the theory that perhaps the first block of use is an unnegotiable use. Just by living, you will have some basic requirements; for requirements beyond that, you perhaps should be feeling some very high disincentive to that usage.

The unfortunate part of playing too artistic with the rates is that we depart from any kind of discipline whatsoever in the setting up.

Since the energy problem in all of its dimensions is so dominated by economic mischief, and has been years in the making and will be years in the undoing, I am very hesitant, as a personal predicate, to depart from a cost basis as being a legitimate way in which rates should be set, notwithstanding the fact that public utility commissions have a broader social responsibility to fulfill, which may lead them to make those departures.

That is fine. But, such departures ought to be conscious and deliberate, because it is very, very difficult, once those kinds of departures are introduced, to understand in advance the kind of mischief that is being sown thereafter in the way electric utility systems are built and deployed and in how electricity is used in the economy.

MR. DE LOSS: What I am getting at is; you could aim for a cost-base price in the initial block, and then start talking about the higher than cost-base price in the second block.

There is a good analogy for this -- another metered service to the householder and businessman -- and that is delivered water.

In California, during the drought last year, they had substantial success with the water-rate structure.

MR. BAUER: You could set up a lot of penalties for the use of water, if you had an overriding reason to conserve water, for example.

But, I think that you are establishing a penalty system that says, basically; the issue here for the consumption of this commodity, as distinct from anything else, will be not so much to pay what it costs, as the general index, but instead to pay what society deems it is worth.

MR. DE LOSS: Of course. It is something like the speed limit on the highways.

MR. BAUER: I am just not sure that society is wise enough, or that any group is omniscient enough to be able to say how much, absolutely, electricity should be worth. It just takes us into a whole domain of social value and moral purpose that, I think, is almost unreachable by any kind of analytical inquiry.

MR. DE LOSS: I just want to leave you with the thought, especially as intervenors, that if you are going to argue for some of these rate reforms as conservation measures, and not take this thinking a step further in talking about some kind of inverted rate structure, we may not actually be getting some of the conservation effects that you are claiming for the rate reform, because, as I said, the two most obvious rate reforms -- the end of discount rates and time-of-day pricing -- which will tend to discourage excess capacity, will tend to hold down rates for the small users, versus the business-as-usual course.

If we went on the way we have been going, those rates would rise faster than if we would get the reforms. It seems to me that this undercuts the strength of your arguments, if you claim conservation effects that are not going to take place.

MS. HOBSON: Okay. Thank you, Garry.

All right, Mr. Davis.

MR. DAVIS: My name is Allen Davis. I am an attorney with the Energy Project of National Consumer Law.

Mr. Bardin talked previously today about the importance of the advisory guidelines that were promulgated by the Department in the event the National Energy Plan became law.

My question is very simple. What specific mechanisms will the Department have in order to ensure proper citizen, consumer, and environmental input into those advisory guidelines as those guidelines are being developed by the Department; as opposed to reacting to those guidelines after they are developed by the Department?

MS. HOBSON: Hazel, do you want to speak first?

MS. ROLLINS: Yes. With Tina's office, and using our own office, our plan is to deal first with the concepts. In other words, we will not merely develop draft regulations and then finally issue them to the public, and only issue them through the "Federal Register."

What we plan to do, and, again, Howard can speak to this more fully, is to develop our concepts in a very thoughtful process, which goes from the first review of the legislation, development of some overriding policy questions which must be addressed by the Secretary, to the extent that he has some discretion.

At that level, I would expect, and would demand, that consumer and public interest groups be involved, including some final tuning of those concepts after the Secretary has made his decisions.

At that point, I would expect consumer and public groups to be involved for a final sit-down, to cut off before the drafting of the regulations themselves.

Now, our General Counsel will, of course, tell us we cannot use people on the outside, in an advisory capacity, to draft the regulations themselves.

In my view, I can live with that mandate, simply because, before you settle on the regulatory language, you have got to understand the concept you are heading for.

At that point, we would then go to either a notice of inquiry and a public hearing on the record, or to some final negotiation within the Department itself, as regards to which suggestions we will take or not take.

At that point, of course, we have opened up for public hearing. To the extent that private or public groups want to come in and raise a particular issue or portion of the legislation for our consideration, we are open to that.

Again, because the ERA is new, this is a process which you will have to let us begin. If you find that we are not holding to that philosophy, then I expect not only to hear from Tina, but I expect to hear from you. We do not intend to close you out.

MS. HOBSON: Do you have a followup?

MR. DAVIS: No. Thank you.

MS. HOBSON: I once had the privilege of working for Hazel, and she still tends to delegate some things to me.

James Flug, Energy Action.

MR. FLUG: One of the most direct ways that people in a particular locality can do something to retard the increase in utility rates is to change the demand forecast for that area.

To do that, of course, involves a concerted conservation and alternative technology effort. Where in the Department can people in a locality, who want to do something about the conservation and alternative technology on a local basis, go for help? Is there someplace right now where you can go for a package, for a smorgasbord, for an agenda, menu, of things that local groups can do right now, for technical assistance, for funding, for expert panels to come and do energy assessments for a particular locality? Is there one place for that sort of service to local groups and coalitions of local groups?

MS. HOBSON: That is a good question, Jim.

MR. HUGHES: Jim, let me try a response: I think, at this point, there are two places where they could try, perhaps neither of them fully satisfactory.

One of them is the complex of outreach activities that I have some responsibility for; I think, particularly, Tina's area of consumer affairs and community participation. That is a non-technical area.

Our mission in the scheme of things, in the Department, is to find the place where people with those sorts of questions should go.

The technical knowledge, in an applied sense, in an operational sense, by and large, is in the Office of Conservation and Solar Applications of the Department of Energy.

Obviously, they could and should be free to go directly to people in that division, if they knew where to go. If they are not sure where to go, we will try and find them the right spot.

MR. FLUG: Can I follow up on that, Tina?

MS. HOBSON: Yes.

MR. FLUG: I think Tina will be the first person to say that she is certainly not staffed to provide that type of service in a comprehensive way, and that there is no pre-existing package or procedure to meet that kind of need.

MR. HUGHES: That is correct.

MR. FLUG: I don't think you can point to anybody in conservation or solar that is sitting there waiting for people to walk in. I think it would be giving a misimpression to the readers and the listeners, at this point, to say that there is somebody waiting there.

Is there any intention of setting up some sort of function like that? What can we do to accelerate the setting up of some sort of function like that?

I guess, just for the record, is there some explanation for why it is taking so long for conservation and solar to get organized?

MR. HUGHES: I will try to deal with the first series of questions, at least, and comment somewhat on the last part.

First, there is nobody in our shop or in conservation and solar waiting. Neither is there a kit of information or tools which somebody would pass out, if that somebody, he or she, were waiting.

As to why we don't have such a kit, I think the answer lies in the time it has taken us, perhaps undue time, to get ourselves together, including the solar and conservation area.

I think the answers also lie in the complexity, at least as they appear to me, of the problem of giving right answers to some of the questions; answers that are consistent with the best technological information that we have.

You asked the question of how you could help us. I think you are. You have helped in this regard rather effectively, in getting us to do things that we should do and perhaps getting them done faster than would otherwise be the case.

We have been concerned, and are doing some things within the Department with respect to consumer information in general, which would not be limited to this area. But, answers to far more simple questions than the ones you have addressed are not as easily forthcoming as they should be from a Department of Energy which has the functions which we have.

Under the leadership that our enterprise has provided, we are trying to get a better grip on the problem of how the facilities of the Department of Energy, as they have been assembled from predecessor agencies, can be mobilized to address technical problems in a much more technical fashion, so that consumers, and others who are not experts, technicians or scientists, can handle the information.

It seems to me that the development of kits or pamphlets, or materials of one sort or another inform, and in terminology that is suitable. As part of the answer to that, we simply do not have enough of them. We don't have the ones that we should have at the present time.

MS. ROLLINS: I just want to make a comment, because, as anyone who knows me well notices, I have been sitting here fidgeting beyond words.

I think that we have it in the Department, and we have lost our focus. There used to be, and I am told it is still within the Office of Conservation, a group which now has a lofty bureaucratic title, but which we used to call the "workshops" group.

In general, we would take a request from a member of the public to put together a public seminar, a series of seminars, on "X,Y or Z" subject.

That group -- and, Sam, this is probably something that you would want to look into since, earlier on, you had suggested you might want to take a hard look at it -- would then tap the resources of this very large Department.

As an example, the old ERDA group has probably more graphics, more handouts, more "Howdy-Doodies" than those of us at FEA had ever seen; and very skillfully, beautifully, and professionally prepared.

I want to spend some more time thinking this through, because it is there. It is just that, first of all, you don't know where to come to ask for it. I know that there are five or six people, who have probably got lots to do now, but who could package, depending upon your requirements, a seminar, or a "how-to-do-it" show, on almost anything.

Now, in addition, we have lots of people who are under contract to us in the new Department who are doing various things in appropriate technology, community implementation of conservation programs, and probably many more sophisticated things on the ERDA side that I do not know about.

I think that your question is well put. In addition -- and I am going to stop in a minute; obviously, I must miss all of this, since I have to talk about it -- in each of the ten Regions, there is a consumer affairs person.

So, to the extent that the need can be identified at a State or regional level, I think we could begin to think, Sam, about how to use that group of people to package these kinds of opportunities.

MS. HOBSON: Okay. I would like to pitch in here and state that, I think, Jim at the last briefing uncovered the fact that we were not videotaping the entire session, just the first hour, and made the suggestion that we videotape it all. We appreciate that, and we are doing so.

I think that you uncovered today a second extreme need. I certainly could not answer your question; and I should, being in the consumer office.

I think that we immediately need to develop a kit of informational

tools that would help consumers effectively deal with and understand public utilities, including the 205 State Consumer Office funds and including the technical assistance that can be provided.

I don't think that Jim is talking about seminars or workshops. I think he is asking, "Do we have some guidelines for citizen groups that are interested in effectively dealing with and understanding public utilities?"

Is that correct, Jim?

MR. FLUG: Yes, and you went beyond that.

As you know, here in the District, we are, ad hoc, trying to make some sort of effort. We have a group, a willing group, who want to do something in the conservation alternative technology field in connection with, as it turns out, the utility proceedings -- the goal would be to change the demand forecast for the District.

MR. HUGHES: Let me take a special whack at it, Jim. You have two or three different answers here from different perspectives.

It seems to me the message of all of us, both Hazel and I, and perhaps Tina, is the same. I have said before, in a different context, that I think the energy information problem is very similar to the Congressional information problem. The problem really is not an absence of facts; the problem is how you organize the information in a readable fashion, in a timely fashion, and get it to the people who need it.

We have information running out of our ears. We have a Technical Information Center in Oak Ridge with around 200 people in it.

There are other, lesser, enterprises, and maybe some greater, for all I know.

We need to develop tools for tapping these systems and translating all of the information into the kinds of forms that you are suggesting. We are behind. We ought to get on it.

MS. HOBSON: And how about, in our transcript, putting in a few names and phone numbers? That would be helpful, as a first start.

MS. ROLLINS: Fine. Douglas, also, is just saying "Please." He would like to leave his phone number for the record. I will take care of that, yes.

MS. HOBSON: All right, let's put your phone number in for the record right now.

MS. ROLLINS: For the ERA, the number for Hazel Rollins is 254-7500; the number for Utility Systems, which would be Dr. Doug Bauer, is 254-9782.

In many instances -- and I cannot believe that you are just looking for guidelines. I really do not believe that, Jim; but that is the kind of information we do have.

MS. HOBSON: We will try to organize it, and put some things in the transcript.

Are there any others?

Yes, the two people right there. Either one first.

MR. HUGGINS: My name is Richard Huggins, from the Eastern Oregon Community Development Council.

The energy portion of the fixed low-income budget is rapidly ballooning, and causing the poor to reduce such discretionary budget areas as food.

While the low-income people certainly appreciate the need for caution in adjusting the utility rate structures, what is the Administration's interim policy to alleviate this rapidly growing impact on the poor while you are agonizing over rate structure adjustments in the next several years?

MS. HOBSON: All right, how are we going to lower the impact on the poor?

MS. ROLLINS: Well, the National Energy Act, as, in point of fact, has been pointed out, takes time to implement.

I see a friend there from CSA*, in the back. If I am not mistaken, this past week, I think, the Congress, at the initiation of the Administration, passed, for the second year, a crisis intervention funding for CSA.* The idea being -- and the amount is again \$200 million, as

* Community Services Administration.

it was last year -- to provide some support for handling the gap, or the shortfall, between what energy costs are to the poor and the elderly and what, in fact, their incomes can provide.

Now, none of us here pretend that that is the ultimate answer; but, that, sir, is your stop-gap.

MR. HUGGINS: Are there any other programs besides the crisis intervention program?

MS. ROLLINS: Well, now, I have to harken back -- Miriam, in our office, can do a much better job at this than I can.

I know that HEW, with some of its assistance programs, has come up with a new indicator for quantifying fuel costs, and has speeded up the system by which they quantify the impact of inflation, so that payments can rise more quickly to meet the pushing increase in costs.

I have not been into this in about a year; but I think that is about all we are doing just now -- oh, yes, somebody has just reminded me, and I should have remembered, myself -- there is, of course, the insulation program which receives funding this fiscal year from both CSA and the Department of Energy to insulate the homes of the poor and elderly.

MS. HOBSON: So, what you are saying is that special assistance programs, rather than utility rate structuring, are going to take care of this need?

MS. ROLLINS: For the interim period.

MR. HUGGINS: Thank you.

MS. HOBSON: The other gentleman.

MR. JERNIGEN: (Office of Consumer Affairs, HEW) I am Kurt Jernigen. There has been a lot of talk this morning about the benefits of public intervention in local utility proceedings.

That intervention requires not only money, but it requires information. Yet, FERC is presently considering a proposal to stop publication of the utility fuel cost data that the utilities report on Form 423. Is this not an inconsistent decision on the part of the Commission?

MR. NORDHAUS: It is not inconsistent until we adopt the proposal. The proposal is one that the former Federal Power Commission initiated. It is one which has some support, for instance, within the Administration. The Antitrust Division of the Justice Department apparently is supporting the proposal.

I cannot say, at this point, how the FERC is coming out; but I should point out that the mere fact that we are considering it does not mean that we are going to adopt it.

MS. HOBSON: All right. We'll have to wait to get an answer to that one.

Yes, the gentleman over here.

MR. TAUBMAN: I am Elliot Taubman, National Consumer Law Center of Boston. There were three questions that were on the original list of questions. I think you might try to make a preliminary stab at answering them. That was the last question in Number 20, which related to support for coordination of the ERA Intervention Office with local consumer citizen groups and using the combined resources, to be more effective, perhaps, in coordinating strategy.

The other question was with regard to abrupt termination in the National Energy Act. The current version of the conference report requiring --

MS. HOBSON: You only get one question; which one do you want to pick?

MR. TAUBMAN: I would pick the abrupt termination, because that is the --

MS. HOBSON: What is the number?

MR. TAUBMAN: That is Number 35.

MS. HOBSON: All right. Do you want to read the question and get it on the record?

MR. TAUBMAN: Number 35: "In light of the Congressional conference agreement for States to consider procedures which prohibit abrupt terminations, what procedures will DOE recommend to the States to implement this provision if it is signed into law?"

MR. BAUER: The first thing that DOE will do is try to consider alternatives; that is, what motivated each so-called "abrupt termination."

Now, there are some sort of alternatives in the way of security deposits that might be set up, instead of having these kinds of interruptions; late payment charges of one sort or another that can be permitted, instead of, again, simply executing the termination; extended payment agreements, financed in some kind of joint way between the utility and the customer, so that life and limb will not be threatened imminently; customer information criteria; metering criteria; and so on.

I think that the consideration that we would be wishing to ensure in regard to terminations and local interruptions is that, somehow, due process is preserved; that this just does not happen off the wall, that people would be without power; that, in fact, it would become part of an explicit process of discovery and debate within the local public utility commission as to the actions taken by a utility in the event of a customer's inability or unwillingness to pay for the cost of the service that he has required.

The ultimate decision as to what would be permitted or not would rest with that commission's determination on the merits.

MS. HOBSON: Do you want to follow up?

MR. TAUBMAN: I understand that the due process consideration may be a matter of constitutional law. Referred to there in the question is a matter of policy -- contrary, perhaps, to what the gentleman from Maryland was saying -- that you look at utility service as a basic necessity of life and, therefore, not to be terminated unless there really are strict safeguards.

MS. HOBSON: Any further comments from the panel?

MS. ROLLINS: Yes, I have a comment, Elliot.

I have an advantage over Doug, as I know and have worked with you. My comment would simply be that I know, in your responsibilities for representing low-income consumers and working with the legal services agencies, you have had quite a great deal of experience in this area.

We would hope that you would give us some guidance.

MR. TAUBMAN: Thank you.

MS. HOBSON: Thank you very much.

We will take two more questions.

The gentleman in the back.

MR. FOX: My name is Howard Fox. I am with the Consumer Advocacy and the Energy Crunch. I am the project coordinator. That is a New York Statewide project, funded by the Community Services Administration.

Forgive me for being a little conventional, but I heard, earlier in the discussion this morning, talk about the fact that wholesale electric rates affect only 20 percent of the rates set in the country.

In New York State, there is a proposal by the seven investor-owned utilities to form a joint holding company, known as "ESPRI," the Empire State Power Resources, Incorporated.

This joint holding company would, in turn, sell power to individual utilities, at wholesale rates, which would then distribute the power to residential and industrial customers, and so forth.

If that proposal were to be accepted -- and it is now pending before a variety of State and Federal agencies and commissions, the wholesale rate between ESPRI and the local utilities would be set at the national level; by FERC, I assume.

My question is: in view of the Congress' position on the proper Federal role in rate making, what is your position now -- any panelist -- on this kind of enterprise by investor-owned utilities?

MR. NORDHAUS: Well, could you sharpen your question up a little bit? Basically, a regulatory agency like ours, sir, takes the industry as it finds it and tries to regulate it.

It has a fairly limited role as far as the question of structure or ownership of the entities within the industry.

Is the question, "What would they do if they filed a tariff with us?" or "Are we going to intervene in Congress to try to encourage or discourage this enterprise?"

MR. FOX: Well, it just seems, to me, that the talk this morning has been pretty much along the line that it is up to the individual utility commissions to determine rate policy, and that your position is an advisory and or, perhaps, a little stronger; but, if ESPRI is, in fact, approved, then -- at least with respect to New York State -- a great deal of the rate-making authority will rest on the Federal level.

It would seem that the State would be limited in its attempt to implement any kind of rate reform.

MR. NORDHAUS: Well, first of all, even if ESPRI were formed, the Commission would regulate only ESPRI's wholesale sales.

The sales at retail, to individual consumers and to industrial consumers, would continue to be regulated by the State.

There is a possibility that the State regulation would be less effective, if FERC's regulation of the ESPRI were not effective; but FERC will, we hope, be an effective regulatory body and will do at least as good a job as the New York State Commission would do if ESPRI had been State regulated.

MS. HOBSON: Sam, did you want to say anything about that?

MR. HUGHES: I was just going to comment that I think one would almost have to consider these sources or efforts one at a time.

I am aware, for example, that, in the Northwest, there is a somewhat similar movement, perhaps with somewhat different motivations there.

I think Mr. Bardin referred earlier to the historic dependence of the area on hydropower and the growing share, now, of much higher-priced steam generated power. Some of the States in the Northwest are considering legislation, some of it sponsored by the political leadership, to glue together what amounts to a public power body; a different set of motivations, probably, than the New York State one, but, it seems to me, again indicative of the complexity of both the machinery and the motivation.

We need to look one-at-a-time at these, to figure out what should be done, what kind of advice the FERC might give, if it is in a position to give advice, or regulation, if it is in a position to regulate.

MS. HOBSON: Thank you, Mr. Fox.

Is there one last question?

Have all questions been dealt with?

Yes, sir.

MR. SLATER: I am Stan Slater, Virginia Citizens' Consumer Council. The cost of fossil fuel has basically been stabilized; therefore, how can we eliminate the fuel adjustment clause? What does DOE think about this?

MR. BAUER: I am struck by your discovery that the price of fossil fuel has stabilized.

MR. SLATER: Basically, I said.

MR. BAUER: Maybe I do not know how you are using "basically"; but, for example, if the current coal strike settlement that has been agreed to, but now is out to the rank-and-file, for 37-percent increases in labor rates were to take place, I think that it is inconceivable that, over the term of that contract, the price of coal is not likely to inch somewhat upward.

MR. SLATER: You have taken that one point. I am saying that, up to this point, we have found that the price -- if you check with the coal operators, if you look at the cost of oil, it has basically stabilized at this point; yet we still have huge fluctuations in our monthly bills.

MR. BAUER: Let me talk about two things. First, it will be perhaps stabilized for but one shining moment, and then it will start moving upward again; but let us assume the predicate and let us assume that it is stable. There is a story to be experienced in this country after this coal stike, on the price of electricity paid by folks in the Midwest who have been used to coal and who have paid for one tremendous amount of oil-based electricity.

The incapability of being able to have the cost associated with that emergency-bought power passed through to those who had the benefit

would be catastrophic on the utilities, not just in the Midwest, but, as well, in those surrounding the Midwest who have been central in the ability to maintain service, quality service, to millions of customers.

The mechanism for that is the purchased power clause. With respect to the fuel adjustment clause, it strikes me that the determination that one would want to make on that is: is it, in fact, true that the costs passed through to the customers were those fuel costs which they accrued and was there a reasonable bargaining process by which those fuel costs were developed?

MS. HOBSON: Do you want to follow up now?

MR. SLATER: No. This gentleman has something he wants to add.

MR. HUGHES: No. We are a little past 12:00, which is our closing time. If you were through, I was going to close out.

MS. HOBSON: Are you sure that you did not want to ask a followup? Were you going to say something Bob?

MR. NORDHAUS: It seems to me that there are some problems with the fuel adjustment clause. I think the fact that those problems exist has been reflected in what Congress is doing in the energy legislation.

The tentative conference agreement directs us, for instance, to re-examine our entire policy with respect to fuel adjustment clauses. We would probably do this in any case, but we will certainly do so if the legislation becomes law.

I think what Doug is pointing out is that there are circumstances where very good arguments can be made for some type of either automatic pass-through or expedited rate increase. For example, there may be cases where a utility faces a very steep increase either in its purchased power or in the cost of fuels it purchases.

The problem is, I think, to design a fuel adjustment clause that gives the utility some degree of protection in these circumstances, while still retaining incentives for it to purchase fuel economically and to use it efficiently. I think that is the task that Congress has directed us to carry out; namely, to redesign a wholesale fuel adjustment clause in such a way as to carry out these objectives.

In addition, if the legislation becomes law, the States will have a similar obligation.

That is all I have.

MS. HOBSON: Thank you.

MR. HUGHES: Thank you, all, for your participation and your courtesy here.

If there are questions which you have not had a chance to ask, we can make arrangements for you to read them into the record, and we will answer them for the record.

Once again, thank you. Perhaps we will see you in March.

(Whereupon, the following questions were read into the record.

See Appendix B of this transcript for the answers to these questions.)

QUESTION OF JOHN WEIDLEIN, NATIONAL HOMEOWNERS ASSOCIATION:

Assuming you are an individual American homeowner wanting to actively halt a proposed utility rate increase to your home, what steps, intervention, would you take to accomplish your goal?

QUESTIONS OF RUTH CAPLAN, SIERRA CLUB, RATE STRUCTURE COMMITTEE:

What are DOE's current long-range goals with respect to the rate of growth in electrical demand?

In what ways is DOE working to reduce the electrical growth rate by means of rate reform?

The "Connecticut Peak-Load Pricing Test, Final Report," issued May 1977, and partially funded by FEA, shows that the largest residential users increased their energy consumption while reducing their contributions to coincident system peaks. The report suggested that, in the long run, peak-load pricing would encourage the increased use of electricity. What pricing mechanisms would DOE recommend to prevent growth in energy use with a peak-load pricing rate structure?

Is DOE studying the design of inverted rates, so as to maximize energy conservation within existing utility revenue constraints? What recommendations have you developed in this regard?

Does DOE have any plans to fund experimental implementation of rate structures based on the principle of marginal-cost pricing, where margin is defined as the current cost of the next unit?

Are any studies being conducted of the conservation potential of long-run incremental cost (LRIC) pricing of electricity?

In what pilot utility programs under Title II of ECPA is district heating being promoted?

Are any studies underway or planned to determine methods for encouraging cogeneration by industries and utilities?

QUESTIONS OF WILLIAM TUCKERMAN, WORCHESTER COMMUNITY ACTION COUNCIL, INCORPORATED, ENERGY PROJECT DIRECTOR:

Does the Department of Energy intend to assume a leadership role in moving towards a more just distribution of total energy costs through a restructuring of the present rate scales?

Does the Department of Energy intend to monitor the insulation industry to assure that the public can obtain safe and efficient materials at a reasonable cost?

QUESTIONS OF RON LANOUE, STAFF ASSISTANT TO SENATOR CHARLES H. PERCY:

Will DOE interpret the size requirement to exclude single-family dwelling size systems, such as windmills and photovoltaic arrays?

Under what circumstances will DOE provide aid to plaintiffs? Will the aid involve DOE intervention, funding or legal and technical assistance?

(Whereupon, at 12:05 p.m., the hearing was closed.)

Appendix A

The following are the questions submitted by consumer and public interest groups prior to this briefing -- and the answers to those questions as researched and prepared by appropriate Department of Energy program offices.

QUESTION #1: Is it possible to structure utility rates so that general cuts in usage and individual cuts in usage will result in reduced bills? Is it necessary that consumers be caught in the bind of having high energy bills because they use energy or having high energy bills because the companies need revenue?

ANSWER: The Department of Energy believes that rates should be based on the principles of cost-of-service, equity and efficiency in the production and use of energy. Such rates will best minimize the cost of providing electricity in the long-run.

In order to answer this question, we must first distinguish between fixed and variable costs. Fixed costs such as depreciation do not vary with the usage level. Variable costs such as fuel costs will decline as usage declines. In the long-run all costs can be considered variable since the utility can adjust its construction program to meet the new level of usage. If consumers use less energy, the variable costs of providing this service will decline. However, the fixed costs will not immediately decline and the fixed costs

per kwh will rise as a result of the usage decline. This is a short-run condition. In the long-run, the amount of fixed plant can also be adjusted and as a result, consumers will pay less for the energy they use if they conserve than they will if they do not conserve.

Somes types of conservation will lead to greater reductions in fixed costs and hence, lower bills. Reduced usage during peak periods is one example. DOE will encourage utilities to structure rates so as to provide incentive to consumers to conserve in the most cost effective manner.

QUESTION #2: What will be DOE's position on lower rates for basic residential use when intervening in a local rate structure case? Under its authority to participate in State utility regulatory proceedings, will DOE recommend lifeline rates? If so, what kind? If not, why not? What utilities are currently using lifeline rates (nationally)? What are the specific lifeline rate designs that are being used or have been rejected (nationally)?

ANSWER: In general, DOE has supported the adoption of cost-based rate structures in local utility proceedings. In cases where the issue has arisen, our investigation has shown reduced rates for basic residential use not to be justified by the underlying costs. However, if it can be shown, in specific circumstances, that lifeline rate structures

would be consistent with cost-based utility rate making, then DOE would support such a rate. Whether DOE will advocate such rates, then, can only be determined in light of the system cost characteristics in specific rate proceedings. Rates that significantly depart from the cost-of-service principle tend to undercut basic national energy objectives.

Lifeline rates of some form have been adopted to some extent in nine States (Arizona, California, Colorado, District of Columbia, Georgia, Illinois, Michigan, Pennsylvania, and Rhode Island). The specific rate designs in effect vary considerably nationwide, with some including an income test and others a flexible definition of "basic residential use." California utilities, alone, feature more than 200 separate lifeline schedules. Similarly, a wide variety of lifeline proposals have been rejected from State to State. DOE is aware of no single source that documents each of the specific designs that have been considered nationally.

QUESTION #3: Have any studies been made to determine the load factor of residential customers without air conditioning? Or electric heating?

ANSWER: There currently are two sources of data relating load factor to appliance types. The most comprehensive is

the Annual Report of the Load Research Committee of the Association of Edison Illuminating Companies (AEIC).

This document contains load studies performed by member companies with regard to electric air conditioning, electric hot water, and electric space heating. In addition, AEIC and the Electric Power Research Institute have just completed a joint study of load factors for customers with heat pumps.

Load factor studies are also conducted by a number of individual utilities which do not report their results to AEIC. For example, the Public Service Electric and Gas Company of New Jersey recently computed load factors for customers with and without air conditioning. Toledo Edison has performed load studies for customers with hot water heating. Unfortunately, these studies are typically not made available to the general public.

Finally, DOE will publish the results of its electric utility demonstration projects. It is anticipated that these projects will yield load factor data for several types of residential customers.

QUESTION #4: What are the most successful types of equipment for measuring both demand and consumption for purposes of implementing peak-load pricing for each class of customer? What are the actual costs of equipment used in implementing time-of-day rates, including installation and operation? What are the various types of financing methods being used or proposed to finance time-of-day equipment and installations?

ANSWER: Peak-load pricing requires the capability to record kwh consumption -- and possibly kilowatt demand -- data by time-of-day. The following types of meters are presently being used:

- (1) 2 or 3 register "conventional" meter with time clock or remote activation. (Cannot measure kw demand.)
- (2) Magnetic tape recorder.
- (3) Newly developed package using "conventional" meter with a solid-state, programmable micro-processor.
- (4) Two-way communication and control system with remote metering capability.

The costs, of course, depend upon the type of equipment used. The costs for a multi-register watt-hour meter range from approximately \$60 to about \$200 per meter for the equipment alone. Installation and operation costs

may typically be comparable to the equipment costs, although insufficient data is available to be confident of these estimates.

In addition, the more complex alternatives, (3) and (4), above, can provide increased flexibility for changing rate structures in the future and additional benefits not ascribed specifically to metering. Thus, for instance, the component of costs assigned to metering for a \$200 per point two-way system may be under \$100.

The magnetic tape recorder (2) costs approximately \$500 with high operating costs so it is clearly an uneconomical alternative except for large industrial or commercial customers. It should be noted that many of these users already have such metering installed.

Two types of financing arrangements are generally available to State regulatory authorities:

- (1) Utility-financed through normal regulated means, just as the cost of present meters is financed, through inclusion in the utility's rate base.

- (2) Customer-financed with the incentives of reduced energy costs and possible tax benefits. If the utility has sufficient incentives built into its time-of-use rates, then the customer may choose to invest in equipment that allows him to avail himself of the benefits of the rates. Financing may still be with the help of the utility and its periodic billing function.

QUESTION #5: What data are available concerning consumer behavior--including energy conservation realized, shifting from peak and electricity of demand--as a consequence of time-of-day pricing?

ANSWER: To date, DOE has performed preliminary statistical analysis of initial data submissions from DOE-sponsored demonstration projects in Arizona, Arkansas, Connecticut, Ohio, and Vermont. Most of these findings have been reported in the FEA publication entitled "Interim Report on Electric Utility Rate Design Proposals," February 1977. Further, DOE is currently preparing to conduct, under contract, a comprehensive statistical and econometric analysis of data from all of DOE's electric rate demonstration projects.

Generally, the findings to date reveal that residential customers, irrespective of their level of consumption,

respond to a time differentiated rate by shifting their consumption from peak to non-peak periods. The findings have also suggested that significant -- non-zero -- price elasticity of demand for kilowatt-hours exists in peak, off-peak and shoulder periods.

In addition, a number of individual utility companies have undertaken studies, on their own, investigating responses to time-of-day rates. The results of these studies, however, are not generally available as yet.

QUESTION #6: Does a construction work in progress (CWIP) provision in utility rate structures adequately apportion costs to consumers? For example, what benefit do senior citizens receive from their increased rates if they are dead by the time the promised lower rates occur?

ANSWER: The inclusion of construction work in progress (CWIP) in the rate base allows the utility to charge ratepayers for the interest costs of the funds tied up in new plant under construction. The alternative to CWIP accounting is to capitalize these interest charges, i.e., to add them to the total cost of the plant and to recover them over the service life of the facility. This method is known as Allowance of Fund Used During Construction (AFUDC).

By its very nature, CWIP accounting cannot precisely charge power plant capital costs to consumers in direct proportion to the benefits received from the plant. The case of a senior citizen who dies before plant completion is an extreme one, but it does clearly demonstrate the point. Another source of distortion in cost apportionment arises from the mobility of our modern society, in which typically 20 percent of the households change residences each year, about one-fourth of which also change utility companies. Even in the unlikely case of a consumer being served by the same utility for 35 to 40 years, equivalent to the life cycle of a nuclear or large fossil steam plant including construction lead time, it is still not clear that he would benefit from CWIP accounting except under some very restrictive assumptions about his time value of money and his timing of electricity usage.

Proponents of CWIP point out that it improves the financial position of the utility, increasing internally generated cash flow, leading to improved coverage ratios and a decreased reliance on external financing. The result is a decrease in the capital costs incurred by

the utility, producing savings which may ultimately benefit some ratepayers. Although rates will be higher in the near term if CWIP is included in the rate base, proponents argue that rates will be lower in the future.

Opponents of CWIP accounting argue that it is inequitable to charge current customers the cost of providing future service, which may be of little or no benefit to them.

In addition, they argue that allowing a utility to earn a profit on plant before it is completed eliminates important disincentives to the construction of unneeded capacity. Finally, it is asserted that the capital market is a more economically efficient vehicle for raising investment funds than requiring the ratepayers to become involuntary investors in their utility company.

Based on careful consideration of all these arguments, in 1977 the Federal Power Commission decided only to permit CWIP accounting for pollution control and coal conversion expenditures.

The DOE is currently studying this complex issue further.

QUESTION #7: When it intervenes in State regulatory commission electricity rate setting or rate structure cases, will the Department support:

- a. the abolition of residential customer charges;
- b. mandatory residential time-of-day pricing;
- c. optional residential time-of-day pricing;
- d. inverted rates? If so why? If not, why not?
- e. penalties for excess generating capacity and associated over-construction of generating plant;
- f. construction of relatively small generating plant to prepare more flexibly for variations in load growth?

ANSWER:

- a. Abolition of residential customer charges.

In providing service to a customer, a utility incurs a number of costs that (a) do not vary as a function of energy use, (b) occur close to the customer end of the utility system, and (c) are readily assignable to a given customer or customer class. Examples of such costs are "drop lines," meters, meter reading, and billing. These costs are generally referred to as "customer costs," and constitute a legitimate cost category. Consistent with the principle of basing rates upon costs, customers should be charged those customer costs for which they are responsible. DOE would also recommend that such charges be separately identified on the customers bill.

b. & c. Residential time-of-day pricing.

It is not clear whether mandatory time-of-day pricing is appropriate for small residential customers, since the cost of special metering might offset the savings at low usage levels. Therefore, DOE has not advocated mandatory time-of-day rates for small residential users. The implementation of such rates would generally be cost-effective for larger residential users (say, those averaging more than 1000 kwh per month during the peak season). For smaller users, optional time-of-use rates, however, may be appropriate.

d. Inverted rates.

Inverted rate structures would increase per unit kilowatt-hour charges for successively higher consumption levels. There is little evidence, however, that inverted rates accurately reflect the cost of providing utility service. In such cases, DOE would therefore not support the adoption of rates of this form. Although inverted rates tend to encourage conservation on the part of the larger users, they would similarly encourage greater consumption by smaller users. They are also likely to increase the use of competing fuels such as oil -- particularly if

larger users are driven to self-generation. The possible impact of inverted rates in causing deterioration of electric utility load factors, by penalizing many customers whose loads have a relatively favorable load factor impact, must also be considered.

e. Excess capacity penalties.

Excess capacity on a utility system or cost overruns incurred by a utility in plant construction are not necessarily nor always the fault of an electric utility company. Unforeseen circumstances or contingencies, customer conservation, economic recession, double-digit inflation can all be responsible for these circumstances. It would therefore seem unfair to penalize a utility for planning capacity additions which prove to be unnecessary due to unforeseen circumstances or where the regulatory commission oversees and approves capacity expansion.

On the other hand, capacity expansion and particular construction programs are in many instances uniquely subject to the control of the utility. In these instances it may be appropriate to consider penalties or alternative regulatory treatment which would assign the additional or unnecessary costs on construction to the utility shareholder.

f. Smaller generating plants.

The interests of the nation and the individual consumer are best served by optimally-utilized efficient baseload plants. This requires careful load forecasting, load management, and some mix of large and smaller plants is indicated under most circumstances. DOE would not at this time advocate a heavy reliance on smaller units unless economically justified. In recent years, small generating plants have generally been less efficient than larger units, and feature high running costs, and tend to burn the wrong fuels (oil or gas). However, where the smaller units rely on renewable or alternative energy forms or are economically justifiable consistent with national energy goals, DOE will support such plants.

QUESTION #8: What information regarding costs-of-service will FERC recommend be gathered by utilities and made available to the public?

ANSWER: It would be premature to respond fully to this question at this time. The DOE requirements for gathering and reporting cost-of-service information is likely to have a significant impact on utility regulation, and these requirements will be carefully developed, with full opportunity for public comment.

It is reasonable to assume, however, that the requirements might require at least the following information for each covered electric utility:

- o total costs, current year, by cost category
- o total costs, future test year, by cost category
- o system load curves (annual, monthly, daily)
- o load duration curves with bulk power supply
(dispatch of strategy, purchased power)
- o system lambda (short-run marginal running costs)
- o ten-year demand forecast and capacity plan
- o customer (or class) load curves, sales,
revenues, number
- o method of allocating each cost category to each
customer (or class)
- o definition of each customer class
- o existing rate schedules
- o the desirability of alternative rate forms

This information would enable DOE, and interested third parties -- the information will be available to the public -- to make a reasonable determination about cost-of-service (for the system and each customer class), about any cross-class subsidies, and about the desirability of time-of-use rates.

QUESTION #9: List all utilities that now have load management programs in effect and indicate the load growth experienced for each during the existence of the program.

ANSWER: Load management programs of one form or another have been put into effect by a number of U.S. utilities. In a broad sense, load management involves shaping the loads -- to flatten out the peaks and valleys of such load patterns -- presented to a utility's generators by:

- o direct methods (e.g., utility load control, interruptible industrial contracts)
- o indirect methods (e.g., customer response to innovative rate design, conservation, voluntary modification of use patterns, and customer-owned storage devices)
- o supply management (e.g., utility-owned storage devices, pumped hydro, interconnection and pooling).

In the past, most utilities managed loads in some respects using methods such as time switch control of water heaters, interruptible industrial contracts and power pooling and interconnection. Still, in the decade ending with the oil embargo (1963-1973), the annual rate of peak growth exceeded kwh growth by 0.7 percentage points. (8.0 percent for peaks versus 7.3 percent for kwh).

Nationally, annual load factor (the ratio of average load to peak load) decreased from 65.3% in 1967 to 61.2% in 1974, and increased slightly to 61.4% in 1975 and 62.6% in 1976. Although these years partly reflect depressed economic growth, they also reflect increased emphasis on load management such as increased conservation, more utility control of load and increased interest in time-of-use pricing.

Although a number of utilities have implemented load management programs, there is no single compilation of such programs now available. The following are estimates of peak reductions achieved by some specific utility actions in 1977.

- o Buckeye Power (Ohio): 3.5 percent by controlling residential water heaters;
- o Cobb County (Ga.) Electric Membership Cooperative: 15 percent by controlling residential central air conditioners;
- o Detroit Edison: 2 percent by controlling residential water heaters.

Since there are over 3,000 U.S. utilities, a list of load management programs in effect at each would be difficult to compile. However, the following are representative of important direct load control developments:

- o Cobb County EMC, already controlling some central air conditioners by radio, will be adding control of 2,000 more air conditioners and 4,000 water heaters in 1978.
- o Ohio Coops are committed to controlling 36,000 water heaters, or 90% of those in service.

- o Florida Power Corporation and Florida Power and Light are testing central control of residential air conditioners.
- o Appalachian Electric Power is initiating radio control of air conditioners (\$5/mo. incentive) and heating (\$10/mo. incentive).
- o Wisconsin Power and Light is undertaking control of commercial air conditioners.
- o YW Electric Association (Colorado) is controlling irrigation pumping.

QUESTION #10: Is there a way to build fuel loan programs into utility rate structures? Programs such as Special Crisis Intervention and fuel loans through CSA are hit or miss as far as any particular consumer is concerned, they are sporadic and unpredictable as to occurrence and administratively cumbersome. Might it be better to build subsidy programs (from general government rate structure) into the rate structure by allowing application and approval more easily through utility companies?

ANSWER: It is extremely difficult to incorporate direct loan programs to cover utility bills into rate structures. The Special Crisis Intervention Program (SCIP) and other CSA programs have for a variety of reasons had insufficient funds to meet the needs of all utility, heating oil and propane customers who have had

difficulty in meeting rising energy costs. Programs which include the various costs of weatherization programs have been and are being considered in many State jurisdictions.

In addition, as with any form of subsidy incorporated in utility rate structures, a program of this nature poses the problem of departing from cost-of-service pricing principles, while at the same time attempting to meet the equities of all consumers.

QUESTION #11: What is the Department's recommended method of long-term electricity peak-load growth forecasts?

ANSWER: The problem of forecasting long-term electricity peak-load growth is a complex one. Due to the long lead times for coal and nuclear plants, it is necessary to forecast load twelve to fifteen years in the future. The difficulty of forecasting twelve to fifteen years in the future is coupled with the lack of knowledge about consumer reaction to future rate reform and conservation measures. For these reasons, long-term forecasting is still an art rather than a science. No single "best" method exists. In general, decision makers must decide on the basis of a number of different methods. Many rate experiments

are being initiated by individual utilities. As the results of these experiments are analyzed together with an analysis of local demographic, economic and weather conditions, the utilities will be in a position to discern local trends. These local conditions together with a national economic outlook should be used in forecasting peak-load growth.

In addition, DOE is now conducting a survey of current modeling practices used to forecast State-level electricity demand. Based in large part on the results of this survey, DOE hopes to make available one or more demand forecasting models to State utility commissions. A final report describing the results of this research will also be made available to all interested parties in the near future.

QUESTION #12: What criteria or methodology will the Federal Energy Regulatory Commission (FERC) use to determine whether or not a rate such as time-of-day is cost-justified? Specifically, how will the FERC take account of the manner in which costs of producing electricity change with increments of output or physical capacity in developing the Federal advisory guidelines? In computing the costs-of-service for the purpose of developing rate structuring standards, what costs does FERC believe should be included, which excluded, and will FERC propose that average or replacement (i.e., marginal) costs be reflected in computing rates? Will these guidelines be designed such that rates will actually reflect marginal production costs?

ANSWER: It would be premature to respond fully to this question at this time. In general, however, a rate will be considered cost justified if it accurately reflects independently verified cost-of-service information submitted to DOE.

The guidelines will probably suggest that various approaches including short-run (plant costs fixed) and long-run (plant costs variable) implications of electricity usage, at different times of the year and day, should be considered in rate making. The guidelines will likely also suggest that joint (capacity) costs should be heavily allocated to peak period users, to the extent that capacity expansion is dictated by peak period consumption.

It is unlikely that the guidelines will suggest that utilities should recover more than the revenue requirement under traditional cost-of-service procedures either for total service or for any class(es) of customers.

QUESTION #13: What measures will the Department take to assure that the eleven rate-making guidelines set forth in H.R. 4018 will be "considered" by the non-regulated Federal utilities?

ANSWER: A task force has been established within DOE to develop rules and regulations concerning the application for, and confirmation of, rates for electricity sold by public power projects. Until these are developed, a detailed response to this question cannot be given; however, in the development of these rules and regulations consideration will be given to these guidelines.

QUESTION #14: Could you describe intervention plans, if any, in proceedings involving natural gas utilities? Will DOE support incremental pricing of natural gas before FERC and State regulatory agencies?

ANSWER: To date, DOE has participated in several proceedings involving gas distribution utilities. However, plans for further intervention actions with regard to natural gas utilities have not yet been formulated. Whether DOE will support incremental pricing of natural gas before FERC or the State regulatory agencies, then, has yet to be determined.

QUESTION #15: Inasmuch as the National Energy Plan calls for pricing energy at its replacement cost (i.e., at its marginal or long-run incremental cost), what steps will the several components of the DOE take to promote the restructuring of electricity rates to conform with that principle? (How does DOE define marginal-cost pricing?)

ANSWER: The National Energy Plan calls for setting rates which reflect the cost-of-service. Cost-of-service based pricing requires that prices be set high enough to cover the cost of providing electricity to the customer and that the rate structure reflect the relative differences in costs that different customers impose on the system. Cost-of-service pricing principles can be met by many different pricing methods. It is not the desire of the Department of Energy to require "marginal" cost or "long-run incremental" cost pricing be implemented. (Marginal-cost pricing refers here to a system of pricing electricity on the basis of the cost of producing an incremental unit of power at any one time.)

Although economists agree on a theoretical basis that "marginal" cost pricing leads to the most efficient allocation of resources, this method of pricing has serious practical limitations. First, there is the problem of defining and measuring marginal costs. Secondly, since "marginal" costs or long-run incremental costs exceed average costs, the utility will earn more than the allowed rate of return. Since it is not the intent of DOE to have the utilities earn more than a fair

rate of return, the problem of "excess revenue" arises. There is no consensus on the solution to the excess revenue problem at this time.

Due to these practical limitations, DOE will not require that rates be set to reflect marginal costs but will encourage the design of rate structures which reflect cost-of-service principles. Marginal-cost pricing is one type of cost-of-service rate and DOE may later encourage this type of rate structure after the definitional problems and "excess revenue" problems have been worked out.

QUESTION #16: What can DOE do to assure that the large Federal power generating and marketing systems (Bonneville Power Administration, Southeastern Power Administration, etc.) will play a leadership role in load management techniques and marginal-cost accounting methodology? In supervising these systems, what policies and processes will DOE pursue to promote energy conservation efficient resource utilization and transition to renewable energy resources?

ANSWER: At the present time, a task force is working within DOE to develop rules and regulations for the processing of the request for rate confirmation by the Federal Public Power Agencies. Until these are developed, the answer to this question cannot be given in any detail. Energy conservation will be a concern of the Department

as these regulations are developed and, to the extent possible, will be accommodated.

QUESTION #17: Should the Department strive to transform these Federal electric utilities into energy conservation models which can serve as an example to the private utility industry? If so, what changes in existing practice or legal authority will be necessary or desirable? If not, what is the rationale for declining to take these steps?

ANSWER: Prior to the development of the regulations for processing rate confirmation requests, detailed responses to this question are not available. DOE does, of course, believe that Federal power agencies should take a leadership role in implementing aggressive energy conservation practices. Necessary changes, if any, in existing practices or legal authority have yet to be determined, however.

QUESTION #18: Legislation has been introduced in Congress which would exempt private electric companies from the Federal income tax, and substitute a gross usage charge on electricity to make up the revenues. The idea is to eliminate Federal pressures for unneeded expansion, to return control of utility policy to State Administrators, and, to some extent, to encourage conservation. From the point of view of a national energy policy, how do you feel about this proposal?

ANSWER: The potential impacts of this legislation, which DOE is now reviewing, are highly complex. The corporate income tax, which is a tax on capital, increases the cost of capital-intensive projects, such as coal and nuclear

plants, relative to fuel-intensive oil and gas plants. Investment tax credits and accelerated depreciation reduce somewhat this tax on capital but do not eliminate it. Therefore, elimination of the corporate income tax on electric utilities would reduce the cost of coal and nuclear plants compared to existing oil and gas plants. Presumably, this reduced cost would encourage utilities to replace more rapidly their existing oil and gas plants. The effect is very similar to that of the NEP proposals of tax credits for non-oil and gas plants and a user tax on oil and gas use. Therefore, the proposed legislation is consistent with national energy policy because it encourages a reduction in oil and gas use.

The effect of the gross user tax will depend on the level at which it is set. For example, the tax rate could be set to yield the same revenues to the Treasury as the corporate income tax would have. In this case, average electricity rates for the nation will not change as a result of shift in the type of tax, although there will probably be significant regional effects. Therefore, the legislation would provide no incentive for conservation. Of course, higher gross usage tax rates would increase the price of electricity and encourage conservation.

The cash flow aspects of this proposal are also important. The gross usage tax will result in the earlier payment of taxes. Currently, tax payments are deferred by the use of accelerated depreciation. This earlier payment of taxes will reduce cash flow in the early years of the life of an investment and raise electricity rates during this period also. In the later years of the life of an investment the reverse will be true.

The legislation proposes to treat the income of electric utilities differently than the income of other corporations. This may not be a good tax policy for the nation. In addition, there are many practical problems that must be solved in order to implement this change in tax policy. DOE is therefore currently studying these problems in addition to the broader implications of the legislation.

QUESTION #19: Is DOE planning to investigate the accounting procedures followed by major utilities? Their tax deferral, and other tax programs of questionable value to customers?

ANSWER: Numerous questions have been raised recently concerning the accounting practices followed by utilities. The primary issues concern the treatment of tax deferrals

of the "phantom tax" issue and the inclusion of construction work-in-progress (CWIP) in the rate base. DOE is currently investigating the impacts of all major accounting procedure alternatives on both utilities and utility customers.

Tax deferrals (phantom taxes), arise when expenses or revenues used for financial reporting or rating setting purposes differ from those used by the utility in computing its federal tax liability. These differences are not permanent but reflect timing differences. For instance, a utility which uses accelerated depreciation for tax purposes but straight-line depreciation for book purposes would recognize a larger depreciation expense for tax purposes than for book purposes in the early years of the life of an investment. The reverse will theoretically be true in the later years of the asset's life. These differences in timing lead to the deferral of taxes. The regulatory commission must decide whether to set rates based on the taxes actually paid or based on the taxes which would have been paid if the expenses reported for tax purposes had been equal to the expenses used for book purposes. The first method is referred

to as "flow-through" accounting. Proponents of flow-through methods assert that the use of normalized accounting unfairly charges the consumer for taxes not paid, so-called "phantom taxes." In some instances, however, Federal law requires that normalized methods be used in order to qualify for certain tax benefits. Normalization also increases the utility's cash flow in the initial years of an investment reducing the need for utilities to rely on external financing. Since normalization improves cash flow and coverage ratios, interest rates are typically lower for normalized utilities. This leads to cost of capital savings which eventually benefit the ratepayer. However, whether ratepayers are net beneficiaries of normalized accounting, which forces them to pay higher costs in the near term and lower rates later than would flow-through accounting, is highly dependent on what the consumers discount rate is. In addition, as long as a utility continues to construct and depreciate more expensive plants in the future, the theoretical savings of future normalized accounting may not be realized.

A similar issue is whether the capital charges on funds tied up in construction work in progress (CWIP) should be

paid by the utility's current ratepayers or capitalized and then charged to consumers upon completion of the plant. If CWIP is included in the rate base, then the current ratepayers will pay these capital charges as they are incurred by the utility. The arguments in favor of adding CWIP to the rate base are the same as the arguments for normalization -- improved cash flow, improved coverage ratios, and lower capital costs. Opponents claim that today's consumers should not bear the costs associated with serving tomorrow's customers. Once again, adding CWIP to the rate base increases rates in the near term while lowering rates in the future.

QUESTION #20: What criteria will the Economic Regulatory Administration use in deciding whether or not to intervene in State rate making proceedings and what issues to raise? What specific steps does DOE plan to take upon intervening in a local rate structure proceeding to ensure proper coordination and communication with local consumer, environmental and low-income groups? What access will these groups have to DOE resources such as expert witnesses, computer facilities and internal department reports and data?

ANSWER: In deciding whether to intervene in a given rate making proceeding or not, a number of factors will have to be considered and found present. These factors include, among others, program resource availability, energy policy impacts, precedental value, utility operating characteristics, and likely cost-benefits of the

recommended actions. Other considerations will be dictated by the nature of the given proceeding, information that local consumer and other interested parties may be able to give us, and the advice of our own staff and consultants. Although DOE will attempt to ensure that good communication is maintained with all interested parties, the question of local access of DOE resources has yet to be determined.

QUESTION #21: The Department of Energy has a utility intervention program. Could you provide the level of appropriations, staffing, etc.? Do you think the present appropriations are sufficient to do the job? If not, what changes are necessary?

ANSWER: Because responsibility for DOE's utility intervention programs has been placed in a new office, the Division of Regulatory Proceedings in the Economic Regulatory Administration, necessary appropriation and staffing levels have yet to be determined. Although it is anticipated that the new office will be able to draw on remaining funds from FEA's program of State regulatory interventions, it is unclear at this time what additional resources will be required, or whether current resources will be sufficient to successfully implement the broadened

scope of activities envisioned under the new Division.

Approximately 14 positions have been tentatively allocated to the Division; to date, contract dollar allotments have not been specifically determined. However, up to one million dollars were authorized, but not appropriated, under Section 207 of the Energy Conservation and Production Act.

QUESTION #22: Under the organizational structure of the Department, all legal personnel are under the General Counsel. Therefore, the utility intervention program does not have control over its legal staff. Could you explain why the Department is structured in that way? Could you also describe your understanding on how differences will be resolved?

ANSWER: All legal services required by DOE are presently centralized in the Office of General Counsel, on the premise that the performance of legal services should be kept independent from program supervision, in order to ensure that legal judgments are not unduly influenced by program needs.

Issues of a strictly legal nature, then, are resolved by the General Counsel. Program management issues, similarly, are resolved by the Division of Regulatory Proceedings, Economic Regulatory Administration.

QUESTION #23: What are the different electrical rates for customers to use as a back-up to solar energy? What research or possible pilot projects might DOE originate to see what provisions can be made to give a fair rate to solar homeowners for back-up systems? What will DOE's position be pro/con, for separating the development of solar from existing utilities?

ANSWER: The impact of alternative electric utility rate structures on the economic attractiveness of customers acquiring solar appliances is complex and at this time not fully understood. Several electric utilities now offer specific rates to customers who have solar systems with back-up electrical systems. Some of these rates take the form of non-time-varying demand and energy charge rates, which may unduly penalize solar users who recharge their units during system off-peak hours. The alternative of providing solar users with time-of-day rates will help ensure that such users receive electric rates that accurately and fairly reflect the cost of providing solar back-up power.

In discussing solar options, two distinctly different situations must be considered. First, the customer who relies on solar collections converts this energy to electricity and has the ability to generate excess power. The National Energy Plan requires that utilities sell/buy

electricity to this customer at non-discriminatory rates. Second, customers may directly use solar energy without converting it to electricity. DOE is encouraging the implementation of load management rates, and to the extent that these customers can control their loads by relying on solar systems during peak hours and electrical systems during off-peak hours, their electricity rates will be more attractive. With respect to other rate forms being advocated the issues raised are complex and further analysis is needed to fully understand the technological problems and the benefits associated with solar energy.

DOE is currently investigating a wide range of alternative methods of ensuring that solar back-up systems are charged fair electric rates. However, DOE has not yet established a specific position on participation of electric utilities in solar development activities.

QUESTION #24: Does DOE plan to help people understand that, while getting into new and small scale technologies, electric utilities will still have to have sufficient plants to supply back-up systems?

ANSWER: It is clear that utilities must maintain sufficient generating capacity to supply electricity to customer-owned back-up systems for new or alternative home energy

systems. For example, customers with solar heating units must be assured of obtaining power for back-up electric heating, whenever the solar units are incapable of providing adequate heat. DOE does intend to ensure that potential users of alternative energy technologies recognize this problem. However, DOE will also attempt to ensure that such users pay no more than the fair costs of such back-up power.

In addition, it should be recognized that utility capacity requirements are determined by peak period, not off-peak, demands. To the extent that alternative energy systems rely on off-peak power -- as time-of-day rates would encourage -- the requirements for utility capacity would be minimized.

QUESTION #25: During FY 75 and FY 76 FEA funded nine electric rate demonstration projects in various parts of the country. If the data has been evaluated, what are the conclusions? Are data available to public and private utilities, Public Service Commissions, and interested citizens? Does DOE contemplate any recommendations or further action on the basis of these studies?

ANSWER: FEA (now DOE) has funded a total of 16 electric rate demonstration projects. Preliminary and final analyses have been completed by either DOE or the projects themselves for several of the demonstrations. Generally, the findings to date reveal that:

- o customers in each project reporting data have uniformly been found to respond significantly to changes in electricity price at all hours of the day, including peak periods;
- o time-of-use rates reduced residential customer peak kilowatt demands even on the days of annual system peak.

Most of these findings have been reported in the FEA publication entitled "Interim Report on Electric Utility Rate Design Proposals," February 1977. DOE is now in the process of establishing a procedure for making further demonstration data available to interested parties while, at the same time, protecting the privacy of each individual participant.

Based in part on the results of these projects, DOE (FEA) has advocated the timely adoption of utility rate structures that accurately reflect the costs of utility service, including costs that vary by time-of-day. In addition, DOE will continue to conduct a careful and comprehensive analysis of all demonstration data and make these findings known through appropriate dissemination

channels. DOE analyses of these data will be available through the National Technical Information Service.

Finally, where applicable, updated demonstration project findings will provide valuable technical inputs to several other DOE programs, including utility consumer offices, grants programs, the pilot utility implementation projects, technical assistance to utility regulatory authorities, and the regulatory intervention program.

QUESTION #26: Will DOE have funds for grants to consumer offices that have been established and need funds to adequately prepare cases on behalf of consumers to the PUC and to advocate rate reform? In dispensing grant monies to State offices of consumer services under Section 205 of the Energy Production and Conservation Act, what steps will the Department of Energy take to assure that such offices advocate positions advantageous to consumers (including environmentalists)?

ANSWER: As authorized by the Energy Conservation and Production Act (ECPA) of 1976, DOE has awarded grants to 12 States to establish new or expand existing State Offices of Consumer Services in order to encourage the representation of consumer interests in electric utility regulatory proceedings. Two million dollars was appropriated for and spent on this program in Fiscal Year 1977. Funds were awarded on a competitive basis, with 12 of the 41 applicants whose applications received the highest scores receiving grants.

At the present time, DOE has adequate funds only to continue existing grants to such States. The NEA, which would extend the authorization for this program, is still under consideration by the House/Senate Conference Committee. The Public Utility section of that bill would authorize \$5 million in Fiscal Year 1978 and \$10 million in Fiscal Years 1979 and 1980 for this program. However, neither the Conference Committee nor the full Congress has taken the final action on the bill.

DOE's utility consumer office program has a number of features intended to promote effective representation of consumer interests in electric utility regulatory proceedings. ECPA itself requires that grants be made only to State utility consumer offices which are independent of any utility regulatory commission. In addition, each such office is required by DOE to develop and publish procedures for advocating on its own behalf a position advantageous to consumers, determining the eligibility of and setting priorities for the funding of eligible consumer groups (as defined in the DOE guidelines), performing analyses, and identifying and informing consumer groups. Procedures for determining

advocacy positions must detail the means by which the office will obtain and consider the broadest spectrum of consumer views.

Utility consumer offices will not be permitted to spend DOE funds until these procedures are approved by DOE.

This Agency's review concerns only the procedural aspects of the Offices' treatment of consumer interests and do not address or prescribe particular policy positions which such offices may advocate. Of course, DOE stands ready to assist its grantees in the development of their policies, as requested.

QUESTION #27: In dispensing grant monies to State utility regulatory commissions under the authority of the new legislation (H.R. 4018), how will the Department of Energy assure that the monies are spent pursuant to the purpose of that Act?

ANSWER: The tentative House/Senate Conference Agreement on the Public Utility Section of NEA would authorize the Department of Energy to make grants to State utility regulatory commissions to assist them in carrying out regulatory activities under this bill. These activities include considerations of Federal retail rate standards and involvement in various other mandated hearings. However, final action on the bill has yet to be taken by the Conference Committee or the full Congress.

The Department of Energy will disburse any grant monies which result from this proposed legislation in a manner consistent with the purposes of that Act. Determination of the exact mechanisms for doing so, however, must await final legislative language and passage of NEA's Public Utility provisions. DOE anticipates, of course, encouraging the maximum public participation possible in the development of program guidelines and monitoring procedures.

QUESTION #28: Does the Department contemplate making such grant monies available specifically for the purpose of funding State-conducted demand growth studies which could serve as an alternative analysis and a benchmark against which data tendered by the utilities could be evaluated? If so, please describe the dimensions of the program anticipated by DOE. If not, why not?

ANSWER: The grant program for State public utility commissions has not been enacted yet, or is the draft legislative language on it available. Consequently, DOE cannot predict the specific features of such a program. Because all legally permissible options for utilizing these funds will be considered, it would appear that State-conducted demand studies could be consistent with the purposes of the Act.

QUESTION #29: Is DOE planning to provide information on growth models under different scenarios for typical utilities, using different assumptions, so that commissions and consumer groups have comparative data against which to judge utility growth projections?

ANSWER: The DOE has taken a number of steps to ensure the availability of such information to consumer groups, utility commissions, State planning agencies, and other interested parties.

Using the Project Independence Evaluation System (PIES), DOE already produces regional electricity supply and demand forecasts for five-year intervals out of 1990. These forecasts are sensitive to national economic conditions, conservation strategies, and fuel prices. While these forecasts do not provide comparative data by which utility projections can be directly judged, they do provide insights into the growth rates applicable to States, power pools, and reliability regions.

Last April, the FEA began developing an integrated short-term electricity supply/demand model which operates at the power pool level. This model forecasts electricity demand, generating plant operation and loss-of-load probability for two years into the future. The model is sensitive to weather, electricity

prices, fuel prices, and forecasts of economic conditions. When completed, the model will be used to assess the short-term reliability of the Nation's bulk power system and the forecast results will be published quarterly.

A third activity underway is a DOE sponsored survey of current modeling practices used to forecast State level electricity demand. As a result, a demand forecasting model to be made available to State utility commissions is currently being developed with the participation of the public service commissions in the States of Arizona, New Jersey, North Carolina, and Wisconsin. Additionally, the information developed by the survey is currently being put into a final report to be made available within the next few months to all interested parties. This information will provide a basis for evaluating the modeling techniques used by utilities in generating growth forecasts, and particularly in judging the sensitivity of those forecasts to alternative assumptions about State level economic and demographic conditions, fuel prices, etc.

Finally, DOE is also planning a study which will survey existing electric utility supply forecasting

methodologies with the aim of obtaining a model which is sufficiently sensitive to local conditions to reliably forecast utility operating costs and capacity expansion requirements. This model will interface with the State electricity demand model described above and will also be made available to the public.

QUESTION #30: What research will the Department conduct or oversee regarding the relationship between income and both residential gas and electricity consumption? Please provide details of research designs.

ANSWER: The Office of Integrative Analysis within the Energy Information Administration has the responsibility for analyzing the distributional impacts of energy events on different socioeconomic groups. Part of this responsibility is met through the operation of the Comprehensive Human Resources Data System (CHRDS). CHRDS can be utilized to assess the distributional impacts of energy events on the residential sector. An analysis of the relationship between income and expenditures on residential gas and electricity can be conducted using this model and the associated data base.

CHRDS is a microanalytic model of household energy expenditures developed for the DOE. This model was

designed to provide the DOE with a flexible tool for analyzing both the short- and long-run distributional impacts on households of various energy policies. The CHRDS model projects a microdata file to a future year, starting from the base year when the survey was taken, by updating the economic and energy-related characteristic of the households. Expenditures on six energy commodities -- electricity, piped-in natural gas, bottled gas, coal, fuel oil, and gasoline -- are then projected on the basis of these updated characteristics.

The data base for the model is a subsample of the 5 percent Public Use Sample of the 1970 Census. Home fuel expenditures are imputed from regression equations estimated with data from the 1970 Census. These equations are currently being revised using electricity and natural gas data from the 1975 Household Energy Use Survey of the Washington Center for Metropolitan Studies. Transportation data in the CHRDS data base are derived from the 1970 National Personal Transportation Survey conducted by the U.S. Department of Transportation, and from the 1975 wave of the Michigan Panel on Income Dynamics.

QUESTION #30: The CHRD System is currently only capable of using average residential State prices per kwh as the primary input to correlate disposable income and usage which is defined in terms of dollars expended for energy and not defined in terms of physical quantities consumed. Therefore, analyses which would examine the consumption levels of consumers or predicted responses to alternative gas and electric rate structures require revisions in the CHRD data base.

ANSWER: It should be noted that actual bills showing both physical quantities and dollars expended for natural gas and electricity were collected as part of the 1973 and 1975 energy surveys conducted by the Washington Center for Metropolitan Studies (WCMS). However, these surveys suffer from small sample sizes, 1500 and 3000 households, respectively, for the 1973 and 1975 surveys. In order to permit this type of analysis, a study is made which identifies the residential rate structures of gas and electric utilities servicing the area in which the sample CHRD data base households reside. Once these rates are identified and incorporated into each household record, it would then be feasible to estimate quantities of gas and electricity consumed and how they would change given alternative rate structures. Discussions are underway within EIA to assign CHRD System funds to conduct this study. The DOE supports these activities to promote better understanding of income and consumption relationships.

QUESTION #31: What research will the Department conduct or oversee regarding long-term electricity peak-load growth forecasting, price elasticity at the time of system peak and the effect thereon of load management? Please provide details of research designs.

ANSWER: DOE is engaged in several areas of research designed to help determine the most reasonable long-term electricity forecasts, including, perhaps most importantly, the State forecasting model. The State forecasting model includes, in as much detail as available data allows, the introduction of how income, economic activity, and prices affect electricity use. These variables are introduced in two ways. First, differences in electricity use across States or over time are allocated to specific electricity uses. Ownership and utilization rates of specific electricity-using appliances are explicitly modeled for the residential sector, and base load, summer weather-sensitive load, and winter weather-sensitive load are modeled in the residential and commercial sectors. The second method of introduction is the disaggregation of economic activity. In the residential sector submodel, State electricity use is modeled based on State family characteristics, overall State demographic characteristics, and State housing characteristics. In the commercial and industrial sector

submodels, the industrial compositions of economic activity are explicitly included as determinants of electricity use.

In addition, DOE's continuing analyses of data from the demonstration projects will provide critical information of electricity price elasticities at times of system peak.

It should be pointed out, however, that DOE's utility rate demonstration program is viewed as a short-term effort as individual projects are engaged in short fixed-length experiments. The analysis of data from these projects, including elasticity estimations will be of a short-term nature and will not be directly utilized in any long-term electricity demand forecasting models.

QUESTION #32: In reviewing rate applications, on what basis will DOE/FERC determine whether automatic adjustment clauses assure efficient utilization of resources?

ANSWER: Automatic adjustment clauses are a special tool of regulation. Their purpose is to provide a substitute for a process of rate regulation that requires complete rate proceedings to effectuate changes in rates to customers.

The Federal Power Commission addressed the question of automatic fuel adjustment clauses in its Opinion No. 633 in Docket No. E-7541, New England Power Company, issued October 30, 1972. In that opinion the FPC adopted the proposition that automatic fuel adjustment clauses in wholesale rate schedules are both lawful under the Federal Power Act and sound as a matter of regulatory policy. Subsequently, on November 13, 1974, the Commission issued Order No. 517 in Docket No. R-479, Fuel Adjustment Clauses in Wholesale Rate Schedules, which revised the regulations and prescribed the principles to be followed in the formulation of acceptable fuel adjustment clauses. Full rule making proceedings were conducted in formulating the revised regulation that was adopted by the Commission and set forth in Order No. 517.

Still later, on June 17, 1975, the Federal Power Commission again proposed to amend its fuel adjustment clause regulations in Docket No. RM75-29. The proposed revisions to the Regulations incorporated an existing fuel clause requirement and would have required the submission of all contracts related to fossil and nuclear fuel procurements, electric

power purchase agreements not otherwise on file with the Commission, as well as detailed additional data and information relative to fuel procurements and fuel usage practices.

In connection with that rule making proceeding the Commission staff undertook a program of special audits for the purpose of reviewing the activities of 14 selected public utilities under fuel adjustment clauses included in wholesale rate schedules filed with the Commission. The audit team was directed to look into the questions of proper fuel adjustment clause application and prudent fuel procurement. While the audits did detect some irregularities in administering the fuel adjustment clauses, the amounts involved were not substantial in relationship to the total fuel costs and the proposed rule making would not have produced any substantial benefits in the Commission's ability to correct the abuses.

Based on consideration of the views and comments received in response to the proposed rule making and because of the results of the special audit program, the Commission issued an order on April 26, 1977, terminating the

rule making proceeding with respect to the proposed amendment of the Commission's Regulations. It should be noted, however, that the procedures adopted during the special audit program are now utilized in the Commission's regular audit program. Assurance that automatic adjustment clauses are not interfering with efficient utilization of resources can be provided by continual re-evaluation of the fuel adjustment clause regulations with particular focus on their effect on utility planning and incentives with respect to obtaining fuel at the lowest cost.

QUESTION #33: What are the Department's views on the types of advertising expenses which should be paid for by ratepayers as contrasted to those which should be paid for by shareholders of the regulated utilities?

ANSWER: It is important to distinguish between two broad types of advertising -- informational and promotional. The aim of informational advertising is to provide consumers with information which can be used to economically evaluate their buying decisions. A primary example is advertising which promotes conservation of scarce resources and which promotes the optimum use of capital facilities by informing consumers of time-of-use rates. Such conservation advertising is consistent with the

goals of the National Energy Plan, and benefits the utility's ratepayers by reducing the utility's fuel costs and promoting the efficient use of its equipment.

Promotional advertising, however, such as that encouraging increased use of electricity, does not benefit the ratepayer and is inconsistent with the National Energy Plan's goal of conserving energy. DOE has therefore strongly discouraged advertising of a promotional nature.

QUESTION #34: What is the Department's position concerning State regulation of heating oil prices? What would its attitude be toward an inverted rate structure for heating oil?

ANSWER: The Emergency Petroleum Allocation Act of 1974 (EPAA) authorized the Federal Government to control the prices and allocation of crude oil and refined petroleum products. Pursuant to the Energy Policy and Conservation Act (EPCA) of 1975, the Federal Energy Administration initiated a series of actions to decontrol, subject to Congressional disapproval, certain refined petroleum products. Heating oil was decontrolled in the summer of 1976 and since that time first FEA and then DOE have establish a monitoring system to determine whether prices are

reasonable. It should be noted that heating oil prices, if they were still under price and allocation controls, would increase slightly as import and domestic crude oil prices increase.

To our knowledge, no State has passed legislation either limiting heating oil prices or requiring an inverted rate structure. Moreover, there are substantial constitutional issues whether the States could pre-empt Federal law, particularly with respect to interference with interstate commerce. From a practical point of view, if one State limited heating oil prices below market levels, refiners and distributors might try to increase prices in other States to obtain their normal profit margin. A DOE task force is currently investigating the complex issues surrounding government regulation of heating oil prices.

With respect to inverted rate structures, DOE has not supported the adoption of such rate designs for heating oil. Since the costs of supplying additional units of heating oil to homeowners do not rise with additional consumption -- the per unit costs are flat -- an inverted structure would not be cost-justified. For the same

reason, nor are declining block rates cost-justified.

In general, DOE favors energy price structures that reflect the costs of supplying that energy.

QUESTION #35: In light of the Congressional Conference agreement for States to consider procedures which prohibit "abrupt terminations," what procedures will DOE recommend to the States to implement this provision if it is signed into law?

ANSWER: Although specific termination procedures that DOE may recommend to States cannot be determined prior to enactment of the National Energy Act, it is anticipated that these recommendations will support the need for reasonable uniform rules and standards for electric and natural gas customers governing both termination of service and a variety of other related customer provisions, including:

- o security deposits;
- o late payment charges;
- o extended payment agreements;
- o customer information criteria; and
- o meter verification and testing procedures.

In developing policy recommendation for termination of service standards, DOE expects to take into consideration the basic principles of due process, including timely notice and the opportunity for administrative

review prior to termination, as well as the need for particular provisions dictated by weather and health-related conditions.

DOE, of course, will attempt to provide for broad public participation and opportunity for comment in the guidelines development process.

QUESTION #36: What does DOE plan to propose, if anything, to deal with the problem of the cost of meters for low-income people if mandatory time-of-day rates are adopted? Specifically, does DOE have any plans to propose refundable tax credits for this purpose? What other approaches to alleviate this problem is DOE exploring? How will DOE deal with the problem of "cream skimming" if optional time-of-day rates are adopted for the residential class?

ANSWER: In general, DOE does not anticipate that the cost of time-of-day metering will impose a hardship for any consumer, since time-of-day rates would be mandatory for any customers only if they are shown to be cost-effective for those customers. If such rates are cost-effective, the cost of meters will be more than offset by the cost savings achieved by improving the utility's load factor. The result will be lower rates as these net cost savings are passed along to the consumer.

There are several alternatives for recovering the costs of time-of-day metering. Although it is possible

that such costs could be subsidized by the public through a tax credit, it is more likely that the costs will be either incorporated in the rate base, or charged to individual time-of-day customers in the form of a monthly service charge. As most States proceed to implement such rates systemwide, these costs will be added to the rate base and recovered over the life of the meter. It is highly unlikely -- and nor would DOE support -- that a consumer would be charged the entire cost of the meter at the time of installation.

DOE does not feel that "cream skimming" -- under which only customers who stand to benefit markedly from optional time-of-day rates will choose them -- will be a significant problem. Because time-of-day rates will be based on the costs-of-service, consumers who benefit will be those consumers who have previously been subsidizing consumers who use large amounts of electricity during peak periods. As revenues fall below the required level, the rate for the heavy peak users is likely to be increased. The subsequent increase in rates for these users will likely lead to further conservation and the adoption of time-of-day rates by more consumers.

Appendix B

The following are questions read into the record after the conclusion of this public briefing; and the answers to those questions as prepared by DOE program offices.

QUESTION: Assuming you are an individual American homeowner wanting to actively halt a proposed utility rate increase to your home, what steps, intervention, would you take to accomplish your goal?

ANSWER: There are three steps you can take to accomplish your goal. First, you must establish who can be a party to a rate case before the cognizant utility regulatory institution by contacting the utility regulatory institution and/or the Attorney General's office in your State. Second, one must determine who are likely to be parties to the case and which, if any, of these parties is likely to represent or assist you in representing your interest. One or more of the following offices may assist or represent an individual: 1) utility consumer office, 2) the State consumer advocate, 3) Attorney General's office, 4) the utility regulatory institution, and/or 5) an involved public interest organization. Third, one must be prepared to devote considerable time and effort to the case as often an extended period of time elapses and a large amount of testimony is considered before the utility regulatory institution reaches a decision.

QUESTION: In what ways is DOE working to reduce the electrical growth rate by means of rate reform?

ANSWER: DOE is attempting to reduce growth rate of electricity peak demand through several major initiatives in the area of electric utility rate design. In that regard we are involved in several activities either required or authorized by Title II of the Energy Conservation and Production Act of 1976 (ECPA).

o Rate Design Proposals

On March 4, 1977, the Federal Energy Administration submitted to Congress an extensive Interim Report on Electric Utility Rate Design Proposals. This report represents the first comprehensive and objective assessment of the full range of rate design concepts currently under consideration nationwide.

o Rate Demonstration Projects

Since early 1975 FEA has conducted, in cooperation with State and local utility authorities, a number of electric rate demonstration projects, designed to validate the effectiveness and customer acceptance of innovative electric rates. A total of 16 demonstration projects have been initiated, seven in Fiscal Year 1975 and nine more in Fiscal Year 1976.

o Regulatory Intervention

Section 204(2) of ECPA authorizes DOE, upon the request of a State, a utility regulatory commission, or any participant in any proceeding before a State utility regulatory commission which relates to electric utility rates or rate design, to intervene and participate in such a proceeding. FEA or DOE has participated in 24 utility rate proceedings to advocate the implementation of rate reform in specific local settings.

o Utility Consumer Offices

Section 205 of ECPA Title II authorizes DOE to make grants to provide for the establishment and operation of State offices to represent residential and other consumer interests in electric utility proceedings before Federal, State and local regulatory commissions. Grant awards were made in September 1977 to 12 applicants.

QUESTION: The "Connecticut Peak-Load Pricing Test, Final Report," issued May 1977, and partially funded by FEA, shows that the largest residential users increased their energy consumption while reducing their contributions to coincident system peaks. The report suggested that, in the long run, peak-load pricing would encourage the increased use of electricity. What pricing mechanisms would DOE recommend to prevent growth in energy use with a peak-load pricing rate structure?

ANSWER: To date, there is little evidence that time-of-day rates accelerate growth in overall energy consumption. The Connecticut data suggest some increases among the largest users, but the increases appear to be the result of the system of participation incentives in effect for the test rather than of the rate design itself. In other areas implementing or evaluating time-of-use rates, such rates either have little impact on or in fact reduce energy consumption. DOE, then, does not believe it likely that time-of-use rates will lead to significantly increased electricity growth rates.

QUESTION: Is DOE studying the design of inverted rates, so as to maximize energy conservation within existing utility revenue constraints? What recommendations have you developed in this regard?

ANSWER: DOE is currently studying a wide range of alternative utility rate designs, including inverted rates. Several of these rate designs are being investigated in DOE's electric utility rate demonstration program. In addition, the Department is monitoring the impacts of inverted and life-line rates that have been put into effect in several U.S. regulatory jurisdictions. The preliminary results of DOE's studies of inverted and other electric rate designs are included in the Interim Report on Electric

Utility Rate Design Proposals, submitted to Congress in 1977. To date, however, DOE has developed no recommendations as to the adoption of inverted rate designs.

QUESTION: Does DOE have any plans to fund experimental implementation of rate structures based on the principle of marginal-cost pricing, where margin is defined as current cost of the next unit?

ANSWER: In September 1977, DOE signed cooperative agreements for projects with 10 States and municipalities. The purpose of these projects is the implementation of cost-based electricity and gas rates, load management devices and systems, and end-use conservation activities. While the program guidelines for these projects do not explicitly require the implementation of electric rate structures based on the principle of marginal-cost pricing, they do require that any rates which are implemented encourage economic efficiency, reflect differences in costs attributable to daily and seasonal times-of-use, encourage conservation as an alternative to additional generating capacity, and encourage the use of load management equipment. Further, the guidelines prohibit the implementation of any rates where the energy charge decreases as the amount of consumption increases.

QUESTION: Are any studies being conducted of the conservation potential of long-run incremental cost (LRIC) pricing of electricity?

ANSWER: Since 1975 the DOE has entered into cooperative agreements for projects with 16 States and municipalities which are evaluating and demonstrating alternative electric utility rate designs and load management techniques. In some projects, the rate designs are based on long-run incremental costs, and part of the analyses of these projects will be an assessment of the conservation potential of such rates.

QUESTION: In what pilot utility programs under Title II of ECPA is district heating being promoted?

ANSWER: Under Title II of ECPA, ERA is supporting the conduct of two studies (one on Cogeneration and the second on District Heating) through the Ohio PUC.

The first study, which primarily seeks to determine the industrial cogeneration potential within the State of Ohio, will seek to develop a generalized tariff applicable to cogeneration, evaluate the impact of this tariff on the utility company, and finally to identify the characteristics of users that would find cogeneration an attractive option within the provisions of the tariff. The second study, which primarily addresses the potential of district heating within Ohio, will develop guidelines

for increasing the use of steam as a substitute for natural gas. These guidelines might involve the adoption of incentives through the rate structure or possibly through the gas curtailment plan.

QUESTION: Are there any studies underway or planned to determine methods for encouraging cogeneration by industries and utilities?

ANSWER: Yes. DOE is supporting a substantial and comprehensive effort to foster the use of cogeneration by industry and the utilities. It is a multi-year multimillion dollar program that includes research aimed at developing more efficient and economical hardware, financial assistance to States to encourage cogeneration within their jurisdictions, industrial- and utility-oriented demonstration programs, efforts to utilize low grade heat at DOE's own energy production facilities, and studies to determine ways of dealing with the regulatory/institutional issues presently limiting the expansion of this technology. We have included a partial listing of representative programs now being supported by DOE.

1. Financial support to Minnesota for the purpose of comprehensively evaluating the massive expansion of district heating in the Twin City area. This includes

examining technological, economical, regulatory and institutional feasibility.

2. Support to communities such as District Heating and Cooling Systems for Communities through Power Plant Retrofit. This action, just released as an Request for Proposal (RFP), represents the initial step to conserve energy and scarce fuel by retrofitting existing electric generating plants so as to utilize by-product heat.

A major demonstration program funded out of the DOE's Division of Industrial Conservation, in coordination with industry aimed at expanding industrial cogeneration capacity.

Numerous reports are available within the DOE library system covering the details of past and present efforts on this subject.

QUESTION: Does the Department of Energy intend to assume a leadership role in moving towards a more just distribution of total energy costs through a restructuring of the present rate scales?

ANSWER: For some time, the Department has strongly advocated that traditional utility rate designs be restructured so as to encourage energy conservation, improve efficiency and ensure the equitable distribution of utility costs. DOE believes that these objectives can best be served by basing utility

rates on the costs-of-service, and has implemented a wide range of programs to achieve these objectives. The Department intends to maintain this role.

QUESTION: Does the Department of Energy (DOE) intend to monitor the insulation industry to assure that the public can obtain safe and efficient materials at a reasonable cost?

ANSWER: The Department of Energy (DOE) does not presently have the authority to monitor the insulation industry. Other Federal agencies such as Consumer Product Safety Commission (CPSC) and the Federal Trade Commission (FTC) do have authority. CPSC has monitoring authority and FTC investigates deceptive claims and advertising. However, DOE is coordinating with these agencies to determine specific areas of responsibility and to ensure that some monitoring procedures will be followed.

QUESTION: Will DOE interpret the size requirement to exclude single-family dwelling size systems, such as windmills, and photovoltaic arrays?

ANSWER: The Act has not passed and we do not have copies of the draft legislation. Therefore, we are presently unable to provide an answer to this question.

QUESTION: Under what circumstances will DOE provide aid to plaintiffs? Will the aid involve DOE intervention, funding or legal, technical assistance?

ANSWER: It appears likely that intervention funding covered by the Act would apply.

QUESTION: You make a distinction between "consumers" and "industry." Industry is a consumer. Industry has provided considerable leadership in energy conservation. As such, it has absorbed significantly increased prices. Do you take into consideration in your deliberations the fact that industry, following absorption of cost increases to the extent possible, must pass through the remainder? To that extent, the individual consumer will pay for energy in the price paid for goods or services.

ANSWER: The Department of Energy is well aware that industrial consumers represent a major share -- some 40 percent -- of total electricity consumption. DOE is also well aware that cost increases incurred by industry/energy users are at least in part passed on by these users to their own customers. The precise extent of these pass-through costs can have a major impact on the effectiveness and advisability of various utility rates. In its consideration of the impacts of alternative rate designs on consumers of all classes, then, DOE does explicitly take into account indirect pass-throughs in costs.

QUESTION: Does the DOE consider utilities such as electric, gas, telephone service, luxury items available to those according to their ability to pay, or are utilities considered necessities to be distributed according to need and accessible to all citizens, regardless of income level? If the latter is the case, what provisions are being made to ensure a minimal availability of energy for survival for all North Americans?

ANSWER: DOE has no direct involvement with telephone utilities, but is concerned with both the electric and gas utility industries. The Department believes that adequate and

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