PUBLIC UTILITY RATE PROPOSALS OF PRESIDENT CARTER'S ENERGY PROGRAM

(PART E OF S. 1469)

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENERGY CONSERVATION AND REGULATION

OF THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

NINETY-FIFTH CONGRESS

FIRST SESSION

ON

S. 122

A BILL TO REFORM ELECTRIC UTILITY RATE REGULATION, TO STRENGTHEN STATE ELECTRIC UTILITY REGULATORY AGENCIES, AND FOR OTHER PURPOSES

S. 1300

A BILL TO REFORM ELECTRIC UTILITY RATE REGULATION, TO STRENGTHEN STATE ELECTRIC UTILITY REGULATORY AGENCIES, AND FOR OTHER PURPOSES

S. 1363

A BILL TO PROMOTE THE RECOVERY OF WASTE HEAT ENERGY RESOURCES AND THE EXPEDITED DEVELOPMENT AND COMMERCIAL APPLICATION OF DUAL-PURPOSE POWERPLANTS, AND FOR OTHER PURPOSES

S. 1364

A BILL TO PROVIDE FOR THE SUBSISTENCE ELECTRICAL NEEDS OF ELDERLY RESIDENTIAL CONSUMERS, PROMOTE EQUITY IN ELECTRICAL COSTING THROUGH REFORM OF CURRENT ELECTRIC RATE STRUCTURES, AND FOR OTHER PURPOSES

S. 1469 (Part E)

A BILL TO ESTABLISH A COMPREHENSIVE NATIONAL ENERGY POLICY

JULY 27, 28, AND SEPTEMBER 7, 1977

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PUBLIC UTILITY RATE PROPOSALS OF PRESIDENT CARTER'S ENERGY PROGRAM

(Part E of S. 1469)

THURSDAY, JULY 28, 1977

U.S. SENATE,
SUBCOMMITTEE ON ENERGY CONSERVATION AND REGULATION,
OF THE COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 8 a.m., in room 3110, Dirksen Office Building, Hon. Henry M. Jackson, chairman, presiding.

Present: Senators Jackson and Hansen.

Also present: Benjamin S. Cooper, professional staff member, James T. Bruce, counsel, and Ted Orf, deputy minority counsel.

OPENING STATEMENT OF HON. HENRY M. JACKSON, A U.S. SENATOR FROM THE STATE OF WASHINGTON

The CHAIRMAN. The committee will come to order. We resume and continue our hearings on the Public Utility Regulatory Policies Act. Our first witness this morning is Senator Curtis, but I note that he is not here as yet. Therefore I should like to call upon Mr. Joseph Swidler who will be our next witness.

And if Senator Curtis comes, Mr. Swidler, we will ask him to come in and then he will have a short statement and then leave and we will keep that separate in the record.

We are delighted to welcome Mr. Swidler, who is a distinguished lawyer and an expert in energy power matters, having served as the chairman of the Federal Power Commission among many other things. We are delighted to welcome you to the committee this morning.

Mr. SWIDLER. Thank you.

The CHAIRMAN. We have the prepared statement.

Mr. SWIDLER. Thank you, Senator Jackson.

The CHAIRMAN. Now, if you wish, of course, we would be delighted to put the entire statement in the record and you may summarize it and proceed in any way that you wish. In any event, the entire statement will be in the record.

STATEMENT OF JOSEPH SWIDLER, MEMBER OF THE FIRM OF LEVA, HAWES, SYMINGTON, MARTIN, AND OPPENHEIMER

Mr. SWIDLER. Thank you. I think I would like to read and perhaps to interpolate as I go along.

The CHAIRMAN. Fine.

Mr. SWIDLER. I am accompanied by William H. Taft.

The CHAIRMAN. Do you want Mr. Taft to come up?

Mr. SWIDLER. He is very convenient where he is.

With your permission, I will skip my credentials and I will read the next paragraph.

I am here at the invitation of Chairman Johnston; however, I have been working with the Commonwealth Edison Co. of Chicago in analyzing the provisions of the proposed National Energy Act and my testimony today reflects the results of the work done for the company.

I shall testify primarily on subpart 2 of part E which provides for Federal control of the retail rates of electric utilities.

Let me start by stating my view, Senator Jackson, based on a great deal of experience, both in Federal and State regulation.

The CHAIRMAN. I wonder if you could pull the mike. The acoustics are lousy in here.

Mr. SWIDLER. Is that better?

The CHAIRMAN. Yes—Senator Curtis. His statement is rather long. I believe you have a shorter statement and we will call on you. Stay right there, Mr. Swidler.

Senator CURTIS. I am 5 minutes late. I should have a little penalty and have to wait.

The CHAIRMAN. Well, the earlier we start, the more precise we are on the starting time which is unheard of in the Senate. That applies to the chairman as well. I am always late except when it is early.

STATEMENT OF HON. CARL T. CURTIS, A U.S. SENATOR FROM THE STATE OF NEBRASKA

Senator CURTIS. Thank you, Mr. Chairman. I appreciate the courtesy of the committee in allowing me to appear today to testify at these hearings. I am particularly interested in subpart C which concerns bulk power supply and here we propose an amendment which I hope the full committee will be able to include.

The amendment I propose would add a new section to the bill. It is not controversial. It involves no authorization for Federal financing or future Federal appropriations. It does not affect other provisions of the bill or existing procedures relating to rate structures, marketing or other aspects of electrical power generation, transmission and marketing.

My amendment would grant the right of eminent domain to participating member utilities in the Mandan project to construct a high voltage transmission system across the States of Nebraska, South Dakota, and North Dakota where it would be connected to a line in Manitoba, Canada.

Mr. Chairman, the Mandan project has been the subject of a comprehensive study for nearly 2 years. Participants in the proposed

project include the Manitoba Hydro Electric Board of Winnipeg, Canada; and in the United States, the Minnkota Power Cooperative, Inc., in Grand Forks, N. Dak., the Otter Tail Power Co. in Fergus Falls, Minn., Basin Electric Power Cooperative in Bismarck, N. Dak., and the Nebraska Public Power District headquartered at Columbus, Nebr.

Together these five utilities serve nearly three-quarters of a million customers directly. Slightly less than 40 percent of the customers, 283,086, are served by the Manitoba Hydro Electric Board which is a corporation owned by the Province of Manitoba that serves most of that Province. The four utilities located in the United States serve more than 60 percent of the direct customers, 442,594, that would be tied together by the Mandan project.

The Minnkota Power Cooperative, Inc., is a cooperative company serving eastern North Dakota and northwestern Minnesota, and has a total of 62,932 connected consumers. Otter Tail Power Co. is an investor-owned company serving a 50,000 square mile area in western Minnesota, eastern North Dakota, and northeastern South Dakota, and has a total of 114,022 customers.

Basin Electric Power Cooperative is a regional wholesale supplier organized by member systems of an eight-state region whose member cooperatives have 164,000 customers in North and South Dakota. Nebraska Public Power District is a public corporation of the State of Nebraska providing retail and wholesale service to 85 of Nebraska's 93 counties, with 101,640 direct retail customers and 108 municipalities and other wholesale customers.

The five project participants had total energy sales in 1976 of 15.4 billion kilowatt-hours, and the U.S. participants represent the major electrical power sources for the agriculturally important upper Great Plains.

Mr. Chairman, the purpose of the Mandan project is to maximize utilization of electrical generation, and to increase electrical energy availability. It was devised by the participating utilities to provide for exchanges of electrical energy between the north and south in times of peak and nonpeak loads, respectively.

Mid-North America does not now have a strong transmission tie with winter peaking utilities in the northern United States and Canada. The Mandan project would provide such a tie with the southern summer peaking utilities of the midwestern United States.

With the Mandan project in place, an interchange of electrical energy would be possible between the winter and summer peaking utilities. Manitoba and the Northern Dakota systems have extreme winter peak loads, and summer loads of only 60 percent of the winter peak loads. On the other hand, Nebraska, South Dakota, and adjoining States to the south and east experience extreme summer peak loads, with winter loads of only 60 percent of the summer peaks.

The Mandan project calls for construction of a high-voltage transmission system for exchange of the excess generation between the participating utilities according to seasons, peak load needs, and generation surpluses. The Mandan system would have the capability of transferring 1,000 megawatts in either direction. It would be carried over a combination 500/450 kilovolt ac-dc line.

The current estimated cost of the project, which is planned for completion in 1984–85, is $550 to $600 million. The project is made

possible by construction of a new hydroelectric project by the Manitoba utility on the Nelson River, which will provide the Manitoba Hydro Electric Board with substantial surplus electrical energy for marketing through the Mandan project to the United States during the summer months.

Mr. Chairman, as I have stated already, there is now no mid-North American electric power transmission tie. However, there is a similar existing project in the Western United States that provides for maximum utilization of electrical energy. There is a high-voltage line between the Bonneville Power Authority in Washington and Oregon, and utilities in southern California.

Besides the economic benefits to all participating utilities in the Mandan project that will be achieved through continued full generation by existing facilities, the project will help supply additional energy for all areas on a seasonal basis when needs are the greatest.

The project will provide a substantial increase in the amount of electrical energy available for a sizable area of the North-Central United States. At a time when the United States is experiencing a severe energy shortage, the Mandan project will do much to help meet energy needs.

Mr. Chairman, I will extend the balance of my remarks to save the time of the committee. We have he support of the Senate—I have a number of Senators involved, including my colleague, Senator Zorinsky, the Senator from North Dakota, Mr. Young and I am informed of other Senators in the area are apt to be involved and I will include the balance of my statement to save time for the committee including a copy of my suggested amendment.

I read rather fast. I want to make it clear this is not a request for funds.

The CHAIRMAN. I understand. You are asking for authority of eminent domain on an interstate basis.

Senator CURTIS. Yes.

The CHAIRMAN. We will have our committee counsel, majority and minority go over this matter to determine how we can best solve the problem here. I don't think there is any question about the need. There is a question in my mind as to the idea of the Federal Government granting this authority on an interstate basis. Each utility has that authority within their respective service area.

I take it there are some problems here in view of the fact that it starts up in Canada to begin with. Is that not true?

Senator CURTIS. That is my understanding.

The CHAIRMAN. Why don't we just check it out. There is a legal problem here.

Senator CURTIS. But there is a need for several of our cooperative owners. It goes through several States and in dealing with a foreign country there is a need for centralized authority and procedures. Our good friends in Canada oftentimes are concerned that their resources in energy come south of the border and that is where the jobs are and they have the depletion.

There is no such problem involved here. The people of Manitoba are anxious to sell us power.

The CHAIRMAN. Is this covered by treaty?

Senator CURTIS. That I do not know.

The CHAIRMAN. Joe, could you give us some free legal advice this morning?

Mr. SWIDLER. I don't think it is covered by treaty.

The CHAIRMAN. I don't know why the International Boundary Commission—well, suppose we look into this.

Senator CURTIS. Thank you very much.

The CHAIRMAN. I just want to say, Senator Curtis, we will go into it very carefully to find out how best to solve the problem. I am completely sympathetic to what you are trying to do. The question is how we should do it and we will get on it.

Senator CURTIS. I assure you I will never be tardy again.

The CHAIRMAN. You didn't clear that with Senator Hansen. He joins me in thanking you.

[The prepared statement of Senator Curtis follows:]

STATEMENT OF HON. CARL T. CURTIS, A U.S. SENATOR FROM THE STATE OF NEBRASKA

Mr. Chairman, I appreciate the courtesy of the committee in allowing me to appear today to testify in these hearings on a National Energy Policy Act, specifically on Part E, electric utility rate reform, of S. 1469. I am particularly interested in Subpart C which concerns bulk power supply, and am here today to propose an amendment which I hope the subcommittee and full committee will be able to include in the final bill which is reported to the floor.

The amendment I propose would add a new section, Section 523, to the bill. It is not controversial. It involves no authorization for Federal financing or future Federal appropriations. It does not affect other provisions of the bill, or of existing procedures relating to rate structures, marketing or other aspects of electrical power generation, transmission and marketing.

My amendment would grant the right of eminent domain to participating member utilities in the Mandan project to construct a high voltage transmission system across and through the States of Nebraska, South Dakota, and North Dakota, where it will be connected to a line in Manitoba, Canada.

Mr. Chairman, the Mandan project has been the subject of a comprehensive study for nearly two years. Participants in the proposed project include the Manitoba Hydro Electric Board of Winnipeg, Canada; and in the United States, the Minnkota Power Cooperative, Inc., in Grand Forks, North Dakota, the Otter Tail Power Company in Fergus Falls, Minnesota, Basin Electric Power Cooperative in Bismarck, North Dakota, and the Nebraska Public Power District headquartered at Columbus, Nebraska.

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energy between the north and south in times of peak and non-peak loads, respectively.

Mid-North America does not now have a strong transmission tie with winter peaking utilities in the northern United States and Canada. The Mandan project would provide such a tie with the southern summer peaking utilities of the midwestern United States.

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The current estimated cost of the project, which is planned for completion in 1984-1985, is $550 to $600 million. The project is made possible by construction of a new hydroelectric project by the Manitoba utility on the Nelson River, which will provide the Manitoba Hydro Electric Board with substantial surplus electrical energy for marketing through the Mandan project to the United States during the summer months.

Mr. Chairman, as I have stated already, there is now no mid-North American electric power transmission tie. However, there is a similar existing project in the western United States that provides for maximum utilization of electrical energy. There is a high voltage line between the Bonneville Power Authority in Washington and Oregon, and utilities in southern California.

Besides the economic benefits to all participating utilities in the Mandan project that will be achieved through continued full generation by existing facilities, the project will help supply additional energy for all areas on a seasonal basis when needs are the greatest. The project will provide a substantial increase in the amount of electrical energy available for a sizeable area of the north-central United States. At a time when the United States is experiencing a severe energy shortage, the Mandan project will do much to help meet energy needs.

Although I have discussed the benefits of the project for the three States involved directly in the United States, there are additional benefits that will be realized in the project for a considerable area adjoining the Dakotas and Nebraska. For instance, all four United States utilities involved in the Mandan project are members of the Mid-Continent Area Power pool grid system which interconnects utilities in eight midwest States, including Illinois, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wisconsin.

In addition, the various utilities have power exchange and sales contracts with numerous other utilities and other States. The Nebraska Public Power District alone has exchange contracts with Iowa Power and Light Company, with Omaha Public Power District, with Kansas City (Missouri) Power and Light, and with St. Joseph Power and Light. Other States with which Nebraska has power exchange contracts include Minnesota, Montana and North and South Dakota.

Thus the construction of the Mandan project will have a widespread impact on energy needs in the midwest. The supply of additional electricity during summer peak needs for most of the midwestern States in the Mid-Continent Area Power pool will help alleviate stress on the many member utilities. Likewise, the additional power will relieve demands on the Bureau of Reclamation power generated by the Pick-Sloan Missouri River Basin System.

I also wish to emphasize that the Mandan project will significantly enhance system reliability in and for all of the affected States. Just two weeks ago we saw in the United States the devastating results of a power system failure in New York City. The Mandan project will help to provide maximum insurance against such a failure occurring in a significant area of the United States.

Mr. Chairman, as I have said, the Mandan project is not controversial, and it involves on Federal financing or obligation.

The amendment I propose and ask the subcommittee and committee to accept in mark-up of the energy bill, would provide eminent domain for the construction of the system through the three States. Eminent domain is sought because

it will greatly expedite construction of the system so that we may be able to get maximum utilization of supplemental electrical energy at the earliest possible date. The amendment does not eliminate or interfere with the rights of property owners to obtain fair compensation for loss of land and rights-of-way for the project. However, it is needed because eminent domain will expedite the process of acquiring the easements and lands necessary for construction of the project.

Mr. Chairman, I have the support in this proposal of my colleague from Nebraska, Senator Zorinsky, and from the Senator from North Dakota, Mr. Young. I am informed that the other Senator from North Dakota and the Senators from South Dakota have been contacted about the project, though I have not had their interest or support expreseed to me directly.

I am advised that in addition to the four United States utilities who support the amendment, the rural electrics in the three States support the project, as do the other utilities, municipalities, and customers who receive electricity from the project participants. To my knowledge there are no utilities anywhere in opposition to this project.

Mr. Chairman, this is a most important project that can provide badly needed electrical energy for a substantial area of the midwest. I have prepared an amendment which adds a new Section 523 to the bill now being heard, and submit it for your consideration. I earnestly recommend that the subcommittee and committee accept this amendment for the bill that will be reported to the Senate floor.

"Section 523. To encourage and expedite benefits to the public of the bulk exchange of electric power between certain areas having diverse peak demand seasons and thereby to increase fuel efficiency and to reduce use of natural gas and foreign oil, upon issuance of a Presidential Permit for transmission facilities at the international border with Manitoba, Canada to exchange electric power among electric utilities which together provide service in Manitoba, Canada, and in North Dakota, South Dakota, and/or Nebraska and permitee or permitees shall be entitled to exercise the power of eminent domain to secure rights-of-way for the construction, operation, and maintenance of electric transmission facilities to accomplish such exchange. Proceedings to acquire property interests under this section shall be in the district court of the United States in which the property is located and in conformance with the Federal Rules of Civil Procedures, *provided, however*, that the petitioner or petitioners may file with the petition or at any time before judgement a declaration of taking in the manner and with the consequences provided by sections 258a, 258b and 258d of Title 40, United States Code."

The CHAIRMAN. Now, Mr. Swidler, we are delighted to welcome you to the committee and you can start clean with a record here and go on from there.

STATEMENT OF JOSEPH SWIDLER, MEMBER OF THE FIRM OF LEVA, HAWES, SYMINGTON, MARTIN, AND OPPENHEIMER—Resumed

Mr. SWIDLER. Senator Jackson, Senator Hansen.

The CHAIRMAN. All right, sir. We have your statement and you were reading.

Mr. SWIDLER. To relieve any uncertainty on what is my position I should like to say at the start, I think subpart 2 is ill considered, counterproductive and that if it were enacted, it would seriously impair the credit and risk the viability of private enterprise in the electric utility area.

I think we are talking about a very important part of the bill.

While I believe that carefully considered reform of rate structures achieved in a way which is sensitive to the conditions of different communities and utility systems, has a place in attaining the objectives of the President's energy program, the approach contained in the bill before the subcommittee will not contribute appreciably to the

conservation of energy that is one of the major goals of the program, nor does it reflect the principles of fairness that the President promised in introducing his program to the country.

Moreover, part E as proposed will introduce substantial additional administrative complexity and uncertainty into an already overelaborated and dilatory regulatory process. These conclusions apply with even greater force to subpart 2 of part E as reported by the House Committee on Interstate and Foreign Commerce.

I recommend that, instead of taking over State government functions in a precipitous fashion, the Federal Government should assist States in their efforts, now already underway, to carry them out more effectively, by a program for collection of information about the actual impact of different rate structures under varying circumstances, the provision of advisory services, and the assumption of a voluntary coordinating function.

As you know, in the past Congress has carefully limited the role of the Federal Government in regulating both electric and gas utilities to the wholesale and interstate aspects of their business. Regulation on the retail or local level has hitherto been recognized as an area of State concern.

Under this division of responsibility, every State and the District of Columbia has created a State regulatory agency vested with broad powers over the rates and practices of local utilities. Subpart 2 of part E would not simply modify but in time would destroy this system insofar as electric utilities are concerned.

Instead of the present arrangement, under which State and Federal agencies function side by side, each within its own area of authority, the Federal Government would prescribe by statute the rules and policies under which the State utility commissions must carry on their key ratemaking function. There is full authority in the bill to make the State commission virtual branch offices of the Department of Energy.

In my opinion, undermining the authority of the State commissions is not necessary and it is not in the public interest.

I read last night the testimony of Mr. Bardin, a former FPC colleague for whom I have great respect, and I also thumbed through the 47 questions which he said were commonly asked with respect to these provisions of the bill, and read his answers. Neither in his testimony nor in any of the questions and answers is there any reference to the administrative problems. This was treated as a theoretical concept. There was no recognition that there was involved in this legislation a major transgression of the traditional line between State and Federal Government. No mention of it.

And no mention of the question, will it work? No attempt to translate these theoretical concepts into real life conditions.

Under sections 512 and 513(b)(i), each State utility commission is required to prescribe methods for determining the costs of providing electric service for each class of customer. If any State commission should fail to do so within 2 years, the Federal Energy Administrator takes over the job.

"To the maximum extent practicable,"—and those words are quotes—costs of service, except to residential consumers, must be determined in accordance with marginal costing principles reflecting the

differences in costs to consumers or classes of consumers attributable to daily and seasonal time of use of service and the extent to which the total costs of the utility "are likely to change"—I quote again—if such consumer or class creates the need for additional capacity.

Section 513 provides further direction as to the details of ratemaking, including requirements that the State commissions must insure that every electric utility shall offer time-of-day rates to every customer willing to pay the metering costs, and seasonal rates to all customers.

Interruptible rates must be extended to each industrial and large commercial customer, subject to some temporary exemptions. These rates, too, must be based on marginal costing principles. Nevertheless, the bill provides that it shall not be construed as authorizing recovery of revenues in excess of normal levels of return.

So that while a utility is required to charge commercial ad industrial customers, not on the basis of the embedded cost, the actual book cost, but rather on the basis of estimates of what additional increments of capacity would cost, that formula can't be translated into revenues. Any excess revenues received from one class of customers must be laid off with respect to other classes of customers.

Now, the justification for this vast extension of Federal authority is slender indeed. It rests on the questionable assumptions that the costing principles are sound, clear and universally acceptable, and that they would not be adopted by the States and the utility companies except under a blanket requirement by the Federal Government, under drastic penalties.

In turn, the need for uniformity rests upon the finding in section 501(b)(1)(D) that the States will not implement rate reforms if they are, quote, "placed at a relative economic disadvantage in attracting and retaining industry by reason of the failure of other States to implement such reforms."

This excuse for destroying the balance between State and Federal jurisdiction in the utility area will not stand up under analysis. Part E is derived from legislative proposals which long antedated the National Energy Act.

I commented on a House bill similar to Part E 2 years ago. These proposals made no progress on their own merits. They have now been incorporated in legislation of high priority. Most of the attention and most of the testimony have centered on other and more dramatic features of the bill, such as coal conversion, deregulation of natural gas prices, and gasoline, oil, and gas taxes.

Subpart 2, because it is complicated and undramatic, has escaped attention and has been piggybacked on the basic provisions of the legislation. It may, however—and it is in my opinion—the most important part of the bill because of its long-run effects on State/Federal relations, on private enterprise in the utility area, and on the interests of electric power consumers.

I should like to address first the question of the need to establish national standards of ratemaking for retail sales to every electricity consumer in the country.

The wide diversity of demographic, climatic, income and other variables makes it impossible to predict the effect of any specific ratemaking formulas as applied to a given company or area.

Uniformity is neither feasible nor desirable. It is one of the great strengths of State regulation that it can give attention to the specifics of individual company conditions and consumer needs and practices in adapting rate policies to particular cases.

The Administrator of FEA has recently reported the same conclusion to the Congress. The FEA was required by section 203 of the Energy Conservation and Production Act to develop proposals to improve electric utility rate design for energy conservation, and for other purposes similar to those specified in subpart 2. After a careful study, the FEA reported in February of this year that it was not in a position to—and I quote, "draw conclusions concerning the desirability of a widespread adoption of the specific rate design alternatives or other utility regulatory practices discussed. Nor does it present any specific proposals for Federal legislative or regulatory action."

And this is also the testimony, as I read yesterday, of the two them an urgent part of this legislation.

The FEA cautioned also that, quote:

> Because the utility industry is extremely diverse, it is nearly impossible to reach conclusions which are equally applicable to every utility. As a result the tentative conclusions reached regarding selective alternatives apply only on a nationally aggregated basis. These conclusions do not represent the probable effects of such alternatives on an individual utility system.

And this is also the testimony, as I read yesterday, of the two expert witnesses, Ms. Streiter and Mr. Uhler, who testified as economists in favor of the general principles of marginal costing, but who warned against national uniformity prescribed by law.

Now, I do not oppose the general concept of giving increasing weight to marginal cost in utility rates, but rather to giving the Federal Government authority to prescribe a fixed set of rules and formulas which must govern all the States and all the utilities.

Implicit in prescribing such rules and formulas is the need, in order to enforce them, of imposing duplicate and overlapping regulatory jurisdiction, and severe penalties on those who fail to conform.

In subpart 2 it becomes clear that the enforcement pattern threatens the integrity of the regulatory process itself. And to this point I want to return later.

A key question as to the need for subpart 2 is whether it is true, as the bill states, that federalization of retail utility ratemaking is necessary to bring about rate reform by the State commissions, by eliminating the factor of interstate competition between those States which do not implement the reforms, and those that do.

If it were true that the factor of interstate competition is seriously inhibiting the improvement in State regulation of retail rates, you would expect that in New York, where utility rates are above the national average, the State commission would be a laggard in exploring and implementing marginal cost pricing.

The reverse is the case. Beginning during my own chairmanship with a program to eliminate all promotional rates and to level rate blocks, and continuing with great urgency and more explicit goals under the leadership of my distinguished successor, Alfred E. Kahn, who also testified here yesterday, the New York State Public Service Commission has led the way both in the development of marginal

cost pricing theory and in the careful adaptation of such theories to individual companies and customer classes, in accordance with the circumstances, and one company at a time.

The fact of the matter is that most State commissions have involved themselves in rate reform. Studies of marginal cost pricing have become a national preoccupation.

The FEA, FPC, ERDA, EPRI, the National Association of Regulatory Utility Commissioners, and many individual State commissions are deeply involved. In the face of this intensity of interest, the swift process of change already underway, and the strong initiative now being displayed by the State commissions, it is hard to see any advantage for the Federal Government to assume the roles of taskmaster and regulatory overlord.

The result can only be to relieve the State commissions of responsibility and to substitute compulsion and friction for what is now an effective program moving on its own merits.

The role of helper and advisor, of providing sympathetic support, would be far more fruitful and consonant with the traditions of Federal/State relations.

The bill allows 2 years for the State commission to toe the line in the implementation of marginal cost pricing. What we must not allow ourselves to forget is that in the real world a transition from one basis of ratemaking to another, involving enormous differences in amounts and percentages, must be approached step by step and with great care to minimize economic hardships and dislocations, both to utilities and their customers.

The process of change must be carried out pragmatically and cautiously. Neither the Federal goal, nor the theorist's vision of a perfect symmetry in marginal costing in the utility field, are proper foundations for achieving genuine progress in ratemaking.

The linchpin of the justification, as I have said, is the argument that none of the States will act unless the Federal Government imposes its will on the laggards. This not only flies in the face of what is transpiring among the State commissions; it is also wrong in its economics.

The fact is that utility rates are one of the least important reasons for industrial plant locations or commercial developments, with the exception of a few electricity-intensive industries, such as aluminum reduction. Access to raw materials; availability, efficiency, and cost of labor; State tax policies; transportation considerations; cultural and recreational advantages; and access to markets, are all far more important in determining where new industrial plants and commercial facilities will be established.

Another of the arguments in favor of the bill is that a national system of marginal cost rates is essential in order to provide economically effective decisions on the use of energy, including decisions as to time-of-day and seasonal use.

If such decisions are made on the basis of marginal costing criteria, it is said, industries, commercial establishments, and individuals will use less energy in total and will time their purchases in such a way as to reduce capacity needs and the cost of providing service.

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With this general formulation I have little quarrel, except as to degree. However, the bill dictates a number of departures from this concept. For one thing, other provisions of the bill prescribe non-market limits to oil and gas prices, so that marginal costing of electric utility services alone could well lead to giving the wrong price signals with respect to the choices among electricity, oil and gas. The effect could be, contrary to national policy, to provide greater incentive to use oil and gas, instead of electricity which can be generated by more abundant coal and nuclear resources or possibly in the future, solar energy.

Marginal costing is intended primarily for a world of free prices, but the energy world is not a world of free prices and only electric energy under the bill would be priced on a marginal cost basis.

More important, residential customers are totally excluded from the requirement of marginal costing. If marginal costing were to be applied to the commercial and industrial customers, the rates would generally produce far more revenues for these classes than the utilities would be permitted to retain.

However, because the bill provides that a utility's total revenues cannot exceed those to which it is entitled on an embedded cost basis, the excess revenues could only be used to reduce the rates of residential customers below those justified even on an historical cost basis.

This combination could produce some weird results.

For example, in the current rate proceeding before the Illinois Commerce Commission, Commonwealth Edison Co. has proposed rates which would produce $1.319 billion from commercial and industrial customers. Four methods of marginal costing for these customers have also been presented in the proceeding.

I might say, as another evidence of the pervasiveness of marginal cost investigations among the State commissions in the country, it has become quite common for a utility, in addition to presenting a case based on embedded cost, to present the State commission with marginal cost alternatives and this is what happened in Illinois.

If prices were set to equal marginal costs, then, depending on which marginal cost method were used, rates to Commonwealth Edison's commercial and industrial customers would increase by $111 to $493 million above the amounts now proposed. Applying the excess revenues to reduce the revenue requirements for residential consumers would result, at the extreme, in reducing their contribution from $730 million to $238 million, or by two-thirds.

Under the various assumptions as to marginal costing methodology, the rates for industrial and commercial customers would increase from an average of 3.41 cents per kilowatt-hour to between 3.70 and 4.69 cents, while the average residential rate would fall from 4.61 cents to between 1.50 cents and 3.91 cents. The work sheets for these calculations are available if the subcommittee staff would like to see them.

There may well be companies, Mr. Chairman, where the mix of loads is such that to dispose of excess revenues from commercial and industrial customers charged on the basis of some of the marginal cost formulas, it would be necessary to pay residential customers to

take electricity. Under other methods there could be little difference between the results on a marginal cost basis and under prevailing methods of determining costs.

Enactment of the bill would give the FEA Administrator the choice between enforcement of formulas so detailed as to impose national uniformity of results, or of allowing state discretion. Uniformity of standards when applied to diverse circumstances will lead to ridiculous results. On the other hand, if the FEA Administrator should permit the states a wide latitude, what becomes of the goal of uniformity? At any rate, it is apparent that whatever the formula, to the extent that marginal costing increases the revenue contribution of commercial and industrial customers, it must reduce the residential bills. The overall result, in terms of energy conservation, is likely to be a standoff.

It is sometimes argued that commercial and industrial loads are the prime reasons for the capacity problem, and that pricing policies should be designed primarily to suppress growth in these loads. That conclusion is not supported by the experience on the Commonwealth Edison system. The residential class contribution to system peaks is increasing faster than that of commercial and industrial loads.

From 1969 to 1976, the residential loads at time of system peaks increased by 75 percent, and the commercial and industrial loads by only 22 percent. As a result, the residential share of total loads at time of system peaks increased from 31 to 40 percent, while the share of industrial and commercial loads declined from 67 to 59 percent.

The abandonment by the bill of marginal cost pricing as applied to residential customers evidences the victory of caution over principle. The all-or-nothing approach of the bill to the difficult problem of how to treat residential consumers is perhaps an inevitable result of displacing local discretion with blanket rules for the whole country.

At the same time it raises questions of consistency and of the efficacy of the bill. Above all, it raises the question, what is the appropriateness of Federal intervention in utility rate making to achieve such inconsistent and discriminatory objectives? To risk the prestige of the Federal Government in such a labor hardly seems an appealing national policy.

Let me say again, I do not doubt both the need and the possibility for rate improvement along marginal costing lines, but we shall need to move with caution, and to remember that formulas which may make sense for one company may make nonsense for another.

There is more in the bill by way of inconsistency and discrimination. The bill purports to cover both regulated utilities, which is to say the private sector, primarily, and nonregulated utilities, that is, most of the more than 2,000 municipal systems and approximately 1,000 electric cooperatives.

The Federal Energy Administrator, under section 515(a)(i), is vested with the authority to prescribe ratemaking policies for these nonregulated utilities. However, under section 511 utilities with sales which do not exceed 750 million kilowatthours a year are exempt.

This exemption takes out totally from the coverage of subpart 2 all but a relative handful of municipal and cooperative electric systems. The exempt systems serve in the aggregate millions of residential, commercial and industrial customers.

For the remaining municipal and cooperative systems, enforcement is much more lax than for the investor-owned systems. Initially, they prescribe their own methods for determining costs. If the administrator is not satisfied after a 2 year period, he is required to prescribe such methods for these utilities.

However, since the rates of nonregulated utilities are not fixed in an open evidentiary hearing, their performance is scarcely likely to receive the same scrutiny as in the case of other utilities.

The exemptions and other special treatment of the municipalities and cooperatives again raise the question of the consistency and depth of commitment of the bill to the pricing policies which it espouses.

The provisions for enforcement as applied to the private sector are summary and drastic. A State utility commission may only exercise the privilege of enforcing the federally prescribed policies for periods for which it has notified the Administrator that it will assume such responsibility. Every 2 years it must file a report which persuades the Administrator that it has faithfully implemented such policies.

If the Administrator, acting without the benefit of any legislative guidance, should conclude, after notice and a mere "opportunity for presentation of views," that the State commission has not adequately implemented such policies the commission may be deprived of its enforcement responsibility, in which case each individual utility is required to report its compliance with such policies directly to the Administrator.

Similarly, if the Administrator determines, after notice "And opportunity for presentation of views," that a utility has not implemented such policies, the utility may not increase any of its rates unless the Administrator determines, this time, "in an evidentiary hearing," that the proposed rates comply with the prescribed policies. The Administrator by rule may exempt certain interim rate increases and increases pursuant to fuel adjustment clauses.

These stern enforcement procedures are without precedent. Without a hearing, a State utility commission may be ousted from its jurisdiction and a utility may be prevented from making essential rate increases. In contrast, to be permitted to increase its rates during a period when the Administrator has assumed the direct regulatory role, the utility must demonstrate "in an evidentiary hearing" that the proposed rates meet all the statutory tests.

There is no limit to the time which the Administrator may take in hearing or deciding such a proceeding, which involves not only the normal complexities of a rate case, frequently enough in themselves to require many months for determination, but a host of additional questions, novel and intricate, raised by the statute itself.

The House bill, I must say, is, on the whole, even more stringent, although it purports to set a time limit for the disposition of rate proceedings before the federal agency.

It is too early to be able to understand fully the possibilities for delay and administrative confusion which are embedded in the bill, but even a cursory review reveals the administrative and judicial morass which the bill invites. A State utility commission is delegated with enforcement authority only if it notifies the Administrator in such manner as the Administrator may prescribe that it will assume responsibility for administering the ratemaking directives of the bill. But suppose a utility commission declines the honor, perhaps because it doesn't relish a branch office status. Or suppose that in the Administrator's judgment a State commission does not measure up to the requirements of the law. Then the Administrator takes over and no rate increases may take place until after a full-fledged rate case before him.

Of course, such a proceeding would not deprive the State utility commission of its jurisdiction under State law, so that it would be necessary for the utility to provide its case twice. In the state proceeding, the issue of compliance with Federal rate design policies under the act would be a part of every proceeding whether or not the state was exercising a Federal delegation.

If the State commission failed to measure up to the Administrator's requirements, the utility would need to prove its case before him, notwithstanding its own willingness to accept the Federal policies. It could be prevented from proving its case before a State commission alone, not because of its unwillingness to do whatever it was the Administrator was prescribing, but because of some difference between the state commission and the Administrator.

The provision for biennial reviews of State commission adherence to Federal standards would create continuing uncertainty as to where and when rate cases should be heard.

The problems of judicial review add a new level of confusion and uncertainty. Are the State courts delegated the authority to determine the compliance of a State commission with Federal standards?

If not, would there be access for purposes of judicial review to both the state and the Federal courts? In what manner, and in what court, if any, would a utility be entitled to a judicial review of the Administrator's orders?

Would a utility commission be able to contest a decision of the Administrator that it was not qualified to exercise the Federal delegation? If the Administrator concludes that a State commission has the necessary qualifications, but a consumer or environmental group disagreed, could they appeal to the courts to reverse the decision of the Administrator that the State commission did comply?

What happens to the utility's revenue needs while these issues are being litigated? I do not know the answers to these questions. The answers are not even hinted at in the bill, but the problems are all implicit.

The requirements of the bill are susceptible to many interpretations, thus adding innumerable substantive uncertainties to the administrative process. In determining marginal costs, for example, dozens of questions arise, difficult questions. Does the cost include income taxes? The incremental cost of generation when there is a

capacity surplus? The fuel adjustment charge? The effect of bringing in lower cost capacity? The cost of the basic transmission system? Should costs be computed on a company or on a pool basis? Should it be based on an actual or on an optimized system?

In determining peak responsibility, over what time period should the peak be measured? What weight should be given to secondary peaks? To the requirements for scheduled outages?

There is more than one reasonable answer to each of these questions and they are only examples. If the bill should pass, not only the commissions but the State and Federal courts could be shoulder deep in unraveling the intent of Congress on esoteric questions of applying marginal costing to the utilities.

Utility rate decisions are already to long delayed. The credit of the utility companies no longer receives the prime rating of previous years, in large part of a result of these delays.

The substantive and administrative complications of the bill can only produce a further deterioration of the administrative process in utility ratemaking and a greater reluctance on the part of investors to entrust their funds to the utility industry.

In the end it is the utility consumer and the ordinary citizen who will be hurt, by higher costs and by electricity shortages.

For almost a century the electric utilities have served as an effective vehicle for providing the great bulk of this country's electric power needs under a pluralistic system where the cooperatives and municipalities have also had a share.

It has been possible for the electric utilities to carry the major share of the load because of the faith of investors that they would receive a reasonable return on their investment. This faith has been premised on a tradition of fair regulation, bolstered by the protections of the 5 and 14 amendments to the Constitution.

Because investors conceived the risks were small, the utilities have been able to tap the capital markets for vast sums of money at low cost. As a result the utilities have been able to keep abreast of demand, and to supply the electric power needs of their markets.

The ability of the utilities to raise the money rests on this fragile bond of faith, on this implied social contract. If this legislation should pass, it is hard to see how investors could continue their faith in the security of utility investments.

The day would be much closer when the Federal Government would need to consider assuming directly the burden of providing for the electric supply requirements of the whole country, as it already does for a substantial part of the requirements of the municipal and cooperative power systems.

The State utility commissions are not merely a nuisance, Mr. Chairman. If the State utility regulatory commissions did not exist, they would need to be invented. They take responsibility for problems of local rates and services which the Federal Government should not shoulder, and which it is incapable—and I say this after a long experience on the Federal Power Commission—which it is incapable of shouldering effectively.

They take the onus for local service conditions and for the vast number of rate increases which inflation and OPEC have made inevitable. Under the proposed legislation, the State agencies would

be in position to disclaim responsibility, because they would be creatures of a Federal bureaucracy, operating under the dictates of the Federal legislation and rulemaking by the Department of Energy.

Whatever prestige and respect they now enjoy, they would lose. I ask the members of the subcommittee to consider whether it is desirable that the Congress place directly on a Washington agency the responsibility for every retail rate increase in the future, and for every failure of service.

I ask the subcommittee also whether it is satisfied that the provisions of subpart 2 will not do permanent damage to the present industry structure for providing power service to the Nation.

It may be said that under the bill the States are likely to continue in their regulatory role. Then is it an idle threat that the bill provides for the contingency of a Federal takeover of State utility commission responsibilities?

If so, the provision has no place in the bill. If it is not idle, how does the FEA organize to handle the potential caseload of hundreds of local rate controversies from throughout the country? Does it wait until the moment of takeover to begin to assemble staff and other resources?

If not, what reserves of skilled lawyers, economists, engineers, and other experts must it employ, and at what locations, and what field offices and hearing rooms must it have available? What appropriations must be made immediately to insure that there will not be a hiatus when the Federal takeovers occur? These will become questions of crucial concern as soon as this bill passes.

Mr. Chairman, this concludes my prepared remarks on subpart 2 of part E, but I should like to take the opportunity to express my general concurrence with subpart 3, concerning bulk power supply, I do have reservations about the granting of authority to the Federal Power Commission to order wheeling, because the wheeling device is ordinarily used for the uneconomical transmission of power from subsidized sources, which is a use contrary to the energy efficiency purposes of the bill. It will lead to demands for Federal subsidies to provide even more subsidized source so that the burden of energy supply would be shifted from rate payers to tax payers.

The cogeneration section provides another needless intervention of Federal jurisdiction, but I believe it would be valuable for the Administrator to have authority to exempt the industrial cogenerators from Federal and States utility regulation. That much in the statute, I think, would remove an obstacle to cogeneration.

In my opinion subpart 2 is not an essential part of the President's energy program and, indeed, the program would be much better off without it or with the substitution of an advisory and coordinating role for that of a Federal preemption.

I have prepared an analysis of part E of title I of the House bill—now part V of H.R. 8444—and ask that it be made a part of my testimony.

The CHAIRMAN. It will be included following your testimony. I would like to ask questions, but our time is gone. I want to commend you for an excellent statement and an excellent analysis.

I will suggest that your testimony be sent to FEA and FPC and maybe by the time they are on it, we will have a new Department of Energy, hopefully. And I will look forward to their comments. I think you have made some excellent points here.

You've pointed out the diverse nature of our country and the difficulty of doing these things. What is the most effective way of doing it?

I must say there are good State regulatory commissions, as you know, and there are lousy ones.

Mr. SWIDLER. Yes, sir.

The CHAIRMAN. You don't disagree with that?

Mr. SWIDLER. No, sir.

The CHAIRMAN. And the point is, I think you put your finger right on it. It is the diversity of our country demographically, climatically, the economic factors, a long list of things that require not universal rules, but local rules that can carry out broad objectives and that can only be handled at the local level. A very fine statement.

Senator Hansen.

Senator HANSEN. Nothing, Mr. Chairman.

Mr. SWIDLER. May I comment briefly on one of the things you said, Senator Jackson? About the quality of State regulation, I have been on the executive board of the National Association of Regulatory Commissioners and I have watched the State commissioners and participated with them in many activities. I see a considerable turnover and a great degree of improvement. There are a lot of young people coming in as utility commissioners.

For a long time utility regulation was a background activity in the States and received very little attention. That is no longer true. The emergence of the energy problem as a crucial national problem has resulted in a great deal more attention being given to the quality of the State commissions, and there is now a fast pace of improvement.

The CHAIRMAN. Yes. I think that has been a factor in the last few years. In the past, however, in many States the people who were to be regulated, of course, had a very strong influence over the commission and it was not always an objective process. That was my point.

Mr. SWIDLER. That is quite right.

Senator HANSEN. Mr. Swidler, just let me say that having once served as Governor of Wyoming, I find great merit in keeping the decisionmaking process as close to the people who are to be regulated or controlled as possible, and I think you have raised some very relevant questions and they can't be easily answered within the framework of this proposed legislation.

I have great misgivings about the validity of this legislation and I compliment you for your perceptive insight that reflects the long experience you have had in utility ratemaking and all of the adjuncts that go along with that.

And I think that if we can give consideration to the questions you have raised, that we are going to come up with a far better bill than might have resulted otherwise. Thank you very much.

Mr. SWIDLER. Thank you, Senator.

The CHAIRMAN. Thank you, Mr. Swidler.

[The analysis referred to follows:]

Joseph C. Swidler
July 26, 1977

Analysis of
Part V of Title I of the National
Energy Act (H.R. 8444)

This memorandum analyzes in some detail (but with inevitable inadequacy, considering its length and complexity), Part V of the proposed National Energy Act, as it was included in H.R. 8444 and considered by the House Ad Hoc Committee on Energy. Part V deals with utility regulatory and rate reform including the reform of state regulatory agencies. Most of Part V deals with electric utility rates and regulation, and this memorandum is confined to these subjects.

The Table of Contents, which follows, outlines the scope of the provisions of this Part.

Background

The provisions of Part V are similar to the provisions of H.R. 6660, introduced by Mr. Dingell on April 26, 1977, and also to a number of other bills introduced by Mr. Dingell in the last Congress. It may help to an understanding of the purpose and impact of the current proposal now being presented by the Subcommittee on Energy and Power to explain the federal and state government regulatory scheme and the industry structure in which these provisions would be made applicable.

The division of responsibility for the regulation of utilities between the federal government on wholesale transactions and the states at the local and retail level is long established. It conforms to the traditional concept of the division of responsibilities between the federal government and the respective states. The provisions of Part V would radically alter this balance by prescribing detailed rules and policies for the activities of the state regulatory agencies; these policies would be carried out from Washington if the state agencies did not follow the federal prescriptions. The policies would not only alter the federal/state balance of regulatory responsibility, but would also alter the balance in the relations between the investor-owned systems, on the one hand, and the public and cooperative systems, on the other.

About 80% of the retail electricity market is served by investor-owned utility companies. The remainder of the retail market is served by some 2,000 municipal systems and by 1,000 electric power cooperatives financed by the Rural Electrification Administration. The public and cooperative systems generate only a part of the electricity they distribute and sell. A substantial share is purchased at wholesale from the investor-owned companies, as well as from federal agencies, including the Tennessee Valley Authority, the Bonneville Power Administration, and the Bureau of Reclamation. The reverse is not true; the investor-owned systems

do not rely on the municipal and cooperative systems for bulk power supply.

The sales by the investor-owned systems to the public systems and cooperatives are regulated by the Federal Power Commission. The purchases by the public systems and cooperatives from Federal agencies take place under laws which grant a preference to the public systems and cooperative agencies in the purchase of power, and which contain mandates to the federal systems to sell power to such agencies at as low a price as possible consistent with costs. In many instances, the costs are premised on construction at some of the best hydro sites in this country, in periods of low construction costs. These circumstances provide power systems owned by public and cooperative entities with significant advantages in obtaining power at rates far lower than the costs of the taxpaying private systems.

In addition, the public and cooperative systems themselves enjoy significant tax advantages. They pay no income taxes, and the public systems can raise money cheaply because the interest on the bonds they issue is free from federal income taxes.

The investor-owned systems are comprehensively regulated by public utility commissions in every state and the District of Columbia with respect to their retail operations. Their wholesale operations are regulated by the Federal Power Commission, which operates under a mandate to exercise every reasonable effort for protection of the purchasers of power at wholesale. In contrast, the public and cooperative systems are not regulated by the Federal Power Commission and are regulated by state commissions in only a handful of states. Although the public and cooperative systems frequently participate in joint projects with each other and sometimes with the privately-owned systems, they are almost never wholesalers of power. Thus, provisions which apply at wholesale do not affect them as sellers, but only as buyers. Provisions

in the bill to prevent recoupment of the costs of wholesale service operate to transfer cost burdens from the public systems to the customers of the investor-owned companies.

There follows a chapter-by-chapter and section-by-section analysis of and commentary on the salient provisions of Part V.

Analysis and Commentary

Chapter 1--GENERAL PROVISIONS

Chapter 1, consisting of sections 501-504, provides primarily a statement of purposes and definitions of terms. The major stated purposes of the bill are to increase efficiency in the generation, distribution and consumption of electric power and to protect consumers' interests in regulatory proceedings involving electric power. A number of the definitions are significant in light of the bill's substantive provisions -- for example, the definition of a "bulk power transmission facility." The important definitions will be discussed in connection with the relevant substantive section.

Section 504 establishes a twelve-member advisory committee to advise the Commission on implementing the regulatory reform provisions of this chapter of the bill. Of the twelve members, three will represent utilities -- one each from publicly-owned, privately-owned, and nonregulated cooperatives; five will represent State regulatory authorities; three will represent the three classes of consumers; and one will represent conservation organizations.

Although the composition of the Advisory Committee is evidently designed to minimize the representation of the investor-owned utilities, upon which rests the major responsibility for electric service, in the context of the bill as a whole it is not objectionable.

Chapter 2--IMPROVING EFFICIENCY OF USE OF ELECTRICITY

The general stated purpose of this chapter (sections 505, 511-517, 521-523, 526 and 531-538) is to alter the pattern of consumption of electricity by requiring rates throughout the country to be structured in accordance with uniform federal standards. The thrust of the required changes in rate structures is said to be to encourage conservation, favor residential customers, and assure an enlarged role in the regulatory process for environmental and consumer interest groups. To encourage conservation the bill would require rates to be structured on a marginal cost basis; that is, rates must reflect for each customer or class of customers the capital and operating costs incurred or to be incurred for such service, including the need to add future capacity because of service at the time of the utility's peak load. Residential service is exempted from marginal pricing requirements. Volume discounts are not allowed unless they are demonstrated by the utility in an evidentiary hearing to reflect decreases in the cost of providing electric services.

The federal government would be responsible ultimately for putting the bill's provisions into effect, either through state regulatory authorities, if they agree to follow the dictates of the statute and of all rules and regulations promulgated thereunder, or in the absence of such a commitment, by direct federal regulation of retail rates. Rate increases for the utilities are to be held hostage until their compliance is achieved.

Comment: Two general comments may be made. First, there is no question of the need to review rate schedules and to adapt them to current conditions of potential shortage of some fuels, and of the need for conservation. This process of change has been a continuing trend for the last several years, and is proceeding swiftly. It is not necessarily true, however, that it would be

accelerated or that the results would be better if the bill were passed, and the federal government now undertakes the task. The effect of many of the changes in rate structure proposed by the bill is unknown. There is a great deal of ongoing research and demonstration on the impact of marginal rates in general and of specific applications of marginal cost rates through time-of-day rates, seasonal rates, and other devices. It is too early to know what policies are most effective or fair or whether the general policies and specific applications are equally adapted to the variety of different climatic, cost, demographic and other variables in the different parts of the country.

Second, the concentration of rate-making authority in the federal government would represent a radical departure from the present division of state and federal powers in utility regulation, and would make the states subservient to the federal government in this important area. There has been no showing of abuses or other cause at the state level to justify such an encroachment upon the states. Moreover, the process proposed in the bill will not substitute federal for state authority, but will utilize the states in a subordinate role, and impose another layer of bureaucracy and numerous procedural complications upon proceedings that already take far too long.

There follows a discussion of the key provisions of this chapter.

Subchapter A--Coverage

Section 505: Coverage. Section 504 makes clear that the "rate reform" provisions apply only to sales at retail, and not to utilities whose sales do not exceed 750 million kilowatt hours a year, until seven years after enactment, at which time the limit is reduced to 200 million kilowatt hours per year.

Comment: Presumably, facility of administration is the rationale for this exemption. However, in view of the importance the bill attaches to the rate principles detailed in this chapter, one may wonder at this exemption of so large a number of public and cooperative systems. The exemption by size of system has the effect of eliminating from the bill's coverage the vast majority of the public and cooperative systems which, in the aggregate, serve many millions of consumers. Equally important, in their purchases at wholesale the municipal and cooperative systems will not be required to pay for power on the basis of the marginal costing formulas to which such importance is attached for purposes of retail sales by the investor-owned systems.

Subchapter B--National Minimum Standards for State Regulated Electric Utility Rate Regulation

Subchapter B consists of sections 511 through 517, and by reference incorporates other provisions of the bill. Here the rate principles and policies are spelled out in great detail.

Section 511: Rate Standards. Each state-regulated electric utility covered by the chapter is required to comply with the following minimum standards:

> (1) Except for "essential needs of residential electric consumers," the retail electric rates of the covered utilities must be designed to reflect the specific costs of providing electric service to the particular consumer or class of consumers. Declining rate blocks are prohibited unless it is proven in an evidentiary hearing that any decrease in a rate block reflects a corresponding decrease in costs.
>
> (2) The rates for each class of consumers must be on a time-of-day basis reflecting the costs for such service unless in an evidentiary hearing it is demonstrated that, with respect to any class of consumers, time-of-day rates would not be cost-effective. If any time-of-day rate is determined not to be cost-effective for a class of consumers, it must nevertheless be offered to each individual consumer in the class who is willing to pay the costs of metering associated with such rate.
>
> (3) A similar requirement that rates shall be on a seasonal basis is imposed.

(4) Each electric consumer or class must be offered an interruptible rate reflecting the cost of providing interruptible service to such customer or class.

The regulatory agency in applying these provisions is to determine costs on a marginal cost basis in accordance with section 532 of the bill. Section 532 provides that each state regulatory authority which has assumed responsibility for carrying out the provisions of the bill is required to prescribe methods for determining costs which reflect differences in cost-incurrence for each electric consumer or class, attributable to daily and seasonal time of use of service, taking into account "the extent to which total costs to an electric utility are likely to change" if additional capacity is added to meet peak demand, if additional kilowatt hours are sold, or additional electric consumers are added. However, Section 516 makes clear that the bill is not to be interpreted as permitting any additional earnings for the utility company.

Comment: We have already noted the precipitous fashion in which the bill would impose incompletely studied rate-making policies on a nation-wide basis.

It is not as though the state utility commissions had ignored the problem of reforming rates in the light of the new imperative for energy conservation and efficiency. On the contrary, at least 31 commissions (according to the National Economic Research Associates) are actively engaged in rate reform studies. Many research institutions, including Electric Power Research Institute, the National Association of Regulatory Utility Commissioners, the national Energy Research and Development Authority, numerous of its contractors, and others, are seeking ways to improve rate structures in a manner consistent with local needs and conditions and the common sense requirement for a degree of stability and continuity in the

level of rates to various customer classes. The provisions of the section represent an effort to impose a rigid formulation of the marginal cost concept, in an abrupt way, where existing agencies are already tackling the job at a pace consistent with responsible administration.

More specifically, the provisions raise two other important concerns when read in combination with sections 516 and 532. First, with reference to the manner of determining costs under section 532, the bill would introduce a very large element of subjectivity into the rate-making process, especially through the requirement that the ratemaking authority take into account the possibility that costs may be changed by a variety of hypothetical circumstances. Nothing is said as to how such additional costs are to be determined. For example, the costs might be based on near-term increases or on increases in the more distant future. They might vary greatly depending upon assumptions as to inflation, construction schedules and regulatory delays. Many other variables would need to be considered. It is thus apparent that the bill cannot possibly achieve the stated objective of facilitating rate reform by eliminating the competitive disadvantage which a state might incur because its rate reforms were not matched by sister states. On the contrary, it may well prove that building upon the present system of rate-making, based upon book costs, will lead to a higher degree of uniformity of rate levels than would the speculative and variable basis prescribed by the bill, and in a way which serves as well the interest of conservation.

In short, even if the bill's assumption that variations between states in the cost of electricity resulting from different rate structures encourage consumption of electricity and discourage rate reform were true, which is far from well established in view of other factors influencing plant location, this bill will not result in uniform rates in any event, and the reforms it does

introduce do not seem well suited to reducing consumption of electricity by many users. This defect becomes most evident in an analysis of the purpose of section 516.

The provision of section 516 that utilities' earnings levels shall not be permitted to increase as a result of using the new costing methods, must be considered in connection with the exemption from marginal cost pricing (section 511(b)) "for essential needs of residential electric consumers." The exemption constitutes an invitation, and as a practical matter a compulsion, to devote the additional charges collected from all other customers to a subsidy of the rates for so-called "essential needs" of residential consumers, which are to be defined by the respective state regulatory commissions. No one can yet say what the extent of such a subsidy might be, but that lower rates for residential users are anticipated is clearly shown by section 532(c), which requires an inquiry by the State regulatory agency where such lower rates have not come into effect within two years. The amount of the subsidy will depend on the mix of business and residential use for a particular company, and the interpretation and application of marginal costing rules.

This type of residential rate subsidy is frequently referred to as "subsistence rates." The low rates for subsistence amounts are granted to all consumers regardless of means, and regardless of total use. A number of studies by the Tennessee Valley Authority, National Economic Research Associates, and others, have shown that the people who would benefit from subsistence rates on a subsidized basis are by no means the same as those who need help in paying their bills. Obviously, those whose use is limited to subsistence amounts will achieve the greatest benefit, but poor people are not necessarily those who use the smallest amounts of

electricity. Usage depends as much upon size of family, the quality of the home and its appliances, and the knowledge of how to make the most effective use of electricity, as it does upon income level. Many wealthy people live in small apartments, or have more than one home and by moving with the seasons are able to avoid severe weather and attendant high energy usage for heating and air conditioning. The TVA study showed that in its service area subsistence rates would increase the bills of 29% of the poor families and reduce the rates of 49% of well-to-do families. Perhaps more fundamentally, it is anomalous to mandate subsidized rates in a bill intended to provide for greater economic efficiency by predicating purchasing decisions on marginal costs. At the same time, the exemption erodes the justification for imposing marginal pricing on other purchasers.

Section 512: Restrictions on Advertising. Section 512, in effect, prohibits any utility from recovering the costs of promotional, political, or institutional advertising by providing that if a utility recovers any of the costs associated with such advertising, its rates shall be deemed to be not in compliance with the requirements of the bill.

Certain types of advertising are exempted from the prohibition. These exemptions are: (i) advertising which informs electric consumers how they can conserve; (ii) notices required by law or regulation; (iii) public information regarding service interruptions, safety measures, or emergency conditions; (iv) advertising concerning employment with the utility; and (v) the distribution of information on rate schedules and rate hearings.

Comment: These provisions reflect a rigid and doctrinaire approach to matters requiring flexible and sensitive treatment. Not included in the exemptions, for example, and therefore presumably banned, are advertisements which inform consumers of proposed

construction programs which might affect them or their locality, information on the plans of the utility to add additional capacity to meet area needs, and other kinds of information that would be of interest to consumers and helpful to them. Beyond these omissions is a larger question, whether the utility should be permitted as a part of its cost of operation to explain and justify itself to the people in its service area, to state its position on controversial questions, such as discriminatory tax proposals which might affect the level of rates, or to defend management against public charges with respect to rates and services. A company which is financially hard-pressed may be required to forego presenting to the public a side of energy issues which is important to sound public decisions. The question of the proper extent of customer information to be included as a part of the cost of service is too subtle and too rooted in local conditions to be susceptible of a blunderbuss approach.

The distinction between prohibited and allowable advertising in the section also does not appear to be sufficiently clear to carry the weight of the severe penalty for violating this provision. (See discussion of section 536.)

Section 513: Pollution Control. In this section the bill provides that an electric utility may recover costs incurred in connection with pollution control.

Section 514: Automatic Adjustment Clauses. Section 514 prohibits fuel adjustment clauses unless they have been determined in an evidentiary hearing "to effectively provide incentives for efficient use of resources (such as incentives for economical purchase and use of fuel) and to be necessary to enable such utility to meet its immediate short-term financial obligations...." A number of additional requirements are imposed, such as periodic review of the clause by the state regulatory authority or the

Federal Power Commission, and periodic audits. Changes in expenses attributable to imposition of the oil and gas consumption tax may not be included in any fuel adjustment clause.

Comment: Almost all utility rate schedules now include a fuel adjustment clause which permits the utility to pass along to its customers dollar-for-dollar any increases in the cost of fuel while at the same time requiring that any reductions in fuel costs are passed along as savings to consumers in the same way. Considering step-by-step increases in OPEC prices for oil, the companion increases which are taking place in the cost of other fuels, not to mention the provisions in the National Energy Act which are designed to increase fuel prices by taxation and otherwise, it is apparent that in future years there are likely to be large and repeated fuel price increases.

An electric company is basically a converter of fuel to electricity. Fuel now accounts for about one-half of the total costs of some utility companies. With such enormous amounts of money involved, the inability to pass along increases in fuel costs over which the utility has no control could, and probably will if the bill passes, threaten the solvency of many utility companies. The short-term cash requirements of most utility companies are large and continuing. If erratic changes in costs cannot be covered promptly, the entire enterprise is jeopardized.

The apparent meaning of the language with respect to including "incentives for economical purchase and use of fuel" is to preclude passing along the entire costs and to make the utility bear a share. If rates are fixed as they frequently are, at the minimum legal level, arbitrarily imposing upon the utility a non-reimbursable share of fuel cost increases can only invite disaster should sharp fuel increases again occur. In the meantime, required absorption of even a few percent of fuel price increases could do great damage to the credit and ability to serve of many utilities.

The implied social contract between a utility and its consumers is that it will provide good service at controlled rates, and in return will be permitted to recover its costs, including the cost of capital. This contract is breached by a statutory bar to cost recovery.

As to the ostensible need to deprive a company of reimbursement in order to provide incentive, there are two answers. The investor-owned systems are business-managed, and there is every reason to struggle for savings. No proof exists that they have not done so. On the other hand, the OPEC cartel and federal price-fixing frequently allow no room whatever for bargaining. The purpose and effect of this provision can only be punitive.

The bill permits passing along the proceeds of a fuel adjustment clause, as a part of an interim rate increase which would "take effect subject to a later determination of the amount of such rates and to a requirement of refund of any overcharge," with interest. To secure the protection of this provision, however, it would be necessary for the utility to file a formal rate proceeding to recover its fuel costs, with attendant indefinite delay in recoupment of costs. The purpose of the fuel adjustment clause is precisely to avoid the need to occupy the utilities and the commissions with formal rate proceedings in order to reflect fuel cost fluctuations in rates, and to permit prompt pass-throughs of such costs. The charges under such clauses can readily be audited, and usually are.

The flat prohibition against recoupment of the oil and gas consumption taxes is incredibly harsh and unfair. The purpose of the taxes is to encourage a switch to coal as a fuel. But many plants cannot be switched to coal, either for physical reasons (lack of space for coal storage, for example), for financial reasons

(in many cases the plant would need to be rebuilt, and the utility would be unable, especially if Part V becomes law, to raise the money), or for environmental reasons, including prohibition by environmental authorities from making the change.

Section 515: Rates of State Utility Agencies. A utility that is an agency of a State, but not including political subdivisions of a State, must base its rates on the total cost of all energy generated and purchased for resale by it. Thus, the favorable treatment of the municipal and cooperative purchasers of electricity at wholesale is extended even at the expense of the state power agencies, and in flagrant disregard of the marginal pricing principles applied to the retail sales of the private systems.

Section 516. (Previously reviewed in connection with section 511.)

Section 517: Other Generating Systems. Under this section, utilities must have rates that do not discriminate against the use of small generating systems, including those using solar or wind energy. Utilities must also agree to purchase energy from such systems at equitable rates, and must accept any offer for any period where the rate does not exceed the highest cost at which the utility generates or buys energy during that period. The volumes are not likely to be large, and the provision is primarily notable as another departure from the economic costing principles of the bill.

Subchapter C--Other Requirements for State Regulated Electric Utilities

Subchapter C imposes requirements on regulated utilities to develop and improve load management techniques; to provide consumers periodically with specified information concerning rates, existing and proposed; and to prevent discontinuance of service to customers until certain procedures have been observed.

Section 521: Load Management Techniques. Each state regulatory authority is required under section 533 to consider alternative load management techniques for the utilities regulated by it. Section 521 provides that those which are determined to be cost-effective over the long run, and which are likely to reduce peak demand for electricity, must be implemented. A utility that does not implement them may not apply for a rate increase. It must also analyze the effectiveness of other techniques with which it has experience.

Comment: One may wonder why a requirement for commission management of utility systems for efficiency and reduction of capital requirements should be enshrined in federal law. The utilities themselves have the greatest incentives to achieve these goals, and only they are in position to achieve them. Diffusion of responsibility, and the sharing of technical decisions with regulatory agencies, is more likely to be counter-productive than helpful.

Section 522: Information to Consumers. The information required to be provided consumers by section 522 concerns existing and proposed rates and consumption levels. It is not difficult to provide this information, although it may be expensive to do so, not only as an initial matter but also in responding to subsequent inquiries that are unlikely to be completely avoided by the bill's requirement that the information conveyed shall be "clear and simple." This requirement may also serve to encourage expensive litigation. The sanction of denying rate increases for failure to comply is another example of the cast of the bill to invoke extreme penalties for any failure of compliance, however vague the directive.

Section 523: Termination Procedures. Prior to termination of electric service to any consumer, notice and an opportunity to contest termination are required to be provided under Section 523. The bill does not specify what "opportunity to contest" meets its criterion of "reasonable." Hundreds of thousands of termination notices are sent out annually by the utilities of the country. This section has the effect of making a federal case out of every such transaction. It will undoubtedly result in much higher amounts of uncollectible bills, the burden of which will fall upon customers who pay their bills promptly.

Subchapter D--Nonregulated Utilities

This subchapter (section 526) makes the provisions of subchapters B and C applicable to nonregulated utilities (most of the public and cooperative systems), with the significant difference that they can themselves exercise the authority which in the case of the regulated utilities is vested in the regulatory agency. Obviously with respect to the unregulated sector the requirements are far more elastic than for the investor-owned sector. Moreover, it would totally exempt nonregulated cooperatives from the restrictive provisions of those subchapters. It should be borne in mind that subchapter A already exempts most of the smaller nonregulated utilities. Thus, there will be one law for the regulated companies, and another for most of the public and cooperative systems.

Subchapter E--Requirements Applicable to State Regulatory Authorities

Section 531: Role of State Regulatory Authority. Section 531 sets up the mechanics for subordinating the existing state regulatory authorities to the federal role. A state regulatory authority is authorized to determine whether a utility is in compliance with subchapters B and C only if it notifies the Federal Power Commission that it assumes such responsibility; certifies

that it also has adequate authority to carry out the requirements of sections 532 and 533 (relating to methods of determining costs of service, and the alternative load management techniques, respectively); and complies with a biennial reporting requirement on implementation in accordance with such rules as the Federal Power Commission may prescribe. If it does not comply with these conditions, the Federal Power Commission will exercise the authority to determine compliance with subchapters B and C as well as with sections 532 and 533.

Comment: The subordination of the state regulatory agencies to the federal government has already been commented upon in the general discussion of subchapter B. A program of regulation which has been carried out over many years by state government will now be brought under the supervision of a federal bureaucracy with authority to order the details of its functions. This federal takeover of state responsibility is not accompanied by an acceptance of the fiscal burden of supporting the state agencies, even though they will now be carrying out federal, not state, policies.

The assumption in the bill that the states, or most of them, will be willing to finance the promotion of federal interests that may well be inconsistent with their own, or that they will be able to attract first-class staff to work in what will amount to field offices of the federal government, is questionable. Even in federal grant programs, where federal financing provides from fifty to ninety percent of program funds and often one hundred percent of state administrative costs--the welfare program, medicaid, and social services--state governments enjoy far more autonomy than is provided in this bill. It has been recognized in those programs that the states have interests in the way in which state-administered programs function within their borders, even when the policies carried out originate within the federal government. Enlightened legislation recognizes that the federal policies will be more effectively executed if they are

coordinated with state interests. Such a blending would be even more essential where federal policies are being superimposed on important ongoing state programs, and on state commissions with a long history of responsibility and achievement. The federal government can most effectively act as an advisor to state regulatory agencies on these matters; at most it should be a partner. In attempting to assume a dominant role, it will discover that the effectiveness and value of the agencies it comes to dominate has been compromised beyond repair, and that it has destroyed an invaluable resource of state pride and initiative.

It should be added only that there may be many legal and practical barriers to the assumption by the state regulatory agencies of the responsibilities in the bill on the terms prescribed therein. Thus, it should not be assumed that the federal government will not have the responsibility of carrying out the bill and determining rate increases for many utilities directly.

Section 532: Determination of Costs of Service. (This section has been discussed in connection with section 511.)

Section 533: Alternative Load Management Techniques. (This section has been discussed in connection with section 521.)

Section 534: Master Metering. Section 534 provides that master metering may be prohibited in buildings pursuant to rules to be prescribed by the administrator of FEA.

Section 535: Participation in Regulatory Proceedings by States and Consumers. Section 535 provides that state agencies and individual customers may "intervene as of right as a party" in the proceedings of state regulatory agencies. It further provides that where the participation of a consumer "substantially contributed to disapproval or modification of a rate proposed by an electric utility on grounds that the rate did not comply with

any requirement of subchapter B or C," the costs of participation by such consumer must be compensated by the electric utility, that is, at the ultimate cost of the consumers themselves, even if the intervention is for the purpose of raising their rates.

Comment: This provision is an invitation to individuals dissatisfied with a rate increase (or reduction) not only to intervene, but to persist in an intervention to the utmost extremes in the hopes of receiving compensation for their efforts. It is also an incentive to persist even if the regulatory action would otherwise be acceptable, in order to maximize fees. It presents a real possibility of rate increases being held hostage to high settlement offers--the sorts of abuses that have already plagued private enforcement of the antitrust laws. The status of a party conferred by the bill carries with it rights to present evidence, to subpoena witnesses and records, to cross-examine witnesses, and appeal from one tribunal to another. It suggests infinite possibilities for delay of proceedings by persons for whom delay is the principal purpose of intervention. This provision would produce endless delays and litigation.

Additional provisions for funding intervenors in federal and state proceedings are included in sections 551 and 552. The discussion under those sections is also germane.

Subchapter F--Enforcement and Review

Sections 536 and 537: Prohibition and Enforcement. Section 536 prohibits any increases in rates by any electric utility which is not in compliance with the requirements of subchapters B and C. Section 537 permits certain federal or state agencies and individual consumers "who may not maintain such an action against such utility in a State court," to enjoin any violation of section 536 in a federal court.

Comment: In the present inflationary economic environment, periodic rate increases will be essential to the survival of any electric utility. The prohibition by federal law of such increases as a sanction for each of the myriad requirements imposed by the bill is a gross example of overkill. If this were not enough, even if federal and state authorities are satisfied with performance, Section 537 extends the right to any electric consumer to seek an injunction, if not in a state court then in a federal court, against any rate increases in claimed violation of section 536 (which in turn incorporates the whole panoply of requirements contained in subchapters B and C). The federal regulatory agencies and the federal courts will provide forums for relitigating the same issues that have been decided at the state level. The combination of sections 536 and 537 with the other provisions of the bill would result in adding an overwhelming flow of litigation in the state and federal courts to the already unmanageable state regulatory proceedings, which deprive utilities of the opportunity to secure timely decisions on their applications for rate relief. Much of the federal court litigation would duplicate the normal processes of judicial review.

The right to seek an injunction which is extended to each consumer by Section 537 is especially anomalous because it is not conditioned on the consumer's having participated in the regulatory proceeding whose outcome is being challenged. Counsel for the consumer group could sit on the sidelines during the whole of the regulatory process and then attack a rate increase collaterally in judicial proceedings, thus defeating the purpose of the regulatory process, which is intended to provide for efficient considerational of all interests in a single proceeding.

Section 538: Judicial Review. This section provides that regulatory decisions concerning a utility's compliance with

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subchapters B and C may be reviewed in the U.S. Court of Appeals at the instance of any consumer or utility company, unless the issues may be reviewed in a state court.

Comment: This provision operates to further prolong rate-making proceedings by guaranteeing judicial review of each one. In view of the importance of the determinations involved to the utility, such judicial review may prove to be essential to insure that regulation remains within statutory and constitutional limits, but the need for such a provision is a demonstration of the extent to which the bill would embroil the industry and intervenors in litigation.

Chapter 3--IMPROVING EFFICIENCY OF, AND PRESERVING COMPETITION IN, GENERATION AND TRANSMISSION OF ELECTRICITY

Background on Chapter 3. Chapter 3 consists of amendments to the Federal Power Act. The subjects relate primarily to wholesale and interstate transactions in energy, which have been the traditional concern of the federal government. They do not raise, as do the subjects of Chapter 2, the question of duplication of and restraints upon the exercise of state powers in relation to local matters. Rather, the single question here (except for section 545) is as to the reasonableness of and justification for the proposed amendments.

Section 202(a) of the Federal Power Act now provides authority to the FPC to divide the country into districts for interconnection purposes and to encourage interconnections on a voluntary basis. This authority has been extensively employed. The country has been divided into national electric reliability districts, each of which constitutes an effective power pool. Representatives of all the major utility interests within each district meet regularly and prepare plans for submission to and discussion with the Commission and its staff. There is an effective exchange of information, both among the members of the various district organizations and between the district memberships and the Commission.

In addition, the various districts are interconnected with each other to such an extent that virtually all of the major electric power systems east of the Rocky Mountains function in effect as a single pool which is tied together electromagnetically. All of the electric systems within this vast area are synchronized in this way because of their common energy and economic problems. The transmission ties between the western systems and the eastern systems are not strong enough as yet for synchronization under all circumstances; but mandatory legislation would not change the controlling geographic and economic conditions.

One exception may exist to this picture of voluntary coordination and synchronization. Some of the major systems within the state of Texas are presently organized in an intrastate pool which they claim fully realizes all the potential benefits of system integration, and they do not participate in interstate operations. A mandatory program might result in tying these Texas systems to the national grid.

Section 541: Interconnection, Pooling, Wheeling, and Central Dispatch; Standard for Wholesale Rates. This section would give the Commission authority to establish mandatory arrangements in place of today's voluntary ones. The purpose of exercising this authority would be to assure "the purchase and sale of electric energy at wholesale at the lowest possible cost," a new standard for ratemaking. The Commission would also have authority to set the terms for energy transactions, to require sales and wheeling in the public interest, and to order a utility to increase its bulk power transmission capacity, though not its generating capacity, under the same criterion.

Comment: The primary purpose of section 541, as of much of the rest of Part V, is to further distort the balance between the public and cooperative purchasers at wholesale and the privately-owned systems from whom they buy a large amount of their bulk supplies. Thus, section 202(a) would be amended to state the goal of the mandatory interconnection program is "to assure electric energy at wholesale at the lowest possible cost." Of course, the electric utility industry is not a competitive industry but a group of heavily regulated monopolies, except for the public sector, which consists primarily of unregulated monopolies. The "maximum competitive opportunities" refer primarily to the federal power construction program, which is strongly supported by the public and cooperative systems because it provides them with subsidized power sources.

Under the bill, wholesale supplies are to be made available at "the lowest possible cost," a phrase which

does not even provide the usual deference to the hard facts of life by adding "consistent with the costs of providing service."

Under many circumstances the standard of "lowest possible cost" would prevent utilities from dispatching power, as they now do in compliance with state and local requirements, in such a way as to reduce air pollution during periods of pollution alerts.

An anomaly is that while the comprehensive prescriptive rules for regulating the retail rates of the regulated utilities place their rates predominantly on a marginal cost basis, nothing is said here about selling at wholesale on such a basis. All the talk of pricing in an economically effective way, and of establishing the correct pricing signals in the energy industry to encourage conservation, has disappeared when the bill reaches the area of wholesale rates to the public and cooperative systems. Logically, wholesale rates would seem to be the first target for marginal costing, because generating costs are increasing much faster and are much more significant than transmission and distribution costs, yet the bill abandons marginal cost principles in the very area where they would have the greatest application.

Significantly, most of the municipal and cooperative systems are totally exempt from regulation, and therefore are under no compulsion to apply marginal cost pricing at the retail level. To the extent they come under the bill as unregulated utilities, they administer their own enforcement. In any case, marginal costing at retail would be of little relevance to systems which purchase their power supply at wholesale, because it would not seriously impact on their costs of electricity supply.

The powers granted to the Commission to order a utility to "provide wheeling, or otherwise transmit energy" for any purchaser or "cogenerator" are especially significant. Wheeling is expensive and impractical unless the distant source of power is substantially lower in cost than that of the supplying system. Such a difference commonly occurs only when the distant source is subsidized. The real purpose of compelling wheeling

is to enable a public or cooperative system to purchase subsidized power at a distant location and to require the utility systems serving the network to displace their own wholesale power sales by delivering the power purchased from the other source. Such arrangements provide a great inducement to local government to take advantage of tax exemptions and subsidized power sources to enter the electric utility business in competition with regulated utilities when to do so would not be economical except for subsidies.

Section 542: Continuance of Service. This section of the bill would in effect require utilities in the event of any shortage of electric energy to spread available resources between its own retail customers and the retail customers of its wholesale purchasers in a nondiscriminatory manner. The authorization to the Federal Power Commission to require interconnection, pooling, wheeling, and other transmission services to further coordination is repeated in section 542.

Comment: Standing alone, this provision would not be objectionable. However, it remedies a non-existent problem. There is no showing that any discrimination has been practiced by any utility in the past and no indication that it will be in the future. The Commission has ample authority to prevent discrimination without this additional provision, which serves as an excuse for a further weapon placed in the Commission's hands to dictate the terms for pooling and wheeling.

Section 542 may, however, have another purpose -- to prevent utility companies from releasing themselves from the obligation to serve wholesale loads, which would in turn require the public and cooperative systems to install their own generating capacity. The existing procedures of the Federal Power Commission already make wholesale service burdensome and nonremunerative. The additional provisions of the bill, especially sections 543 and 544 (discussed below), would virtually insure that wholesale service could be conducted only at a heavy loss.

Section 543: Rate Increases. The new standard of establishing rates under the bill, "the lowest possible cost," is contained in section 541 and has been discussed in connection with that section.

This section would amend the Federal Power Act to prohibit any rate increase until after formal proceedings and a final order issued by the Federal Power Commission whenever a complaint was filed concerning the increase. Such proceedings currently can take years to complete; however, the bill would require them to be decided in ten months. The ten-month period would start to run only 30 days after the utility notifies the Commission and its customers of its application, meaning essentially that eleven months, not ten, must pass before a decision is made on the request for an increase. The bill refers, however, consistently to a "ten-month" period. This period itself could be extended in order to provide time for the Commission to obtain additional information from the utility, and the time taken for response in a manner satisfactory to the FPC is added to the "ten-month period." If the Commission did not complete its work in "ten" months plus any extensions due to requests for additional information, the matter would be lodged with the Chairman individually, who is granted an additional two months for a decision. No rate increase application, even on an interim basis, may be filed within the "ten-month period" plus extentions for providing additional information after the filing fo a previous application.

Comment: The accelerated treatment of rate increase aplications intended by this provision is a step in the right direction. However, the present workload of the Commission, not to mention the added burdens that H.R. 8444 would place on it, suggests that faster disposition of these rate cases, if it happens, may only be purchased by delaying further the Commission's treatment of other responsibilities.

Nor is the bill explicit as to what happens if the schedule is not met. Presumably, the new rate would not go into

effect until a court ordered it approved. This is a difficult remedy to obtain, especially in a context where rate increases are prospective only and delay is often the equivalent of victory for those opposing the increase.

Further, the opportunity afforded to the Commission to extend its consideration by requesting additional information from the utility is subject to serious abuse where the bureaucracy is unable to meet a tight time schedule. Merely ordering an early decision does nothing to clear away the procedural thickets which delay cases, or to eliminate the crowded dockets which prevent expeditious handling of applications. In fact, the provisions in the bill for funding intervenors and expanding their opportunities for delay work against any assumption that the time limits set in section 543 can be met.

The prohibition against filing a rate increase application within ten months of a previous one could seriously injure a utility company's financial position simply to serve the convenience of the bureaucracy. The fairness of the rate, not when it is filed, should determine whether it should go into effect.

Two other provisions must be mentioned as casting doubt on the efficacy of section 543. One provides that to be "lawful," a schedule "filed by a public utility . . .[must be] just, reasonable, and otherwise lawful." Does this mean that if the Commission (or the Chairman) should disallow a part of the request at the end of the statutory period, the filing was not a lawful filing and must be dismissed? The second provision states that a filed schedule shall not be lawful "if differences between such utility's wholesale rates under such schedule and its retail rates are unreasonable and anticompetitive." This is the so-called price-squeeze question, a difficult and controversial issue. Injecting such an issue

into every proceeding would in itself preclude prompt disposal of the application. If the decision should hold that such a price squeeze exists, would the schedule be nullified and the utility required to file a new schedule in order to secure relief?

Section 544: Automatic Adjustment Clauses. Section 544 would provide that no rate increase could take effect pursuant to a fuel adjustment clause unless the Commission had determined after an evidentiary hearing that the clause "effectively provides incentives for efficient use of resources (such as incentives for economical purchase and use of fuel) and is necessary to enable such utility to meet its immediate short-term financial obligations." The clauses must be reviewed not less often than every two years "to ensure the maximum economies in those operations and purchases which affect such rates." In any event, the clauses must be reviewed in an evidentiary hearing not less often than every four years. The Commission is required to audit the practices of each utility with respect to the use of automatic adjustment clauses. Any purchaser from an electric utility "may examine the records of the public utility . . . to insure compliance with applicable schedules and Commission rules."

Comment: What has been said in connection with section 514, restricting the use of automatic adjustment clauses in retail rates, is generally applicable here. Automatic adjustment clauses are essential to preserve the short-term cash positions of most utilities in a manner consistent with responsible management requirements. To base national policy on an assumption that even for a short time utilities will be able to either resist or absorb OPEC price increases or the imposition of new federal taxes is patently unrealistic, especially since rates will already be at "the lowest possible" level when these increased costs are incurred.

The requirement for evidentiary hearings not less than once every four years could mean (if the wholesale customers were successful in prolonging such proceedings) that even a utility which perchance would meet every other test would be barred from passing along fuel cost increases until the Commission entered a final order in the proceeding, perhaps after a long lapse in which no relief could be granted. This requirement for periodic review will also seriously inhibit the ability of utilities constructing new generating capacity to enter into reliable long-term contracts for sale of that capacity. Such contracts are often an essential element in a decision to undertake a new construction project.

Finally, with regard to this section, the free rein given to the public systems to rummage through the records of their investor-owned suppliers provides an instrument which is subject to many sorts of abuse. No reason appears why this broad right of discovery is necessary. The Commission itself has access to all the records, and can require all relevant material to be made available. One can easily imagine this provision being used to serve other purposes than verification of fuel costs.

Section 545: Reliability. Section 545 requires that the Federal Power Commission shall prescribe rules respecting electric utility reliability, by rulemaking proceedings (that is, without evidentiary hearings). It requires also that in prescribing reliability standards, the Commission shall require a level of reliability which will be adequate to meet the public needs, though not in excess of that which is cost-effective; give consideration to technological feasibility, energy conservation and environmental impact; minimize capital costs and operation and maintenance expenses; recognize the different requirements of reliability of different consumers, depending on

their respective circumstances; insure that the reliability requirements for generating, transmission and distribution equipment and for operating and maintenance procedures are internally consistent; take into account the availability of emergency electric energy from nonutility sources; and require minimum standards of quality in purchase, construction, operation and maintenance of bulk power facilities. The Commission is authorized to implement rules which may include sampling, testing and other quality control requirements, and to promulgate requirements relating to performance, warranty and measure of damages to be included in contracts between the utilities and their suppliers. The rules must be reviewed by the Commission not less often than every five years.

Since the reliability provisions are applicable to the entire systems of the companies rather than merely to the wholesale function, there is a provision included in section 545 which authorizes the Commission to delegate its authority under this section to any state regulatory authority which the Commission determines has the capability to exercise such authority effectively.

Comment: If the other provisions of the bill left with the utility companies any discretion in managing their systems, section 545 remedies the oversight. This section is an illustration of the assumption in the bill that the operation of the nation's electric power network will be improved by transferring virtually every important element of responsibility to the Federal Power Commission, or to a state agency that meets with its approval. Its provisions fly in the face of the fundamental managerial concept of avoiding the separation of authority and responsibility. Utility management in the future could hardly take the most routine steps except in accordance with directives of the Federal Power Commission or the state

regulatory agency. If electric service in this country were in a state of total collapse, the provisions of the bill would hardly be justified as a method of reform. As it is, the power network in the United States is strong and efficient, and the standards of service are high, notwithstanding occasional interruptions on individual systems. Adequacy of power supply has not been a limitation on the growth of the economy, as in some other countries, although under the constraints of the bill this could well happen in the future. It is hard to see what faults or evils this section was designed to correct. Like so much else in the bill, it seems to rest on the presumption that, at least so far as the investor-owned utilities are concerned, every decision must be determined or reviewed in Washington.

Section 546: Cogeneration. In this section, the Commission is required, again by rulemaking proceedings, to prescribe rules requiring electric utilities to offer to sell electric energy to the owners and operators of cogeneration facilities and to offer to purchase electric energy from such cogenerators. Again, there are numerous specifications as to what the rules shall include: allocation of costs; the details of interconnection; the respective responsibilities of the utility and the cogenerator; minimum reliability standards for the cogenerator; and provision for the supply of emergency electric service to the cogenerator. Cogenerators which are not otherwise utilities are exempted from the Federal Power Act, the Public Utility Holding Company Act, and from state laws and regulations respecting electric utility regulation, if the Administrator of the Federal Energy Administration (peculiarly, not the Federal Power Commission) determines such an exemption to be necessary to carry out the purposes of the statute. The Commission's authority under this section may be delegated to a state regulatory authority.

Comment: The provision permitting exemption of cogenerators from the Federal Power Act and other state and federal regulations applicable to electric utilities is desirable. It may well be that some industrial companies have hesitated to enter into cogeneration arrangements because of uncertainty as to whether to do so would bring them within the jurisdiction of the utility regulators, state and federal. As to the remainder, the physical circumstances and the economics of coordination of utility facilities with cogeneration facilities will depend upon the unique circumstances of each case, which the state commissions are in the best position to appraise. An array of complex and rigid federal regulations is not likely to be helpful.

Section 547: Interlocking Directorates. The Federal Power Act now prohibits, unless with the express order of the Commission, any person to hold the position of officer or director of more than one public utility or to hold such a position with a utility while at the same time serving as an officer or director of any bank, banking association or firm that is authorized to underwrite or participate in the marketing or securities of a public utility, or any company supplying electrical equipment to such public utility. Section 547, as amended by the Ad Hoc Committee on Energy, would add to existing law a requirement that any person who is an officer or director of any bank, insurance company, any other organization providing financial services or credit, any company supplying electrical equipment or fuel for the use of public utilities, or any company which is among the 20 largest purchasers of electric energy sold by the utility, and at the same time is an officer or director of a utility company must file a notice of his dual responsibilities with the Commission. If the Commission finds that the holding of the positions in any case

"adversely affects the public interest" it may prohibit the individual involved from continuing as a director of the utility.

The provision for disclosure is a significant improvement over earlier versions of the bill that would have banned officers from holding two positions that now need only to be disclosed. How the Commission interprets "the public interest" in these matters will determine the efficacy of the section. No objection can be made to the disclosure requirement as such.

Section 548: Preservation of Competition. This section would provide that the Commission may, on its own initiative or on complaint, hold a hearing to determine whether a utility "is engaging in any unfair method of competition" or that any contract or rate schedule "would result in an unfair method of competition." It is required to prohibit any such unfair method of competition or reject any such filing. In connection with any generating facility (other than a nuclear facility, which is subject to licensing by the Nuclear Regulatory Commission) or transmission facility capable of operation at 200 KV or more, which a utility proposes to build, any public or cooperative purchaser of electricity may apply for a Commission order conditioning the construction of the facility on compliance with such conditions as the Commission may prescribe to prevent antitrust law violations. Such an application is required to be transmitted to the Attorney General for advice as to whether "the ownership or use of such facility may create or maintain a situation inconsistent with the antitrust laws . . . ." Upon receipt of such advice, if the Commission determines that such ownership or use is likely to create or maintain a situation inconsistent with the antitrust laws, the Commission shall issue an order conditioning the construction of such facility on compliance with such requirements as it determines appropriate to prevent or remedy such a situation (including providing for joint ownership of such facility).

Comment: In an indirect way, this provision introduces federal siting jurisdiction over the construction of fossil fuel power plants and all transmission lines of significance. Invoking the antitrust laws in connection with the proposed construction of a generating plant or transmission lines involves delays of such magnitude as to make uncertain when, if at all, a plant or line could be completed, and insures greatly increased costs. Under such circumstances, the utility is in a poor position to bargain. In effect, this provision, to be administered by a Commission which is virtually ordered to view proceedings from the standpoint of the public and cooperative systems, will very likely result in the Commission imposing partners upon a utility company on the Commission's terms. What such proposed relationships may mean in terms of construction costs, the quality of construction, and the reliability of service, can only be conjectured. In the past, the utilities have taken with great seriousness their obligation to provide adequate and reliable supplies of electricity to both retail and wholesale customers. If this provision becomes law, this responsibility will become greatly diffused.

Section 549: Applicability of Antitrust Laws. Although there is nothing in the National Energy Act which could possibly be contrued as exempting public utilities from the application of antitrust laws, section 549 adds a specific statement that nothing in Chapter 3 shall be deemed to constitute such an exemption.

Section 551: Financial Assistance to State Agencies and for Consumer Representation. Under section 551 the Administrator of FEA is authorized to make grants to state utility regulatory commissions for three purposes:

(1) up to $40 million a year is authorized for grants to improve the staffing of such agencies, but only where the regulatory authority agrees to assess utilities "or otherwise secures the funds to maintain the additional staff" following expiration of the grant;

(2) up to $5 million a year is authorized to subsidize the participation of intervenors in state regulatory proceedings; and

(3) up to $5 million a year is authorized for grants to enable the state commissions to develop "innovative rate structures."

Comment: Staff Improvement. Taking up first the grants for staffing, the provisions for "maintenance of effort" at the expense of the utilities after expiration of the grant are characteristic of the bill's rigid approach and anti-utility bias. It would seem that a state should have the option whether to support regulation from general revenues or utility assessments. More important, with such large sums to be available, the grant program would constitute another vehicle for exercising control from Washington over the operations of the state utility commissions. With the prospect of additional increments of funding and additional staff from year to year, some state commissions would feel under pressure to decide cases and adopt policies and programs designed to maximize the grants rather than to carry out their responsibilities in the light of local conditions and under the provisions of the laws of the respective states.

Recent years have witnessed an enormous expansion of the staffs of utility commissions throughout the country. The pace of expansion has been determined by the governors and legislatures of the states in accordance with their own priorities. Whether a system of federal grants for particular agencies will be helpful in maintaining balance among the state agencies and lead to a better state administration and a higher quality of state services seems doubtful. It may be expected if this provision should become law that it would become a precedent for purchasing the extension of federal authority into many other aspects of state administration.

Funding for Innovative Rate Structures. Enough has been said about the stress on devising new rate structures to indicate that, under the pressure of the rigid controls established by the other provisions of the bill, there is hazard of immature and abrupt changes. The federal funding for the development "of innovative rate structures" can only increase the danger of precipitate action, harmful to electric consumers.

Funding for Participation in Proceedings. One of the greatest burdens on the electric utilities in their efforts to plan for the future is the inordinate delay in the disposition of rate and certificate cases by the regulatory agencies at both the state and federal levels. The situation has deteriorated markedly in recent years because of the intervention of numerous special interest groups, purporting to speak for a variety of environmental and consumer interests. Many of the interventions are calculated to influence the result more by delay than by the terms of the order which ultimately is issued. In effect, the funding of intervenors represents frustration through the use of federal funds of the purposes for which regulatory authorities are established, which is to dispose of proceedings as promptly as possible, consistent with a full and fair hearing.

The intervenors are now supported by contributions from member associates, grants by foundations and other sources. Public funding will insure and institutionalize the development of large groups of intervenor counsel and witnesses, at high compensation, to defeat the purposes of energy legislation. Increasingly, the rewards of intervention will lead counsel and experts to create their own consumer organizations as a base for interventions.

Several bills for the funding of intervenors in federal energy cases have been introduced in recent years and they have been the subject of extended hearings. The Congress has declined thus far to enact any of them. Now the effort is being made, under the sweep of a broad energy program, to carry with it a program for the financial support of intervenors which would have a dubious chance of enactment if considered separately on its own merits.

Withholding of Funds. The Administrator may withhold a part or all of a grant under this section 551, if he finds that the grantee state agency "is not carrying out the program as described in the application or has violated assurances contained in the application." This sort of provision is commonly found in federal grant programs designed to fund activities that have been originally stimulated and are maintained by federal support to achieve federal purposes. The license that it creates in the federal government to oversee and influence those activities on a day-to-day basis is justified by the dominant federal interest. In the case of the bill's grant program, however, the long-term and principal responsibilities of the agencies involved have been established by state law to protect the public interest as the state government has perceived it. To bring this ongoing exercise of public authority by a state agency within the control of a federal official on

a day-to-day basis, as this provision authorizing the Administrator to release or withhold funds does, is an entirely different matter, and one which may have a significant effect on the independence of state regulatory commissions.

Section 552: Office of Public Counsel. This section would establish a new office in the Commission with the responsibility to represent consumer interests before the Commission. The Director of the Office would be appointed by the President for a term of four years, subject to Senate confirmation. The Director would function independently, and would not be responsible to the Commission. The Office would have the same status as an outside party to appeal to the courts from a decision of the Commission.

The Office would be authorized to participate in proceedings before other federal agencies when their policies and activities affected public utility matters. In general, it would represent the interests of consumers and assist in the representation of the interests of the state and political subdivisions. The Office would have a separate budget which would increase by stages to $2,400,000 for the fiscal year 1981. An additional $2 million would be available to the Director of the Office to compensate the lawyers and expert witnesses of intervenors in any proceeding before the Commission.

Comment: Since the early days of the Kennedy Administration, the staff of the Federal Power Commission has operated under a directive to present a consumers' case in every proceeding. The Commission has granted a large degree of autonomy to the staff, and has set up careful procedures to avoid either Commission influence on the staff's presentation, or the participation of staff which handles a particular proceeding from a role in decision of the case. The system has worked well and

the FPC staff is acknowledged by all those familiar with FPC proceedings to have performed aggressively in presenting as strong a case from the consumer's viewpoint as the facts and law would allow. This arrangement has permitted strong advocacy in the consumer's behalf while at the same time maintaining cohesiveness for the agency as a whole. Under the proposed arrangement, there would be divisions between the Office of Counsel and the Commission, between the lawyers and the rest of the staff, and between the Office of Counsel and the Commission's own legal staff. In appeals to the courts, one group of FPC lawyers would attack the Commission's decisions, and another group of FPC lawyers would defend its actions.

Under section 552 the staff of the Office of Public Counsel would be functioning in an adversary and abrasive relationship with the Commission and in an arms-length rather than cooperative relationship with the remainder of the FPC staff. Neither the dignity and responsibility of the agency, the interests of economy in government expenditures, nor efficiency in the dispatch of the Commission's work, are likely to be advanced by the proposed amendment.

The program for grants to counsel and expert witnesses for intervenors is an attempt, in effect, to include as a rider on the National Energy Bill a program which the Congress has failed to accept when repeatedly proposed and considered in the past on its own merits.

Section 553. Information and Technical Assistance. Section 553 grants to the Administrator authority to compile and make available to state regulatory authorities a wide variety of information on load management techniques, innovative electric utility ratemaking, methods for determining costs of services, and any other data or information which he may determine would be helpful in carrying out his responsibilities. It also

grants the Administrator authority to provide technical assistance to state agencies having responsibility with respect to the planning and siting of bulk power facilities and such other technical assistance as may be requested by a state regulatory authority, electric utility or nonregulated utility.

Comment: This section provides for informational and advisory assistance, a familiar and traditional method of cooperation and assistance. It carries all the authority to provide aid to the regulatory community of the states which the federal government can appropriately exercise, consistent with the traditional division between federal and state areas of responsibility.

Chapter 5--NATURAL GAS UTILITIES

This chapter would impose a number of requirements on the natural gas industry and state regulatory authorities that are similar to those being imposed on the electric energy industry. It will not be analyzed in detail here. Rate structures in the industry would be the subject of a study, and not established by law at this time.

Chapter 6--SMALL HYDROELECTRIC POWER PROJECTS

Chapter 6 consists of three sections, but the second is merely a brief provision limiting licensing charges of the Commission, and the third is a technical provision addressing the possibility that pending legislation may relocate the FPC's authority in the Department of Energy. The three sections will therefore be considered together.

Sections 586-588: Incentive Program. Section 586 begins with a Congressional declaration of the urgent need to develop environmentally acceptable sources of electric energy, and of the public interest in requiring "rapid development of the hydroelectric potential of the numerous existing dams on the nation's waterways which are not being used to generate electric power where such development is technologically feasible, econoimically beneficial and not environmentally harmful." A small hydroelectric power project is defined to mean any project of not more than 15,000 kilowatts of installed capacity. With respect to such projects, the Commission is required to establish a program to encourage "municipalities, electric cooperatives, industrial development agencies, nonprofit organizations, and other persons" to develop the hydroelectric potential of existing dams. The Commission is directed with respect to such projects to introduce "simple and expeditious licensing procedures." A grant program is also established and the Commission is authorized to make grants of up to 50% of project costs. In making grants, the Commission is directed to give priority to projects proposed by "any municipality, electric cooperative, industrial development agency or nonprofit organization, or by any person other than a utility." (Underlining supplied.) Only on the express finding by the Commission that a proposed project would not otherwise reasonably be carried out could a grant be made to a utility.

The Commission is also authorized to make loans to "any munipipality, electric cooperative, industrial development

agency, nonprofit organization, or person other than a utility" (underlining supplied), in amounts up to 50% of the costs of a project, on a finding that the project will contribute to employment, but the total of grants and loans may not exceed 75% of total project costs. The rate of interest on loans is to be the "discount or interest rate used at the time the loan is made for water resources planning projects under section 80 of the Water Resources Development Act of 1974." The Commission is also directed to encourage applications for licensing to make use of additional "public funds and other assistance" for fish and wildlife facilities in connection with such projects. Fifty million dollars a year is authorized for each of the fiscal years 1978, 1979 and 1980 for the grants programs and the same amounts for the loan program, a total of $300 million, to be available until expended.

In section 587 a ceiling of $1 per kilowatt of installed capacity is proposed for licenses involving "a government dam" issued subsequent to December 31, 1975.

Comment: It seems apparent that the number of existing dams at which it would be economical to install power facilities, even with the benefit of subsidies, and which also meet the tests of environmental compatibility, must be relatively few, and that even in the aggregate they could not contribute much to relieve the need for additional power supply. If one were to assume that all the projects in the program were of the maximum 15,000 kilowatt size, it would take 66 such projects to equal the capacity of a single modern 1,000 nw coal-burning or nuclear power unit. Considering the great variation in flows of small streams, many more than this number of projects would be required to equal the energy output of a major, modern generating unit. Even with a 50% subsidy and an additional 25% loan at a subsidized interest rate, the program

is not likely to contribute substantially in the way of either capacity or energy.

Despite the claims in other sections of Part V that its purpose is to encourage efficiency in energy use by pricing on a marginal basis and using "other innovative" pricing systems, under the provisions of Chapter 6 the federal government would stand ready to contribute half the costs of a project and to subsidize the remaining half, thus severely distorting its economics, and promoting increased use rather than conservation. Any entity, whether a municipality, cooperative or an industry, is given preference over the utilities, despite the fact that only the investor-owned companies are comprehensively regulated in all states and would be required to flow through any subsidy benefits to consumers.

This final chapter exhibits a basic hostility to private enterprise in the electric power area. Such an animus is reflected as well in other provisions of Part V, by depriving management of essential authority to conduct company affairs, by setting stern standards for the private system while setting up a pattern of exemptions and self-regulation for the public systems, by establishing wholesale rates for sales by the investor-owned systems to the public systems on a noncompensatory basis, and in general by increasing the costs of the utilities while at the same time withholding necessary certificates and rate relief.

The purpose of the limitation on license fees as set forth in section 587 is obscure. Federal dams require no licenses but are authorized by Congress, and hence this section would not affect them. The provision was evidently tailored for projects of municipal or state power agencies now pending before the Federal Power Commission, and other such projects for which licenses have been issued after December 31, 1975, or will be issued hereafter.

The CHAIRMAN. Our next witness is Governor Brendan Byrne, Governor of the State of New Jersey.

Governor, we are delighted to welcome you back to the committee and we look forward to your statement.

We are under a time problem here and if you wish to speed up the process by skipping here and there, your entire statement will go in the record. I just want you to feel free to do it in your own way.

We have to start on amendments to our conservation bill at 10 o'clock and we have a panel of about six participants.

STATEMENT OF HON. BRENDAN BYRNE, GOVERNOR, STATE OF NEW JERSEY

Governor BYRNE. Let me then, through the kindness of Senator Jackson, put the statement in evidence. I have with me the head of our new Department of Energy in New Jersey, Joe Jacobson.

I think New Jersey is probably the first State department of energy in the Nation. Mr. Jacobson was formerly head of the State public utility commission.

Respecting the time restraints, Senator, I will focus on an issue which is of vital concern to a great segment of New Jersey citizens and a great segment of citizens in the United States; that is, the issue of lifeline rates. In studying the various proposals, frankly, including a good proposal by Senator Hart, I think that perhaps we are still being a little too vague on our commitment to lifeline rates for senior citizens.

We have tackled the problem at the State level. The difficulty in tackling it at the State level was pointed out by the President in his address to the Congress. I have some statistics in my prepared statement which indicate that there is no free lunch; that if we provided a lifeline rate for senior citizens, it would add a substantial percentage to the cost of electricity to industrial users.

The figure I present is 26 percent. Now, for a State like New Jersey, which is generating electricity with highly expensive imported oil, for us to make that kind of an adjustment and add 26 percent to the cost of electricity for industrial users while we are doing what is only right for senior citizens, puts New Jersey at a competitive disadvantage with our neighboring States, and with the rest of the States in the union.

And for that reason I think it is not only appropriate, but necessary for a Federal standard to be set for these lifeline rates. Now, I say that I think the pending legislation is a little too vague on lifeline and I think that comes from the fear of many experts that unless we can justify lifeline rates in a rate hearing, the rates may be set aside, as an unconstitutional taking.

I don't believe that that is so. First of all, the courts and everybody else recognize that conservation is a legitimate objective and setting lifeline rates does promote conservation.

In the old days it made sense to develop additional generating capacity and to encourage more use of electricity. It was a legitimate objective of utilities. Today it is the large user of electricity who is forcing utilities to add peak loads and to increase generating capacity and to put into place more expensive generating equipment.

I don't see anything wrong with identifying, for example, those generating facilities which can generate electricity at the lowest cost and establishing rates for senior citizens, and low-volume users.

The same procedure can be applied to natural gas. We in New Jersey not only buy natural gas, but we produce synthetic gas.

There is nothing wrong with a procedure which identifies the lowest cost electricity for modest users of electricity. As I said, I think it is essential that it be done, by Congress so it will give us the impetus at the State level to implement lifeline and to implement it without endangering our competitive or position with other States.

Every State would like to do this. I truly believe that. The first State to do it forsees movement of industry out of the State and that becomes a deterrent not only to that State in anticipating doing it, but to other States in being among the first to do it.

So although the focus of my testimony is on the lifeline provision on the national legislation, I have a couple of paragraphs in my testimony with respect to termination of service for people who can't afford to pay. I ask that standards be set prohibiting the termination where it would endanger the lives and health of the citizens who may be victims of that type of termination.

I appreciate your time. I did want to make the point, that as important as any aspect of energy policy is, an energy policy must recognize the plight of citizens on limited income and that includes many senior citizens.

The energy crisis is not only a crisis of supply. It is a crisis of price. And if we have an energy policy which prices our senior citizens out of the market, that crisis is as real to them and to us as if they were out of the market because of lack of supply.

The CHAIRMAN. Governor, I want to thank you for some very good points that you have made here and especially on the issue of senior citizens.

I want to ask you this: How do we try to do something to help senior citizens who are the hardest hit of all by inflation, and the biggest part of inflation has been in energy? We wouldn't be talking about two-digit inflation if it hadn't been for the sudden increase in the price of energy; isn't that right?

Governor BYRNE. Yes, sir.

The CHAIRMAN. I mean it is at the heart of this problem because it is all pervasive. Now, what do we do in trying to help the senior citizens in a State like yours where you have really been hit by the sudden increase in the price of oil, which you are largely bringing in from abroad, I take it.

Governor BYRNE. Eighty percent.

The CHAIRMAN. Eighty percent. How do you have a shift here in your State to help senior citizens and place some of the burden on the nonresidential users without some kind of Federal subsidy lest you lose your industry because your rate structure then gets way out of line, assuming that other States don't do the same?

Governor BYRNE. That is right. If other States don't do it, our rate structure gets out of line, especially if you recognize that we have unemployment in our State of 300,000 and we must assume that we need additional energy sources.

In other words, we must allow the utilities to adjust to the fact that we eventually want to put those 300,000 back to work. We have got to allow them to increase their generating capacities. As we do that, we increase the overall costs and that increases the burden on the senior citizens.

Now, as I said in my prepared statement, when the block concept of ratemaking was popular, it was not only popular, it was legitimate because it indeed was cheaper to increase the volume of electricity sold. It was cheaper to do, it was cheaper to sell. You could generate all the electricity that you wanted to and it got cheaper to generate as you generated more. That is not so anymore.

If a public utility commission makes a substantial revision in the block system in one State first, would make a competitive disadvantage, for that State.

Now, there are some things that the States can do, but it involves State money. In New Jersey, and this is not something that applies to 48 of the other States, we are going to use the money from casino gambling in New Jersey to help senior citizens. That is where they want the help. If you ask senior citizens to identify the area that is hurting them the most, the average senior citizen will identify the cost of power and the cost of heat.

And even that is going to be a modest effort. So that absent some Federal concept——

The CHAIRMAN. You feel that there ought to be some Federal standard here so that it wouldn't put States——

Governor BYRNE. At a competitive disadvantage.

The CHAIRMAN. Competitive disadvantage.

Governor BYRNE. Absolutely.

The CHAIRMAN. Well, that is a very good point.

Senator Hansen.

Senator HANSEN. Governor, what percentage of your people would you categorize as senior citizens?

Governor BYRNE. In New Jersey?

Senator HANSEN. Yes.

Governor BYRNE. Probably 25 percent.

Senator HANSEN. Twenty-five percent?

Governor BYRNE. Right.

Senator HANSEN. Mr. Swidler just testified before you that the residential load at the time a system peaks increased by 75 percent and the commercial and industrial loads increased by only 22 percent. He went on to say that as a result the residential share of total loads at time of system peaks increased from 31 to 40 percent, while the share of industrial and commercial loads declined from 67 to 59 percent.

You say that most users, especially senior citizens, are not responsible for the excessive peak load prices, nor for the high capital investment needed to accomodate peak loads. Out of fairness, would you think that the other 75 percent of the people in your State should pay a higher price than they now pay?

Governor BYRNE. Well, first of all, Mr. Swidler is talking about residential users. He is not talking about senior citizen use.

Senator HANSEN. Well, the senior citizens are residential users.

Governor BYRNE. Not with air-conditioners, Senator. They are not residential users with air-conditioners. I think if you will identify the cause of the residential peak power usage you will find that that peak power usage comes from the use of air-conditioners and if every senior citizen in New Jersey had an air-conditioned home, I don't think that they would be too concerned about how my testimony is received here today.

But there is a difference between the residential user who can afford the luxury of an air-conditioner or use an air-conditioner to typify what consumes electricity in peak hours and those residential users who are senior citizens who are in lifeline rates. We also would adopt a concept in granting preferential rates or lifeline rates, we adopt the concept of limiting the amount of electricity which is eligible for that kind of rate.

Senator HANSEN. Maybe I didn't make my question as clear as I should have. My question was, assuming—and I am certain that you do know what the situation is in your State—I thought you said you would categorize as senior citizens some 25 percent of the people in New Jersey.

My question was, should the other 75 percent not shoulder a bigger burden in these increasing utility rates?

Governor BYRNE. If they are larger volume users, yes.

Now, it is not too hard to identify the larger volume residential users.

Senator HANSEN. Then you would recommend a further breakdown in residential users according to the amount of juice that is used?

Governor BYRNE. We do that in every lifeline bill that we have discussed in New Jersey. It does that.

Senator HANSEN. I just want to make clear then. I thought that you were trying to suggest that maybe, though you didn't say it, that if industry and other users were to have higher burdens, the burden on senior citizens could be lessened; was that the thrust of it?

Governor BYRNE. I think my testimony includes a volume of consumption. The whole concept of lifeline needs is that there has got to be a minimum amount of use by a senior citizen in order to sustain life. In other words, to give them a minimum standard for heating his home or turning on vital appliances. And so that is a fairly low—we use 250 to 300 kilowatt-hours.

So that is a fairly modest amount of use which is identified for lifeline rates. Beyond that, even if he is a senior citizen, if he is using an air-conditioner, if he is using overload rates, he pays the premium.

Senator HANSEN. Then let me ask this: Based upon the statement that was made by Mr. Swidler, would you say that a fair way of shouldering the increased burden of rising electric costs, would be to place more on the other 75 percent of residential users in your State who are not senior citizens?

Governor BYRNE. No. The electricity today is priced in blocks and we have almost come to the point where we have got the blocks upside down and so I say let's sort of reverse those blocks and let's expand the cost of the top block instead of the bottom block.

Senator HANSEN. And then let me ask you who should pay more?

Governor BYRNE. Who should pay more?

Senator HANSEN. Yes. Instead of talking top blocks, can you identify the groups to whom you referred?

Governor BYRNE. Sure. If you have a chart of blocks, all you have got to do is identify who is using the top block.

Senator HANSEN. And who will be those users in New Jersey?

Governor BYRNE. The larger consumers of electricity which are mostly industrial consumers of electricity.

Senator HANSEN. Well, Mr. Swidler's testimony indicates that the sharp increase in use, the peaking periods that account for the need for additional facilities has come more from residential users than from industrial users. Do you agree or disagree with that statement?

Governor BYRNE. On the peak days in June and July, the use of air-conditioners by businesses and by homes are what contributes to the excess use of electricity. The peak use of electricity. Yes, that is so.

On the other hand, at the same time we are doing that, we are still supplying industries with electricity at bargain rates, at bargain rates, a lot cheaper now than we are supplying homeowners with electricity.

Senator HANSEN. I have no further questions.

The CHAIRMAN. Thank you, Governor. We appreciate your fine statement and your help here today.

[The prepared statement of Governor Byrne follows:]

STATEMENT OF HON. BRENDAN BYRNE, GOVERNOR, STATE OF NEW JERSEY

On July 9th I attended a meeting with the President of the United States with 43 other Governors. At that meeting we were presented with a fact sheet provided by the White House which states in part "Conventional utility pricing policies discourage conservation. The smallest users commonly pay the highest per unit price due to practices such as declining block rates. Rates often do not reflect the costs imposed on society by the actions of utility consumers."

If the winter of 1977 taught us anything it is that energy problems require a nationally planned, unified approach to render the best possible solutions for the State and the nation.

New Jersey recognizes the need for national standards or guidelines, especially in the complicated area of "lifeline" rates. New Jersey has been looking at various "lifeline" proposals to supply a subsistence quantity of electricity and gas at a discount rate for residential users. There are numerous pending "lifeline" bills in the New Jersey legislature. The Public Utilities Commission has also held a series of hearings on "lifeline" rate restructuring proposals. My Administration is dedicated to implementing a "lifeline" plan which will relieve our senior citizens, poor people, and small users from the burdensome rates which utilities charge for their essential services.

I think there is a pressing need for consideration of federal action to mandate "lifeline" proposals. As with all things in life, with "lifeline" there is no free lunch. If utility bills are reduced one dollar for one class of customer, we have to look for one dollar more from somewhere else. If we put the charge on a block or other users such as industrial user. The New Jersey Public Utilities Commission has estimated that a "lifeline" amount of 300 kilowatt hours offered to residential consumers at the lowest rate now offered any electric user would mean a shift of $350–400 million dollars onto large users. The rates of large industrial users of electricity would be increased by approximately 26 percent. In our region, we are now charging more for utility use because we use imported oil as the major energy source for power generation. New Jersey and other states in similar situation can't afford to take actions which would make our current utility rate structures even less

competitive with those of other states in attracting commerce and industry. A way must be sought to ensure federal uniformity. According to a report prepared for the Coalition of Northeast Governors which has just been released, energy costs in the Northeast are the highest and show the largest increases in the nation. This report details the devastating impact the highest energy costs in the nation have had on the economic vitality of the region. The study notes, "The Northeast lagged far behind the rest of the nation in growth of manufacturing employment . . . During the last decade, the region suffered an absolute decline in manufacturing employment."

Senator Hart's bill to require "lifeline" rates on a national basis with further intense study of the concept and its efforts deserves careful review by this Committee. A national program would alleviate the possible competitive disadvantages which might result from piecemeal action. If this Committee chooses not to adopt a mandatory national plan, I believe that there remains a role for the federal government in supporting the studies necessary to implement complex "lifeline" proposals. This support could be in the form of a national study, along with aid to the states for separate studies to tailor "lifeline" proposals" to their own situations.

I have said there is no free lunch. On the other hand, block rates in the past have been set in times of abundant energy. It then made sense to give lower block rates to large consumers. This is no longer appropriate.

It is now easy to justify a rate structure which recognizes the "lifeline" concept. Modest users, especially senior citizens are not responsible for the expensive peak-load pricing, nor for the high capital investment needed to accommodate peak loads. Conservation, as the various proposals before Congress recite, is a desired objective. There is adequate room in determining cost-of-service to modest users to stress conservation and to attribute more expensive peak-load facilities to the larger volume consumer, giving the senior citizen the benefit of rates attributable to the most cost efficient generating facilities.

No state wants to be first to make this kind of rate adjustment. It risks a state's industrial climate on a competitive basis. That is why the President urged a national program and that is why I support one.

Although the primary focus of my testimony has been on "lifeline" concepts, before I close I would like to recommend that this Committee consider including in any bill which it recommends provisions fixing minimum standards for the termination of electric service. Service should not be cut off until the customer has been given a reasonable period of time to contest the proposed cut-off. Electric service to a residential customer should not be cut off during any period when it presents a danger to the customer's health, nor should it be cut off when the customer has demonstrated that he or she is unable to pay without unusual hardship. Although the New Jersey Public Utilities Commission has already issued regulations which essentially meet these standards, I feel that there is a sufficiently troublesome national problem that it should be included in federal utility regulation legislation.

Thank you.

The CHAIRMAN. We will next call the panel, Mr. Paul F. Levy, deputy director, Massachusetts Energy Office; Mr. Garrett Morris, chairman, Public Utility Commission of Texas; Mr. Walter J. Cavagnaro, director, California Public Utility Commission; Mr. Charles Cicchetti, chairman, Wisconsin Public Utility Commission; Mr. William T. Mayo, member, Florida Public Service Commission.

Gentlemen, if I may make a suggestion here. We have got a time problem on our hands and what I think would be helpful—when we finish with the panel we go directly into the markup with the amendments that we will be considering to the conservation bill starting at 10. The Chair would like to suggest that we put all your statements in the record and avoid repetition. It would be helpful if you could summarize your comments, make your points and all then would be in the record in any event; is that agreeable?

[Chorus of yeas.]

The CHAIRMAN. All right. We will start with Mr. Levy.

STATEMENT OF PAUL F. LEVY, DEPUTY DIRECTOR, MASSACHUSETTS ENERGY POLICY OFFICE

Mr. LEVY. Thank you, Mr. Chairman. My name is Paul Levy. I am deputy director of the Massachusetts Energy Policy Office.

And unlike many of the other people who will appear before you and have appeared before you on this issue, I am not a State regulatory commissioner. I approach this issue from the point of view of an energy policymaker and so I offer a different perspective of these matters before you.

As you suggest, I will put my written testimony in the record and summarize the major points. A great deal has been said today and yesterday about whether it is appropriate for the Federal Government to set standards for utility ratemaking for the States.

Mr. Swidler has made a number of points in opposition to that premise. I would say that I am strongly opposed to the position that Mr. Swidler is taking, speaking from the point of view of a State that has been traditionally very careful about the infringement of the Federal Government on its activities.

I think this is an area in which it is essential for the Federal Government to get involved. Mr. Swidler has made a point that for 75 years or so there has been a tradition of a certain relationship between the State and Federal Government in electric utility matters. I would like to point out that for 190 years there has been a tradition of the Federal Government getting involved in State and private matters when it is felt that there is a compelling national need. And I would like to submit that there is a compelling national need here.

Electric utility rate reform is an essential part of the national energy plan. The national plan deals with the pricing of oil and natural gas, and it is also very important that electric rate structures be included. It is a necessary element because of a number of points.

One is the point that State regulatory commissioners are reluctant to take action in this area because of the threat of interstate competition for industrial and commercial customers.

Mr. Swidler, for example, has minimized the importance of that issue, but I can assure you that whenever there is a case before a State public utility commissioner, there is an industry representative in there offering advice to go slowly and to be cautious because our State alone should not lead in this area. I think it is very important that there be a common set of guidelines in the country so that this is not a disturbing element in the public utility commission deliberations. The principles put down in the Carter bill and the Brooke bill and the Durkin bill of utility rate reform are sound.

There has been no disagreement among the witnesses here yesterday, or today, or for that matter 3 years ago before this committee, on this same issue, that these principles are sound.

There has been made the accusation that these principles will cause financial harm to the utilities. In fact, I would point out that one of the benefits from rate reform is to improve the revenue stability of the utility companies during a time in which they would otherwise face substantial growth and have to invest a large amount of money in new generating capacity. So there is a substantial benefit to be gained from this approach.

I think the bill is a good compromise between States' rights and Federal intervention. The bill puts forth some general principles, but then leaves it up to the State regulatory commissions to exercise their lawful authority in determining the details and adjusting the overall principles to the States' needs.

There is an issue, however, of the Federal oversight of this whole process once it gets going, once the goals are set. The way the administration's bill is worded is that the Federal Energy Administrator would have the right to, in effect, take over the powers of the public utility commissioners if that Administrator felt that the purposes of the bill were not being served.

We oppose that provision. I would like to make a distinction here. We support the provision outlining the broad Federal goals in utility ratemaking. We do not support the concept of having the Federal Energy Administrator coming in and taking over the role of the State regulatory commission in implementing those goals.

I would suggest that a better approach is that which is put forth in the House version of this bill and also in the Durkin and the Brooke versions which give State agencies and individuals the right to intervene before the State public utility commissions and in the Federal courts if they feel that the provisions of the bill and the overall goals of the bill are not being met. That seems to be a good compromise between Federal intervention and States' rights.

Turning now to some of the specifics of the bill, we are very supportive of the provisions prohibiting declining block rates, authorizing time of day rates and so on. We are also supportive of the provision prohibiting master metering in new construction.

We have evidence that master metering results in substantial wasteful use of electricity. For example, a recent Boston Edison study shows that in those apartment buildings which are master metered 87 percent of the apartments that are unoccupied during the day have air-conditioning on during the day—during a summer hot spell—compared to apartments which are individually metered, which show only a 10 percent use of air-conditioning when the residents are not in them.

Boston Edison estimated that this wasteful use of electricity costs its customers $3 million every time there is a prolonged hot spell in the Boston metropolitan area. That evidence and the evidence of the Midwest Research Institute, which shows that master-metered apartments can be reasonably predicted to consume 21 percent more electricity than individually metered apartments, is very strong and suggests that master-metered apartments should be prohibited in the future.

I would like to make a point in this regard concerning apartments that are presently master metered, that might be converted to individually metered apartments. We are beginning to find indications that some landlords are converting units to reduce the utility cost associated with poorly built structures. These costs are, in turn, being borne by the tenants.

While we support the idea of individual metering, we feel they should take place within efficient buildings. Therefore, we would request that a requirement be put into the bill that when currently ...

master-metered apartments are converted to individually metered apartments, the building be brought up to an energy conservation building standard such as the ASHRAE 90–75.

Those are my main points concerning the overall philosophy of this approach and, as I mentioned, many of the specifics are in my written testimony. We would be pleased to help the committee in any way and answer questions and work with the committee over the next month as you deal with this issue.

Senator HANSEN [presiding.] Thank you very much, Mr. Levy.

[The prepared statement of Mr. Levy follows:]

STATEMENT OF PAUL F. LEVY, DEPUTY DIRECTOR, MASSACHUSETTS ENERGY POLICY OFFICE

Mr. Chairman, I thank you for this opportunity to testify in favor of President Carter's electric and natural gas rate reform proposals. As we have said before other Congressional committees, we in Massachusetts have a few changes to suggest in the President's energy plan, but we have absolutely no quarrel with the philosophy and goals of his proposal.

Unlike others who may have appeared before you on this issue of utility rate reform, I am addressing this topic from the point of view of a policy-maker and not a state regulatory official. In many utility-related matters, regulatory decisions can have significant energy policy implications. It is primarily to these matters that I will direct my comments.

The philosophy behind this testimony is that Massachusetts advocates more efficient use of energy wherever economically feasible. A key factor in promoting energy efficiency is to establish price structures for the various energy forms—whether they be electricity, natural gas, oil, or coal—in a fashion that reflects the true cost to society of producing and distributing these resources. It is clear that the commonly used methods of pricing electricity and natural gas do not satisfy this criterion. The legislation you are considering goes a long way towards ensuring that such pricing schemes become national policy.

ELECTRIC RATE DESIGN POLICIES

Massachusetts supports the provisions of the bill that would require state regulatory authorities to prescribe methods for determining costs of service and that require those methods to reflect differences in cost-incurrence attributable to daily and seasonal time of use. We are concerned, however, that Parts (b)(1), (2), and (3) of Section 512 will be construed to mean that regulatory authorities must adopt long-run incremental cost (LRIC) pricing. While LRIC may be a useful concept in some cases, there are many situations in which it is not warranted. I do not think it is necessary to make a change in the language of the bill, but it would be appropriate if the legislative history of the bill showed that it was not intended that the LRIC method be mandatory.

We strongly support the provision prohibiting declining block or other promotional rate structures. I understand that in the House version this was amended to include an exception something on the order of "except where demonstrated to be based on cost of service". We would oppose such an exception. While this might seem somewhat contradictory to my earlier remarks concerning cost-based rates, we feel it should be a matter of policy that promotional discounts be prohibited.

We also support Part 2(A) of Section 513 requiring utilities to offer time-of-day rates and load management systems if the customer is willing to pay for metering costs. We would not want this to be interpreted to mean, however, that only customers who want time-of-day rates will get them. Regulatory authorities clearly should have the authority to mandate time-of-day rates for certain customer classes and to place the associated costs in the rate base. We understand that this section is included so that small users may take advantage of time-of-day rates.

We support the provision prohibiting master metering in new construction. We have evidence that master metering results in wasteful use of electricity. An internal Boston Edison study, for example, compared the use of air conditioning in individually metered versus master metered apartments. During

a typical summer hot spell, air conditioners were left on during the day in 87% of the unoccupied master metered apartments. In individually metered units, only 10% of the air conditioners were left on while the residents were out for the day. Boston Edison estimates that over 29,000 kilowatts of electricity is being wasted during the period of critical peak demand. This results in excess costs to the utility—and to all the ratepayers—of over $3 million.

Another study by the Midwest Rsearch Institute estimated that consumption by master metered tenants can be predicted to be 21% higher than for individually metered tenants.

We would recommend adding another provision to this section. This would state that if existing apartments are converted from master metered to individually metered apartments, the apartment units must be brought up to comply with an energy efficiency standard, such as the ASHRAE Standard 90–75. We are beginning to find indications that some landlords are converting units to reduce the utility costs associated with poorly built structures. These costs are in turn borne by the tenants. While we support the idea of individual metering, we feel that it should take place within efficient structures, so that tenants are not faced with exraordinarily high utility bills.

BULK POWER SUPPIY

We support the provisions of Subpart 3 of this bill, and are especially pleased to see incentives given for cogeneration facilities. We feel that this type of facility has great potential for improving the energy efficiency of the country, and we think that these provisions will help to remove some of the institutional barriers to their construction.

NATURAL GAS RATE DESIGN POLICIES

As in the case of electricity rates, we support the provisions of this section, although we would make some changes. We would add a part (3) to Section 544(b) stating that such proposal shall be accompanied by an analysis of the effect, if any, on revenue stability and financial health of the gas utilities. I believe that Mr. Edward Berlin, of the New York State Public Service Commission, addressed this point during his testimony before this Committee and so I shall not go into detail on this matter.

We have some concerns with the schedule put forth in this Subpart of the bill. Section 548(2)(A) calls for the state regulatory authority to report within two years on progress towards the policies and rules set forth by the Administrator. Yet, according to Section 545, these rules are not to be established before two years have passed. In short, the state must satisfy rules during the same period in which the rules are being written. If this approach of having a federal oversight is adopted, the reporting and review schedule should be made consistent.

This point raises a larger question, however. This is whether the federal government should be involved in the oversight of the provisions put forth in this bill, both in the natural gas and the electricity sections. Alternative methods have been proposed for ensuring that the rate policies adopted in this legislation are carried out, but without creating the need for an extensive federal review process. The House version of this bill, as well as the Brooke and Durkin bills before this Committee, provide for the right of individuals and state agencies to intervene in state regulatory proceedings concerned with these issues. It is our opinion that this form of self-enforcement is preferable and we would recommend its inclusion in the bill.

S. 1300

Turning now to Senator Durkin's bill, S. 1300, some of the provisions are similar to the President's bill, but I would like to mention some of the others.

Section 203(A)(5)(C), requiring a comparison of current consumption with consumption during the same billing period the previous year, would be a very effective stimulus to energy conservation. We recommend that this provision be included in the Committee's report.

We also support Part 6 of the same section, prohibiting promotional, political, and institutional advertising. These are clearly inappropriate costs to be charged to customers. While utilities have a constitutional right to expression,

the costs for this should be borne by the companies' stockholders and not the ratepayers.

Section 203(b) would prohibit the use of an automatic fuel adjustment clause, except in time of an emergency. I understand the rationale for this position. In theory, utilities have no incentive to get the lowest possible price for fuel because they are permitted to pass along all fuel costs to the customers. This has not been a problem in Massachusetts, where although the fuel clause is adjusted monthly, a hearing is held to review the companies' records. I understand, however, that the abuse of the fuel adjustment is an issue in other states.

Permitting a fuel adjustment allows customers to immediately benefit from fuel cost reduction as well as to be immediately affected by cost increases. On the other hand, insulating customers from cost increases may make them insensitive to changes in the true value of electricity and may result in unwarranted consumption.

As I mentioned, in Massachusetts the state legislature has put forth a policy regarding the fuel adjustment clause which appears to be working well. If the Committee felt, however, that this was a sufficiently troublesome national problem, we would have no objection to including this section in the bill.

We take a similar approach to Section 203(c), concerning the inclusion of construction work in progress in the rate base. The Massachusetts regulatory agency already has such a policy and so would not be affected by this section. The Committee is probably in a better position to judge the national necessity of this section than am I.

Concerning both these issues, it is our opinion that if the Congress is to set standards for the state regulatory agencies, it should set the same standards for wholesale ratemaking by the Federal Power Commission. It would be confusing to have one set of policies at the retail level and a different set at the wholesale level.

Senator HANSEN. We will next hear from Mr. Garrett Morris, the chairman of the public utility commission of Texas.

Mr. Morris.

STATEMENT OF GARRETT MORRIS, CHAIRMAN, PUBLIC UTILITY COMMISSION OF TEXAS

Mr. MORRIS. Senator Hansen, I would like to put my written prepared testimony in the record.

Senator HANSEN. It will be included in the record.

Mr. MORRIS. I would like then to very summarily tell you my position, if I might.

Senator HANSEN. We appreciate that.

Mr. MORRIS. I feel and it is I think the feeling of my commission and basically the people in my State that a biplicative system is really unworkable and all that it is going to do is actually going to increase the cost of electricity to the rate payers.

I have listened to the testimony here this morning in regrad to the necessity of establishing more or less a nationwide rate so that industry won't flow from one State to the other. There isn't any way that that can be accomplished.

The cost of fuel, for instance, in my State compared to the cost of fuel or generating costs in other States. There isn't any way that you can level the two. Many States have a lot of hydroelectric power; a lot of them have coal underground, where the cost of even transporting the coal into our State costs more than the coal itself. So there is no way that you can set up a rate nationwide that is going to level the rate so that the cost of electricity in my State will be the same as it is in some other State.

I just don't think that that is possible. The cost of just complying with the regulations that are set up in these five various acts, I thing is going to substantially increase the cost to the ratepayers.

The States, our State, and I think most of the States are doing away with the declining block rate. We are cutting out the excess advertising that people complained of. We are going to the cost-base rates. We have a lot of public participation in our rate cases. The truth of the matter is I think the State commissions are doing or will do shortly because of the public pressure and participation everything that is really worthwhile doing that is contained in any of these five bills. And as far as establishing, as I say, a uniform rate nationwide, I just don't think that it is worth it.

There is one thing that I would like to mention that I have in my testimony that I think would be very helpful. It certainly would be helpful to the industry in our State and that is the deferred Federal income tax deferral. If that could be made into actually a tax credit rather than a deferral so that we could depreciate out the oil and gas plants that retire earlier than what we retire them now, it would helpful.

And none of the bills contain this provision, but it is one of the things that we need because, as we change from oil- and gas-fired plants to coal and nuclear, it requires a tremendous amount of funds. We do have the investment tax credit on new investments, but you also need to increase the depreciation so that you can retire the old plants earlier. And if we are to do that we need some help, we need some tax help.

The burden on the ratepayers to pay the rising cost of fuel, to pay the rising cost of conversion cost and then to have to pay the rising cost of depreciation to retire the old plant is really too much of a burden for them to share.

One other thing that I would like to say before I cease and that is the provisions of the bills having to do with discouraging people from using electricity, I think are very bad. I don't like time-of-day pricing for the simple reason that I don't like optional contracts where you can terminate people for the simple reason that when you do that you relieve those people of the capacity costs for all the new plants that you are building and regardless, the new plants that are being built are being built in order to convert to fuels that are more abundant and it is not because you need the capacity.

And during this conversion period certainly we have excess capacity and we will continue to have excess capacity during the conversion period. But I don't think anything should be done that would relieve any segment of the ratepayer of their portion of those capacity costs.

That, Senator Hansen, concludes my statement.

Senator HANSEN. Thank you, Mr. Morris. If you would care to comment, I am certain that the committee would be appreciative of your observations on the interconnection provision of the bill and perhaps you would like to take a little time and do that in writing. However it would best suit your convenience.

Mr. MORRIS. I do in my written testimony have some comments on the interconnection.

Senator HANSEN. Good.

Mr. MORRIS. If you care, I would be glad to make some comments regarding the interconnection.

Senator HANSEN. We have three more witnesses from whom we would like to hear, before 10, if we could. May I suggest that we give each of them a chance to testify and if we have a few moments remaining, then if you would be good enough, we would like to come back to you.

Thank you very much.

[The prepared statement of Mr. Morris follows:]

STATEMENT OF GARRETT MORRIS, CHAIRMAN, PUBLIC UTILITY COMMISSION OF TEXAS

I am Garrett Morris, Chairman of the Public Utility Commission of Texas, and I appear here today to speak to the provisions of Senate Bills 122, 1300, 1363, 1364 and Part E of 1469, having to do with the establishment of a national rate design policy for electric utilities and authorizing the Federal Power Commission to implement such policy by rules and regulations. I appreciate the opportunity to be here, and shall try to be brief and cover only the main points in the proposed legislation.

As there are five bills covering the same general subject, some of the proposals are conflicting. Some of the bills speak to life-line rates for the needy, while others speak to cost based rates, and, of course, you can't have both.

I have no problem with giving assistance to the needy, but having them subsidized by other rate payers, many of whom are also needy, is a poor way to do it.

One of the problems with most life-line rate concepts is that it assumes that the needy use small amounts of energy and, therefore, can subsist on the amount allowed at low rates. Whereas there is some evidence to support this assumption, the correlation is far from perfect. For example, in San Antonio, 85 percent of the poor use fewer than 500 kwh of electricity monthly, yet their average usage is approximately 400 kwh, but 15 percent use more than 500 kwh.

The primary thrust of these bills appears to be to set a policy which will produce uniform rates throughout the nation so that no part of the country will have a competitive advantage over any other areas of the country.

This is a very noble concept, but it fails to take into consideration the hard economic facts of the matter.

I would agree that cost-based rates for each class of customer are needed. Our Commission and many others are moving in that direction as rapidly as possible without causing a severe economic impact on any one given class, but that will not mean the same rates or even competitive rates nationwide.

Many states have large amounts of hydro-electric power which is cheap and utilities in my state cannot compete with such costs now nor in the foreseeable future.

Many states have large supplies of coal for generation, while Texas must import such coal at transportation costs which exceed the cost of coal, and, therefore, has a competitive disadvantage.

Although, Texas has a small amount of lignite, we are already an energy-deficient state in terms of coal required to meet future generation requirements; therefore, a standard or uniform rate policy could result in great economic loss to our state and other states similarly situated through loss of industry and jobs.

There are other points about the proposed rate policy which disturb me. One is the provision that no rate shall encourage new customers. If the conservation of scarce fuels, such as oil and gas, is the national policy, why should we discourage customers switching from the use of such fuels to electricity which is rapidly being generated by more abundant fuels?

Another point of concern is the limitation on generating capacity because, if we are to convert to facilities which use more abundant fuels, of necessity, there will be excess generating capacity during such conversion process which will continue at least to 1985 and probably a considerable time beyond.

The elimination of the declining block rate is already being handled by state commissions and there is sufficient consumer participation in present rate cases

to eliminate the declining block rate completely as well as unnecessary advertising and to insure that capacity costs are property allocated; therefore, I see little or no need for these provisions. In fact, the public participation in current rate cases is rapidly bringing about most of the desirable changes provided for in the proposed bills.

With respect to time of day pricing, we have several reservations. There is considerable cost associated with the installation of proper meters. Many Texas electric utilities have high daily load factors and low annual load factors, so that time of day pricing does not appear to fit the Texas situation. Furthermore, the conversion process currently taking place in Texas is accompanied by excessive generating capacity, and the costing difficulties associated with time of day pricing are magnified in our particular circumstances. If time of day rates are optimal for a particular company, climate, and customer's load and usage pattern, and if the costs can be allocated more accurately than they are presently, the policy should be adopted. However, many situational complications make it difficult to nationally dictate mandatory time of day pricing.

With respect to the requirement that a public hearing is necessary before a change in fuel costs can be passed through, even under an automatic fuel adjustment clause, such a policy would clog the dockets of every commission resulting in increased regulatory lag, which can be worse and more costly to the consumer than the problem sought to be cured. This is especially so as long as the costs of fuels are as volatile as they are at the present time.

The reporting and information requirements will substantially increase customer costs, plus they seem to substantially increase the burden on state commissions and yet no funds are provided to cover these particular costs.

In regard to tax relief proposed, it would be helpful if the deferred tax for accelerated depreciation were converted into a tax credit so that the old oil and gas plants could be phased out more rapidly. This would not only allow earlier retirement of such plants, but would increase the internal cash flow needed to build new plants which use more abundant fuels.

With respect to the policy on interconnection, this applies directly to the electric utilities in Texas because, for the most part, the other systems are connected to one or the other of the regional and national grids. Texas has its own interconnected system with approximately 280 generating units representing 35,000 mw of capacity operating in synchronism. This system began forming as far back as 1924 and millions of dollars have been expended on transmission lines to make it into one of the most reliable systems in the country.

The cost for transmission lines to hook the Texas system into the national grid is estimated to cost one billion dollars or more and yet not increase the reliability of the system; nor is there any substantial evidence of any cost benefits to the rate payers. In fact, there is some evidence that increase in the size of the system delays stability time after loss of load or an outage and, therefore, impairs reliability rather than improving it. The recent blackout in New York seems to underline these facts, because their system is interconnected in all directions. With the high cost of energy and the added cost of conversion of facilities to use more abundant fuels, the rate payers of today can ill afford to spend a billion dollars just to fulfill some planner's dream.

In summary, it appears that most of the more desirable goals of the bills are rapidly being implemented by state commissions due to public pressure and participation in current rate cases, and that the two-tiered regulation proposed in the current bills is a poor solution to the balance of the problems raised, and will substantially increase the cost of electricity to the consumer.

Those of us who regulate at the state level ask only that you do not deny to us the right to seek solutions to such problems, especially those of a unique or regional nature and that you recognize that in the proposals you are considering, there are contradictions and there are solutions which create more cost to the average consumer than the relief offered.

Before I close I would like to offer this committee the use of a very valuable asset—the expertise of our staff. We feel we have a most innovative regulatory staff and I urge you and your staff to call on us if we can provide any information concerning specific proposals among the many you are charged with considering. We will be most willing to respond.

I appreciate the opportunity to be here, and, hopefully some of these comments will merit your consideration because a bifurcated system of regulation is a poor answer to the problems confronting us. I will be glad to try to answer any questions which you may have.

Thank you.

Senator HANSEN. Mr. Walter Cavagnaro, director, California Public Utility Commission. We are pleased to have you here, sir.

STATEMENT OF WALTER J. CAVAGNARO, DIRECTOR, CALIFORNIA PUBLIC UTILITY COMMISSION

Mr. CAVAGNARO. Yes. I am pleased to be here today, both to represent the California Commission and also to represent the Governor's office.

I might say that it was a pleasure to hear Mr. Swidler's statement. There are a great many things in it with which I agree. I think, particularly, we are concerned about the administrative complexity and we are concerned about having an administrator, Federal administrator, that would dictate to us in an area that we think that we are already doing an outstanding job in.

I think probably the only point that I would disagree with Mr. Swidler on is that we think that the leadership in electric rate structure and electric rate designs coming from the west coast and not from New York. And, as I say, I think that is important from the sense that we think that Federal standards might tend to dampen innovation.

We would be concerned that the Federal Government establish minimum standards, that rather that being in the role of leadership, we would much prefer to have the freedom to remain in the leadership role.

I also want to support Governor Byrne's concern for lifeline rates. Lifeline rates are in effect in California, not only for senior citizens, but are in effect for all residential customers and the way we have accomplished that is to invert our rate design so that Senator Hansen, as you have indicated, senior citizens or any citizen that uses above the lifeline allowances is facing a very steep cost of energy.

What it looks like on the gas side, for example, in northern California, we recently have priced our lifeline rate and frozen it since about 1975. A lifeline customer for the first 20 to 100 therms of natural gas is paying 14 cents and the rates go up very steep above that for both residential, commercial, and industrial customers.

The large user is now looking at a rate of 22 to 23 cents a therm as compared to the 14 cents for lifeline rate. That still is an advantageous energy cost. I think that is probably less than the cost in Texas of natural gas. We are pricing the industrial rate now at 23 cents a therm which is about roughly equivalent to about 24 to 25 cents per therm for low-sulfur oil.

So through these inverted rate designs we have established lifeline and we have still been able to price commercial and industrial gas at reasonable prices. On the electric side, because of the drought in California, we have unprecedently high electric rates and, as a result of that drought, and the necessity to burn fuel oil, I think something like 60 million barrels in northern California this year as compared to less than 40 million last year. I think, in fact, more like 25 to 30 million.

We have inverted our electric rate so that now the electric lifeline rate is about 2.5 cents per kilowatt-hour to 2 cents per kilowatt-hour as compared to 4 to 4½ cents per kilowatt-hour for all other use.

So our customers above lifeline are paying a dear price for energy and we are sure that it is inducing conservation. It is a marginal cost concept in the sense that we are burning more oil. In an average year, we are tied to hydroelectric energy and might average only 1 cent per kilowatt-hour of energy cost. The energy cost are now going to 2½ or 3 cents just for the cost of producing the energy before transmitting and distributing it.

So that we have exercised marginal costs in addition to the lifeline concept. We are also proud of our leadership in the use of time-of-day rates and have started with the very largest industrial customers and I might indicate that the industrial customers in California have been cooperative in that regard in properly designing these rates.

We hope to also offer them interruptible rates that will be attractive industrially so that we think that there can be through State regulation a very high revolution of electric and gas rate design problems and we want to urge the Senate to carefully consider the job that the States are doing and not unduly interfere in the State regulatory process.

I have attached to my testimony, which I understand will be incorporated, comments on which of the items have been adopted that are considered in the present legislation and so you will find two appendixes attached that comment specifically on the legislative proposals to indicate what area of California has already adopted. It is reflected in those proposals and we find none with respect to either electric or gas rate structure that we have already not adopted. We participate with the National Regulatory Commissions exchange ideas and feel that that agency is also making a real effort to voluntarily assist the States in meeting rate design problems.

I think that summarizes my remarks. Thanks very much for the opportunity, Senator.

Senator HANSEN. Thank you very much, Mr. Cavagnaro. Let me say that your entire statement, including the appendixes, will become part of the record. We appreciate your presence here this morning.

[The prepared statement of Mr. Cavagnaro follows:]

CALIFORNIA PUBLIC UTILITIES COMMISSION

PROGRAMS FOR ELECTRIC UTILITY RATE REFORM

Walter Cavagnaro, Director
Utilities Division
July, 1977

THE REGULATORY AGENCY WHICH IS RESPONSIBLE FOR ESTABLISHING THE LEVEL OF UTILITY RATES IS IN A PARTICULARLY UNIQUE AND EFFECTIVE POSITION FOR PROMOTING EFFICIENT ENERGY USE. THE CALIFORNIA PUBLIC UTILITIES COMMISSION'S POLICY OF LIFELINE RATES FOR THE SMALL USER AND INVERTED RATE DESIGNS ABOVE THE LIFELINE QUANTITY ENCOURAGES CONSERVATION. CALIFORNIA'S LIFELINE ELECTRIC RATES ENCOURAGE OVERALL ENERGY CONSERVATION AND OUR LEADERSHIP IN DEVELOPING TIME-OF-USE RATES WILL PARTICULARLY INFLUENCE USE OF ELECTRICITY AT THE TIME OF PEAK DEMAND.

OTHER CONSERVATION PROGRAMS IN EFFECT IN CALIFORNIA INCLUDE BUILDING AND APPLIANCE STANDARDS, VOLTAGE REGULATION, LOAD MANAGEMENT, AND UTILITY RETROFIT PROGRAMS COVERING HOME INSULATION, INTERMITTENT IGNITION DEVICES, GAS AND ELECTRIC WATER HEATING AND MANY OTHERS. OUR REGULATORY AGENCY OFFERS FINANCIAL INCENTIVES TO THE UTILITIES BY ADOPTING PROCEDURES FOR RAPID RECOVERY OF UTILITY COSTS AND ADDED CONSIDERATION IN ALLOWABLE FAIR RATE OF RETURN. DIRECT INCENTIVES TO CUSTOMERS FOR ENERGY CONSERVATION ARE ALSO ENCOURAGED AND ALLOWED IN RATE FIXING BY

THE AGENCY. COST EFFECTIVENESS IS AN ESSENTIAL TEST IN PLANNING CONSERVATION EXPENDITURES AND SHOULD BE MEASURED BY COMPARING THE COST OF A CONSERVATION PROGRAM TO THE MARGINAL COST OF NEW SUPPLIES.

IN 1975, THE COMMISSION ISSUED A DECISION IN PG&E'S GENERAL RATE INCREASE PROCEEDING FOR THE FIRST TIME IMPLEMENTING LIFELINE DOMESTIC ELECTRIC RATES AND FURTHER REVISING GAS RATES.[1/] THE EFFECT OF SUCH CHANGES WERE RATE REDUCTIONS FOR ELECTRIC USERS OF LESS THAN 300 KWHRS IN ZONE 1 AND 500 KWHRS IN ZONE 5, WHILE RATES FOR LARGER USERS WERE SUBSTANTIALLY INCREASED. SIMILAR RATE MODIFICATIONS HAVE BEEN PUT INTO EFFECT FOR OTHER CALIFORNIA UTILITIES.

IN SEPTEMBER OF 1975, THE STATE LEGISLATURE ENACTED THE MILLER-WARREN ENERGY LIFELINE ACT WHICH REQUIRED THE COMMISSION TO ESTABLISH LIFELINE QUANTITIES TO COVER THE MINIMUM ENERGY NEEDS OF THE AVERAGE RESIDENTIAL USER FOR SPACE AND WATER HEATING, LIGHTING, COOLING, AND FOOD REFRIGERATING. AFTER EXTENSIVE HEARINGS, THE COMMISSION ESTABLISHED THE FOLLOWING MONTHLY QUANTITIES FOR SINGLE-FAMILY RESIDENCES:[2/]

	ELECTRIC KWHRS	GAS THERMS
BASIC RESIDENTIAL USE - LIGHTING, COOKING, REFRIGERATION	240	
COOKING AND WATER HEATING		26
WATER HEATING	250	
SPACE HEATING NOVEMBER - APRIL	550 - 1,420	55 - 140

1/ DECISIONS NOS. 84902 AND 84959, DATED SEPTEMBER 16, 1975 AND OCTOBER 7, 1975 -- APPLICATIONS NOS. 54279, 54280, AND 54281.

2/ DECISION NO. 86087, DATED JULY 13, 1976, IN CASE NO. 9988.

THE SEASONAL ALLOWANCES FOR SPACE HEATING COVER FOUR CLIMATIC ZONES RANGING FROM BELOW 2,500 DEGREE-DAYS TO AREAS ABOVE 7,000 DEGREE-DAYS. THE BASIC RESIDENTIAL USES WERE COMBINED AS APPROPRIATE FOR ELECTRIC AND GAS TO RECOGNIZE APPLIANCE SATURATION DATA AND TO REDUCE THE COMPLEXITY OF ADMINISTRATION. UNDER THE TERMS OF THE LEGISLATIVE REQUIREMENT, LIFELINE RATES CANNOT BE INCREASED UNTIL THE AVERAGE SYSTEM RATE HAS INCREASED 25% OR MORE OVER THE JANUARY 1, 1976 RATE LEVEL. UNDER THIS CONCEPT AND THE COMMISSION'S POLICIES, IT IS ANTICIPATED THAT RESIDENTIAL RATES WILL BE INVERTED -- THE RATE FOR USAGES ABOVE THE LIFELINE QUANTITY WILL EXCEED THE RATE FOR LIFELINE USAGES.

CALIFORNIA HAS ALSO BEEN INTRODUCING TIME-OF-DAY RATES IN A FURTHER EFFORT TO REFORM RATE STRUCTURES. THE COMMISSION HAS REQUIRED THE MAJOR ELECTRIC UTILITIES TO FILE TIME-OF-DAY RATES FOR ALL CUSTOMERS WITH REQUIREMENTS EXCEEDING 4,000 KW.[3/] METERING EQUIPMENT HAS BEEN REQUIRED WHICH WILL PERMIT THE EXTENSION OF THIS TYPE OF RATE TO 500 KW REQUIREMENTS IN THE NEAR FUTURE.

ADDITIONALLY, THE COMMISSION HAS REQUIRED EXTENSIVE EXPERIMENTATION WITH LOAD MANAGEMENT EQUIPMENT AND RATES TO TEST THE EFFECTIVENESS OF SUCH DEVICES AND METERING ON ALL CLASSES AND SIZES OF ELECTRIC CUSTOMERS.

THE COMMISSION HAS JOINED WITH THE ENERGY COMMISSION AND FOUR MAJOR CALIFORNIA ELECTRIC UTILITIES IN SUBMITTING THIS EXPERIMENTAL PROGRAM TO THE FEDERAL ENERGY ADMINISTRATION. IT HAS BEEN APPROVED FOR FEDERAL FUNDING ASSISTANCE AND IS IN THE PROCESS OF BEING IMPLEMENTED.

3/ DECISION NO. 85559, DATED MARCH 16, 1976, IN CASE NO. 9804.

THE COMMISSION HAS ALSO INDICATED THAT MARGINAL COST WILL BE AN IMPORTANT ELEMENT IN ELECTRIC RATE DESIGN. CALIFORNIA, LIKE MOST OF THE MAJOR STATES AND THE FEDERAL POWER COMMISSION, BASES REVENUE REQUIREMENTS ON REASONABLE OPERATING EXPENSES AND A HISTORICAL COST RATE BASE. EVEN THOUGH WE UTILIZE A FUTURE TEST-YEAR RATE BASE FOR SETTING RATES, INCREMENTAL COSTS SUBSTANTIALLY EXCEED AVERAGE COSTS. FOR EXAMPLE, ON A SYSTEM SUCH AS PG&E'S, HAVING THE ADVANTAGE OF SUBSTANTIAL HYDROELECTRIC RESOURCES, THE AVERAGE ENERGY COST WAS ONLY ABOUT 1¢/KWHR IN 1975. INCREMENTAL ENERGY COST BASED ON CURRENT PRICES OF LOW SULFUR OIL APPROXIMATES 2.5¢/KWHR FOR FUEL ONLY. A DIFFERENTIAL OF THIS MAGNITUDE CONSIDERABLY EXCEEDS THE DIFFERENCE BETWEEN AVERAGE AND INCREMENTAL CAPACITY COSTS.

WITH DIFFERENCES OF SUBSTANTIAL MAGNITUDE BETWEEN AVERAGE AND MARGINAL COSTS, IT CAN BE ANTICIPATED THAT FURTHER RATE REFORMS WILL BE INVOLVED IN BALANCING PORTIONS OF THE RATE STRUCTURE BASED ON MARGINAL COST WITH THE UTILITIES' ALLOWED REVENUES BASED ON AVERAGE COSTS.

THE EXTREME EFFECT OF THE DROUGHT IN NOTHERN CALIFORNIA HAS LEAD TO FURTHER RECOGNITION OF MARGINAL COSTS AND EVEN MORE CONSERVATION ORIENTED RATE STRUCTURES. BY MAINTAINING LIFELINE RATES AT 1975 LEVELS AND PUTTING MOST INCREASES INTO EFFECT ON A UNIFORM CENTS PER KWHR BASIS FOR DOMESTIC RATES ABOVE LIFELINE QUANTITIES AND FOR OTHER CLASSES OF SERVICE, THE FOLLOWING AVERAGE RATES FOR VARIOUS CLASSES OF PACIFIC GAS AND ELECTRIC COMPANY CUSTOMERS HAVE RESULTED:

	1975	JULY, 1977
DOMESTIC		
LIFELINE ABOVE LIFELINE	2.81¢/KWHR	3.37¢/KWHR 4.67
SMALL LIGHT & POWER	3.82	6.48
MEDIUM LIGHT & POWER	2.27	4.84
LARGE LIGHT & POWER	1.67	4.13
AGRICULTURAL	2.30	4.81
SYSTEM AVERAGE	2.40¢/KWHR	4.48¢/KWHR
AVERAGE COST OF ENERGY (FUEL & PURCHASED POWER)	1.12	2.75

THE RATE INVERSION IN DOMESTIC RATES (D-1) FOR PACIFIC GAS AND ELECTRIC COMPANY IS CONTRASTED WITH RATES FOR SOUTHERN CALIFORNIA EDISON COMPANY (SCE) WHERE LESSER RATE INCREASES HAVE NOT YET BEEN SUFFICIENT TO ELIMINATE THE DECLINING BLOCK RATE.

	PG&E	SCE
FIRST 240 KWHR*	2.55¢/KWHR	4.15¢/KWHR
NEXT 60 KWHR	4.24	
OVER 300 KWHR	4.80	3.41

* ADDITIONAL QUANTITIES ARE ALLOWED FOR WATER HEATING AND SPACE HEATING.

IT IS ANTICIPATED THAT THE EDISON RATE WILL INVERT WITH FURTHER INCREASES IN 1977 AND 1978. THE EDISON SYSTEM AVERAGE RATE OF 3.69¢/KWHR AND AVERAGE COST OF ENERGY OF 1.75¢/KWHR IS LESS THAN PG&E'S DROUGHT INFLUENCED LEVELS BUT SIGNIFICANTLY IN EXCESS OF PG&E'S RATES AND COSTS BASED ON AVERAGE HYDROELECTRIC CONDITIONS.

LOAD MANAGEMENT

ELECTRIC UTILITIES, AS WELL AS MAJOR COMMERCIAL AND INDUSTRIAL CUSTOMERS, ARE DEVELOPING A SIGNIFICANT INTEREST IN LOAD MANAGEMENT HARDWARE. IN THE ELECTRIC UTILITY SIDE, A GOOD DEAL OF THE INTEREST RELATES TO THE AUTOMATIC CONTROL OF PEAK DEMANDS ON THE SYSTEM. MANY INDIVIDUAL UTILITIES ARE UNDERTAKING EXPERIMENTAL USE OF SUCH DEVICES AS TEMPERATURE CONTROLLED DEMAND LIMITERS, RADIO CONTROLLED WATER HEATERS, RIPPLE CONTROL OF VARIOUS ELECTRIC LOADS, AS WELL AS THE USE OF BI-DIRECTIONAL COMMUNICATION SYSTEMS. AN IMPORTANT AREA FOR ADDITIONAL RESEARCH WOULD BE IN THE COMBINED USE OF COMMUNICATION CIRCUITS FOR VARIOUS UTILITY CONTROL AND METERING PURPOSES, AS WELL AS FOR NON-UTILITY SERVICE.

IN ADDITION TO UTILITY DEMAND MANAGEMENT SYSTEMS, MAJOR ELECTRIC USERS ARE APPLYING AUTOMATIC (COMPUTERIZED) ENERGY MANAGEMENT SYSTEMS BOTH TO REDUCE MAXIMUM DEMAND AND TO REDUCE ENERGY USE. IN SOME CASES, EVEN GREATER OPPORTUNITIES EXIST FOR REDUCTION IN ENERGY USE THAN FOR REDUCTION IN MAXIMUM DEMAND. CUSTOMER ENERGY MANAGEMENT SYSTEMS COULD BE COORDINATED WITH UTILITY SYSTEMS TO MAXIMIZE THE EFFICIENT USE OF ENERGY.

FURTHER, THE COMMISSION HAS ENUNCIATED A POLICY THAT, IN CALIFORNIA, CONSERVATION RANKS AT LEAST EQUALLY WITH SUPPLY AS A PRIMARY COMMITMENT AND OBLIGATION OF A PUBLIC UTILITY. THEREFORE, THE COST OF NEW SUPPLIES WILL BE MEASURED AGAINST THE ALTERNATE COSTS OF LOAD MANAGEMENT.

CALIFORNIA PUBLIC UTILITIES COMMISSION ACTIONS
WHICH RELATE TO SPECIFICS OF
SENATE LEGISLATION UNDER CONSIDERATION

Advertising

The Commission does not permit customer rates to cover political, promotional or institutional advertising. (CPUC Decisions Nos. 84902 and 86794) This position is consistent with Sec. 202(a)(6) of S. 1300 and S. 122.

Automatic Fuel Adjustment Clauses

The Commission has established an Energy Clause procedure requiring public hearings for each rate increase except in case of emergency. This matter is addressed in Sec. 203(b) of S. 1300 and S. 122.

Construction Work in Progress (CWIP)

The Commission does not generally allow expenditures associated with construction work in rate base. This position relates to Sec. 203(c) in S. 1300 and S. 122.

Cost of Service

The Commission considers allocation of accounting costs as well as marginal cost data in establishing rates. Many variations in the methodology of both accounting and marginal cost studies exist. It would be impractical to establish one methodology for either type of cost study at the present time and it is questionable that either basis should be used exclusively. The matter is addressed in:

(1) Sec. 512 of Committee Print No. 3. The discussion of points to include in cost allocation here is directed toward marginal cost analysis but is not precise enough to provide any definition.

(2) Sec. 205(a) of S. 1300 and S. 122.

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Enforcement

The CPUC has just initiated a program for reducing the time of processing of major rate applications to twelve months from the date the application is filed. Any federal enforcement requirements should provide sufficient time exceeding this period for proper consideration of the requirements in the regulatory agency's public hearing process. See:

(1) Sections 516 and 548 of Committee Print No. 3. (Two years)

(2) Sections 205(b) and 209(b) of S. 1330. (Six months)

(3) Sections 205(b) and 209(b) of S. 122. (Two years)

(4) Section 4(a) of S. 1364.

Lifeline Rates

California's lifeline rates apply to all residential customers and include allowance for lighting, refrigeration, cooking, and water and space heating. See:

(1) Sec. 513(b)(1) in Committee Print No. 3 which permits such rates. The Commission has supported this provision in H.R. 6831.

(2) Sec. 203(a)(4) of S. 1300 and S. 122 which are supportive of California's position.

(3) Sec. 3 of S. 1364 is limited only to the elderly.

Excerpts From Analysis by the California Public Utilities Commission of the National Energy Act (H.R. 6831)

RATE DESIGN (Title 1, Part B)

The California Public Utilities Commission is in agreement with the intent of this part of the National Energy Act, namely, the implementation of conservation-inducing gas and electric rate structures. Along these lines, the Commission has been engaged in conservation-oriented ratemaking for several years. Finding that supply circumstances no longer warrant a declining commodity charge based on consumption, the Commission determined several years ago that marginal costs should be considered in rates and that the highest rates should be paid by the lowest priority users. As a result of these policies plus our implementation of lifeline rates (see below), recent gas rate increases are leading to the flattening of commercial and industrial rates at prices higher than the lifeline rate and flattened or inverted rates for residential customers.

Lifeline Rates

In the interest of protecting the residential user, meeting his or her minimum energy needs, and encouraging conservation, California has implemented lifeline rates for all residential gas and electric customers. The CPUC feels that lifeline rates are an important contribution to conservation-oriented rates. As such, we endorse the provisions of the NEA which allow lifeline rates for residential customers (Sec. 513(b)(1)). Furthermore, in keeping with the intent of the Act, California's lifeline rates include summer allowances and degree day zones for winter allowances to reflect varying local needs, and thus create a seasonal rate for domestic customers.

METHODS FOR DETERMINING COST OF PROVIDING ELECTRIC SERVICE
(Title I, Part E, Sec. 512)

Section 512 seems to encourage the development of methods for determining cost of service for electricity that reflects marginal costs. This is a policy with which the Commission is in general agreement. The CPUC is currently implementing cost methods that examine marginal costs (e.g., marginal costs of capacity, energy, transmission and distribution). However, this is a highly technical and controversial area and the methodologies are still very much in the process of undergoing development. Therefore, the Commission does not endorse the requirement that each state regulatory authority prescribe one or more methods for determining costs for providing electric service. Furthermore, the Commission considers it inappropriate for any regulatory commission to specify (a priori) in detail which standards and cost bases it will use. Room for flexibility is needed to respond to changing conditions.

As an example of the Commission's concerns regarding such matters, the Commission is currently exploring the issue of additional costs assessment based on incremental additions of customers (as in Sec. 512(b)(3)). There are difficult policy questions here on which no agreement has been reached. For example, if it is suggested that new customers be charged a different rate than existing customers, questions arise regarding discrimination as well as the creation of administrative complexities (e.g., would the cost of service for "new" customers be averaged with that of "existing" customers at each rate change?). The Commission might well oppose such a rate proposal.

ELECTRIC RATE DESIGN AND REGULATORY POLICIES
(Title 1, Part E, Subpart 2, Sec. 513)

The Commission is in general agreement with the rate design policies expressed in Sec. 513. The cost methods now being implemented by the CPUC include marginal capacity and energy costs and time of use (as in Sec. 513(a)(1)(A)). California is in the process of eliminating declining block rate schedules (as in Sec. 513(a)(1)(B)) and has eliminated all promotional schedules. Future potential master meter customers are encouraged to install individual meters and retrofit of individual metering will be encouraged where cost effective. Tariffs for interruptible service are in effect and being reviewed for expansion to a larger number of customers.

Regarding time-of-day rates and load management (Sec. 513(a)(2)):

(a) The CPUC, the California Energy Resources Conservation and Development Commission, four major electric utilities, and the FEA are conducting a detailed study of load management options and have several experiments in progress regarding equipment, rates and potentials for shifting system peaks.

(b) The CPUC has implemented peak load pricing for large industrial customers and provisions are being made to extend these rates to intermediate size industrial and commercial customers within two years. Cost-benefit analyses are being performed to determine the cost-effectiveness of installing time-of-use meters for all 6.5 million California electric customers. Seasonal rate differentials are also being considered.

The Commission does not necessarily endorse the provision (Sec. 513(a)(2)(A)(i)) wherein time-of-day rates may be offered to customers willing to pay the costs of metering. The costs involved in supplying time-of-use meters for the 6.5 million California residential customers could be substantial. Equitable methods of handling the costs have not yet been determined and creating a division between those customers who have already paid metering costs and those who have not would add many complications to resolving the equity issue if meters are finally required for all customers.

Furthermore, with respect to Sec. 513(a)(2)(A)(ii), the provision for rates to reflect any decreases in cost for the utilization of a load management system is unclear. To the extent that time-of-use rates are implemented as ordered here, a load management system will shift use to lower cost time periods and result in bills which reflect the decreased cost of service. If additional rate development beyond this is intended by this provision, additional explanation is required. In general, the CPUC opposes the requirement for such further rate development. If these rates are developed, they may best be formulated and implemented at the state level to allow resolution of local conditions and problems.

GAS UTILITY RATE DESIGN PROPOSALS
(Title 1, Part E, Subpart 4, Secs. 543, 544)

The Commission is supportive of the gas rate structure reforms proposed in Sections 543 and 544 of Part E. The CPUC's lifeline rates include summer-winter rate differentials, as suggested in Sec. 544(a)(1). Furthermore, the Commission is considering a staff proposal which would determine rates on usage zones, based on the climate and seasons. There would be a single summer lifeline rate and several different winter rates based on heating degree days, reflecting need.

Regarding Sec. 543(a)(1), the Commission is in the process of establishing inverted residential (multi-tier) and commercial (2-tier) rates and flat industrial rates reflecting marginal costs. Interruptible industrial gas would be priced at one of the higher residential tier rates.

Furthermore, the Commission has been moving in the direction of incremental pricing by setting higher rates for nonlifeline use. Offset increases have been passed on to nonlifeline users. The retail price of natural gas in northern California is approaching the equivalent cost of oil, the prime reason being the high cost of Canadian imports. Incremental pricing could push the cost of gas past the price of oil and induce large volume users (Priorities 4 and 5) to switch entirely to oil for economic reasons, air quality and facilities permitting. The following table compares the current California utilities' commodity charge for natural gas with low sulfur oil (in equivalent MMBtu's):

			OIL	
PG&E	SoCal	SDG&E	N. Calif. (0.5%S)	S. Calif. (0.25%S)
$2.148	$1.515	$1.919	$2.30	$2.50

Implementation of Rate Design Proposals

Although the Commission is sympathetic with the intent of Part E, we take issue with the provisions for implementation of these rate reforms. First of all, the Commission feels that it is imperative that Congress not impair the ability of states to protect the interest of local gas and electric consumers. The Commission believes that, the states being best able to formulate and implement ratemaking policies that take into account local conditions and problems, the states should be permitted to continue to do so. Furthermore, the Commission believes that minimum standards can become the norm and discourage innovation. The Commission thus opposes the notion of mandatory national standards for rate design.

The Commission is furthermore strongly opposed to the implementation mechanism proposed here (Part E, Secs. 516 and 548) which would:

(1) Grant the Administrator of FEA broad powers to determine rate structures without any mechanism for consideration of regional or state differences.

(2) Allow the Administrator to determine the acceptability of a state's implementation efforts with no formal mechanism for states to participate in the development of the guidelines.

(3) Bypass, in certain instances, the authority of state regulatory agencies by requiring reporting and implementation directly from the utilities as well as the state agencies.

(4) Provide for the absolute preemption of state ratemaking authority should the Administrator not find that state or utility implementation efforts are acceptable.

We realize that California has been very advanced in its rate reform activities and note the possibility of a need for incentives for other states to move along similar lines ("finders-keepers" legislation and similar protections should help). However, the above provisions, which obviate the authority of state regulatory authorities to engage in their traditional job of ratemaking, provide a very severe penalty which could only possibly be justified, if at all, in the case of complete absence of a good faith effort on the part of a utility or state regulatory agency to implement rate reform, and should not be considered until a substantial record of such a lack of effort has been demonstrated.

Furthermore, if the Administrator assumes ratemaking authority for a substantial number of utilities, thereby preventing him from acting in a timely fashion to resolve the complex issues relating to ratemaking, and if as a result, utility rate increases, subject to refund, are permitted pending resolution, we may have another FPC-type situation where consumers' rates go up dramatically, but utilities still cannot raise capital because their increased revenue may some day have to be refunded. The Wall Street investment community looks only at revenue that is certain.

OTHER ELECTRICITY-RELATED ISSUES

BULK POWER SUPPLY (Title 1, Part E, Subpart 3)

Interconnection and Wheeling (Part E, Section 521)

California electric utility transmission systems, under various intertie agreements, are integrated with numerous other utilities and federal agencies in the Western United States including the Pacific Northwest, Nevada, Utah and Arizona. Although intertie agreements are established between and among utilities, the Western Systems Coordinating Council does provide long-range technical planning assistance in the development of regional electric resources. In addition, the Western Conference of Public Service Commissioners is developing a resolution for the authorization of research studies concerning regional power supply, operations and planning.

Extensive interconnected transmission systems have been and are being developed under mutually beneficial agreements worked out between the utilities and with the encouragement of state and federal agencies. The concept of a nationally integrated electric energy network analogous to the communication and highway systems is physically feasible, and should be implemented where economically warranted for reliable service or improved economics.

Although the intent of Subpart 3 (which would authorize the FPC to order electric utilities to connect with other utilities or qualifying cogenerators after evidentiary hearing) is sound, the practical legislative and technical functions and cost/benefit studies can be more adequately accomplished by local utilities, state public utility commissions, and regional councils.

COGENERATION (Title 1, Part E, Section 522)

1. The Commission has generally supported the concept of cogeneration and views cogeneration as a conservation measure for effective utilization of waste heat by industrial or commercial establishments engaged in a primary function other than the sale of electricity or other utility service.

2. The Commission is opposed to the provisions of the plan Part E, Sec. 522(a), that grants the federal authorities jurisdiction for the establishment of cogeneration rules and regulations. The Commission can more effectively implement such programs and would be impeded in resolving the many unforeseen problems that will arise should the Commission be required to act under the jurisdiction of a federal agency.

3. Cogeneration as it relates to wheeling involves numerous local problems that should be resolved by and remain under Commission authority.

4. The Commission in general supports the concept of fully protecting the rights of the cogenerating party including risk of investment and would not be adverse to holding public hearings for the resolution of this policy question.

Senator HANSEN. Next we will hear from Mr. Charles Cicchetti.

Mr. CICCHETTI. I would also like my full comments put into the record.

Senator HANSEN. They will be included.

Mr. CICCHETTI. Along with my attachment.

Senator HANSEN. They will be.

STATEMENT OF CHARLES CICCHETTI, CHAIRMAN, WISCONSIN PUBLIC UTILITY COMMISSION

Mr. CICCHETTI. I would like to take a few moments and clear up what I think are some very strong misunderstandings that some of my fellow panel members have led you to believe are, through their statements as well as from other panel members who I have heard testify.

But before I try to clear up some of those misunderstandings, let me begin by saying that there is no question in my mind that the proper policy for setting electric rates ought to be or are to take into account the very significant variation in the time pattern and cost of generating electricity and the voltage at which electricity is provided.

I think there certainly are at least four States that are moving very rapidly in this direction. I happen to think that Wisconsin is the national leader, but that is not important. There are, at least, four States that I think are moving along with these concepts.

I think the other States are looking at the concepts, but they are not quite as far along. So there is a proper policy. There is no question that time-of-day pricing and moving away from declining rate block pricing is clearly the policy that they should adopt.

In fact, I have probably testified in about 20 different States, besides my own State of Wisconsin, making these arguments and I really believe very strongly in that. The question then becomes, how do we go about achieving implementation of these concepts?

I have heard people this morning imply that this legislation, the administration legislation, would require national electric rates. There is no way that I read any of these sections of that legislation as requiring a uniform rate for electricity.

I have also heard people testify that there will be Federal regulatory policy superimposed on States if the States don't do the job. Well, that is certainly not true in the administration's bill.

The bill that has moved through the House might mean that. It might not. I don't understand all the words in this section. I think it is very vague in terms of whether it means that or not, but it doesn't appear to mean that.

But it is not a uniform rate. It is not Federal regulation. In fact, what it is, it establishes a minimum set of standards with guidelines that have not been fully specified that I believe will help in coverage, the other States, other than the four that I mentioned and a few others that are taking up the second tier. It will encourage those other States to close some of the gaps.

And the most important thing I think it will do is it will change the presumption of the status quo, rather than starting to look at electric rates with declining block pricing as a given and then say how do we move from it in a reasonable fashion.

What I consider this regulation as doing is it starts off a utility rate consideration by looking at the time pattern of cost and then it encourages the movement from it if it is reasonable. In fact, the administration's bill gives statewide discretion to reject time-of-day pricing as long as there is an evidentiary hearing. That is all it requires.

Any State that decides they want to have continued declining block pricing cannot in this legislation do it as long as they have a public hearing and explain why that despite the time-of-use pattern of the cost, they prefer not to, for their State or for their service area or for their industrial customers or whaever, prefer not to have them.

The House bill would also make that provision, but the consideration there would be mostly on the basis of whether or not it is cost justified to avoid moving to a time-of-day pricing.

So in no way do I see this as requiring a single electric rate for the Nation and no way do I see this as requiring Federal regulatory takeover. In fact, it is, I think, a reasonable set of minimum standards to encourage the States that are lagging behind in this important area to catch up.

With respect to natural gas, I feel that all the bills before the Congress are very weak. I think California, New York, again, Wisconsin, Michigan are breaking through and bringing to natural gas the same kind of reform those States brought to electricity. I think we know a bit more about natural gas than these bills would imply; by merely saying declining block pricing for natural gas doesn't make any sense.

I think we know a lot more about how to define the cost of natural gas. I think we know a lot more about redefining rate structures and changing marketing circumstances for natural gas. And I find that these bills are very weak in that regard.

Maybe the FEA is a bit behind what is going on in the States, but nonetheless, I think that part of the bill should be toughened up.

Finally, I think the important question before the Congress is that we all know that just about every political leader in the country has been telling people that conservation of energy is the most responsible thing they could do for themselves and for the Nation.

Yet, as long as we maintain a declining block pricing system, people who conserve energy, maybe 20, 30 percent of the energy they use, when they get their utility bill with declining block pricing, they will see a much smaller fraction of reduction in their monthly bill.

To me, that is reason enough to move away from declining block pricing for electricity. Their moving away from it has to be along time-of-day lines and interruptible rates that are much more in the way of European-type interruptible rates than the ones that we have used in this country and in the form of natural gas, it means pricing some increment of gas to all customers and perhaps all gas to some customers on the basis of the cost of alternative fuel systems.

And I think we understand these concepts and declining block pricing in my opinion is something that we just can't maintain. Thank you.

[The prepared statement of Mr. Cicchetti follows:]

Testimony of Charles J. Cicchetti, Ph.D.
Chairman of the Public Service Commission of Wisconsin

Before the Subcommittee on
Energy Conservation and Regulation
of the Senate Committee on
Energy and Natural Resources

July 28, 1977

Re: Utility Rate Reform

Good Morning!

My name is Charles Cicchetti and I am here today to share my views concerning utility rate reform. Currently, I am Chairman of the Wisconsin Public Service Commission. Previously, I testified in approximately twenty proceedings in various states encouraging electric utility rate reform on behalf of environmental, consumer and government entity intervenors. I have co-authored two books and edited two others on these subjects.

The purpose of my testimony is (1) to state the reasons why electricity and natural gas prices should be restructured; (2) to make suggestions concerning the bills before Congress to make them stronger; and, (3) to debunk some all too ubiquitous misconceptions related to electricity and

natural gas pricing. Let me begin by stressing my principal beliefs in these matters.

* VOLUME DISCOUNTS FOR ELECTRICITY AND NATURAL GAS MUST BE ABANDONED. Such discounts are totally inconsistent with the current energy realities facing America, and indeed the world today.

* TIME-OF-USE DISCOUNTS AND LOAD MANAGEMENT, WITH APPROPRIATE ECONOMIC INCENTIVES, MUST BE VIGOROUSLY PURSUED FOR ELECTRICITY. Electricity tariffs, when meters are economically available, should be immediately switched to a time-of-use pricing system. This does not mean that price "levels" should be increased for any users, rather it means they must be restructured.

* NATURAL GAS TARIFFS MUST BE RESTRUCTURED SO THAT CONSERVATION DECISIONS ARE BASED UPON THE COSTS OF ALTERNATE ENERGY SOURCES OR NON-TRADITIONAL GAS SUPPLIES WHICHEVER IS LESS. Insulation programs must be encouraged by conservation tariffs, which do not raise bills, but which restructure them. A "finders-keepers" or fixed base year system for natural gas supply is an essential federal step if natural gas tariff reform is to be vigorously pursued by states. Now let me get into some reasons why I hold these beliefs.

I. Electricity:

Time-of-use should be the basis of electricity pricing. The reasons can be stated in technical economic jargon using

such concepts as economic efficiency and marginal cost. I prefer to state the reasons in far less theoretically rigorous terms and instead prefer the following more pragmatic justification of time-of-use pricing.

Cost Minimization

Efficiently managed electric utilities attempt to minimize costs in several ways. First, system planners and engineers attempt to minimize the cost of meeting expected future demands and load patterns for the utility and its connecting systems. Additionally, electric utilities practice so-called "economy dispatch" for the least-cost operation of the electric system at any given point in time. The units cheapest to operate are called on line to provide service to meet demands at a particular time and place. The simple fact is that electric utilities cost-minimize in both the operation and the expansion planning of their systems. In the practice of this cost minimization, it is understood that the cost of a kilowatt-hour of electricity varies over time.

The argument is made, therefore, that it would be beneficial for consumers to have available to them roughly the same information which is available to the planners and dispatchers, i.e., that consumers should know and incorporate into their own decision-making processes the effect on the utility of the consumer

taking more or less electricity. The cost calculations made by planners and dispatchers are precisely the same cost data which should be used in the design of tariffs, except that the latter will be somewhat more simplified to facilitate consumer comprehension. Thus, the first desirable feature of time-of-use electricity pricing is that it will attempt to track the cost minimization calculation of the systems planners and the utility's economy dispatchers by reflecting this cost pattern in the tariff structure. The systems engineers' knowledge of cost is communicated to consumers, and consumers' demands and willingness to pay in the reverse direction.

Equity

Economics as an objective analytical discipline does not offer much guidance on the matter of what is equitable or fair. That is not because the subject is considered unimportant; rather that it is simply outside of the competence of the analyst. However, if one is willing to say, as many have, that rates which are based on the costs of providing service are per se equitable, then marginal cost prices are indeed fair. The cost or savings realized by the utility as a consequence of any change in a consumer's demand are directly transmitted to that consumer in the billing process. Pricing each kilowatt-hour of electricity on the basis of the actual cost to the utility is the most direct way

of pricing electricity imaginable. The price paid by each consumer is a function of what it cost to produce the power; not what someone or some agency happens to think is a "fair" price, nor does the price depend on what the consumer happens to use the power for - residential or commercial purposes. All similarly produced kilowatt-hours are priced alike. Marginal cost distinctions are not based upon total levels of consumption over a billing period as contrasted with the present system of volume discount pricing. The present subjective and often arbitrary practice of cost allocation is virtually eliminated.

Load Factor Improvement

For most of the history of the electric power industry one of the most commonly sought objectives has been to maintain a high system load factor. High system load factor means that utility plant stands idle relatively less than in the case of a low load factor system. Higher load factor thus means a greater degree of plant utilization and lower average costs. Without engaging the argument whether higher system load factors are themselves a useful objective, or merely the likely product of pursuing the broader objective of economic efficiency, it remains that higher system load factors are often perceived as beneficial, and many policies formulated to that end. Marginal cost pricing would encourage higher system load factor by encouraging a shift in the timing of electricity use, rather than acquisition of more

expensive new equipment and the incurrence of high operating costs. Time-of-use pricing, along with the generous use of long-term interruptible tariff contracts for larger volume customers, will hold down the need for new generating and transmission capacity. Frequently, interruptible rates are down played because few large volume industrial users of electricity can afford long or frequent unanticipated interruptions. However, in European countries several industrial customers are sometimes packaged into an interruptible group in which no single firm has to be interrupted for the entire peak period, but collectively the capacity saving can be great and so should the size of the discount. In such ways the need for new capacity can be reduced, even without necessarily diminishing the use of energy.

Environmental Externalities

Environmentalists entered the debate on electricity pricing because they have opposed the increase in external social cost associated with the construction and operation of electric generating plants and transmission systems. Since time-of-use pricing is expected to reduce the need for new generating and transmission capacity, environmentalists expect that under time-of-use pricing the amount of new electrical generating and transmission capacity needed would be less than under any alternative

form of electricity pricing that might be considered. Although of limited applicability to hydro based systems, many electric power plants also have peaking units which are often very inefficient to operate. Such plants are typically fossil fueled and are the most polluting from a particulate and sulfur dioxide standpoint. Because time-of-use pricing would shift use away from such inefficient, and therefore, polluting units, time-of-use pricing is also expected to have some desirable pollution-avoiding effects.

Energy Conservation

Many people are concerned with the uncontrolled and seemingly unending growth spiral of energy consumption. Time-of-use pricing would discourage the most expensive aspect of this energy consumption by helping to avoid the use of the least efficient generating facilities. Time-of-use pricing would result in a shift to more energy efficient base load and intermediate load units and away from inefficient peaking units and old fossil fuel plants. It is quite possible, however, that if energy efficiency is measured in terms of total kilowatt-hours consumed, as opposed to total energy required to meet a given load, then time-of-use pricing may actually encourage greater use of electrical energy. To some this greater use may seem inconsistent with energy conservation, but time-of-use pricing will improve the energy efficiency of the level of electricity

consumed, and that is a positive improvement in energy conservation for a given level of economic activity.

Earnings and Tariff Stability

One serious problem today in electricity tariff controversies is that many tariffs actually induce earning instability. Electric utility gross revenue stability can of course be achieved by charging as much money "up front" as possible, which is what is accomplished by volume-discount or promotional pricing. A pricing system, based on marginal costs attempts to tie revenues and costs together, thus promoting earnings or net revenue stability. Similarly, a tariff structure which closely reflects marginal costs would require only periodic modification for inflation, instead of a continuing round of wholesale tariff revision. This objective will be furthered because changes in consumer use patterns will result in changes in revenue and costs that move in the same direction.

Consumer Savings Opportunities

The abrupt increase in the price of fuels used to generate electricity and the gradual but continuing rise in the cost of electricity production equipment has had a very adverse effect both on householders and in the commercial sector. To some extent, consumers have been able to mitigate this effect by reducing total electricity consumption. Obviously, however, there is a limit to the extent to which electricity consumption can be

reduced in gross amount without an unacceptable decrease in household comfort and economic activity. Time-of-use pricing, offers a further opportunity for consumers to save on energy costs by changing not the amount but the pattern of electricity consumption by substituting various capital investments for current energy consumption by, for example, better insulation.

To be sure not all consumers will be able and/or willing to take advantage of this opportunity, but those who are and do may benefit substantially - and not at the expense of the utility!

Load Management

Time-of-use pricing is a passive system of sending signals to consumers to reflect changes in the costs associated with consumption. In the years ahead reforming electricity marketing will undoubtedly also reflect a more active system for reducing demand in order to achieve the above mentioned objectives. Interruptible loads, voltage reductions, and reducing discretion on the use of certain circuits are all steps, which I believe should be offered to residential, commercial and industrial customers alike. As the quality of service is affected - electricity is not fully available on demand - very significant price discounts should be offered to customers, who prefer this marketing approach in which the utility is invited

to step to the "other side of the meter." I do not believe there to be any conflict between time-of-use pricing and load management. Their objectives are identical and their designs are complementary.

To sum up I believe that electricity costs vary by time and voltage. These realities must begin to be reflected in the tariffs used to sell electricity in the U.S. Other industrialized countries, who learned far earlier than their more fortunate North American counterparts, have been using such concepts for decades because they have always known energy to be expensive. Volume discount pricing must be eliminated!

The proposed legislation being considered by this committee would establish national standards to accomplish this important objective. I strongly support this concept. Most significant is the fact that the legislative proposals being considered would change the status quo of mental mindsets. Rather than as at present in which state regulatory commissions begin their consideration of new tariffs by looking at their existing, outdated and totally misleading volume discount prices, the starting point would be a new national standard based upon time-of-use and voltage variations in cost.

If regulatory commissions choose to deviate from this new national rate making norm, there are various opportunities to do so in the bills before this committee.

* I do not oppose such state by state discretion, as

long as a public evidentiary hearing takes place and reasons for rejecting time-of-use pricing are made on the record.

* I support the concept of providing resources to state regulatory commissions to accomplish such reforms.

* I support the notion of supplying resources to citizen intervenor groups.

* I do not, however, believe any of the bills provide enough support for load management, or sufficient resources for research and development for the implementation of residential metering based upon remote meter reading.

* The administration bill should be strengthened in the Senate as it was in the House Commerce Committee by specifically eliminating volume discounts for kW, or capacity, charges unless such variations are related to a specific customer's distribution costs. Such charges should not be used to reflect variations in system wide generation and transmission costs.

* Lifeline rate proposals, or its passive permission under the various bills, are matters in which I have considerable concern. There may be cost based reasons for lifeline rates, but in many cases, particularly for electricity, this will not be true. The issue then becomes an income redistribution matter. Some utility customers would, under these circumstances, be taxed proportionately to their electricity use and the funds collected

would be redistributed inversely proportional to electricity use to other customers. I have many problems with this mechanism as an income transfer device. But, I can assure you the problem of rising utility costs for low and fixed income customers is incredibly severe. It is my opinion that legislative solutions are preferred to regulatory solutions to this dilemma. As a separate matter I shall be happy to share my views with this committee on this important issue.

II. Natural Gas

Last winter's early warning crisis on natural gas should make it plain to all that selling natural gas by means of volume discount promotional prices is the most asinine public policy imaginable. The proposals before Congress in this regard are far less developed than for electricity. In my opinion this is a weakness in the Administration's proposals and some of the Congressional response. Fortunately, these matters can be remedied rather simply. Let me make four specific recommendations.

* First, natural gas should not be sold to any customer with a volume discount component. In order to encourage conservation and conversion some volume of the gas sold to each customer should be priced to reflect the higher costs associated with other fuels, specifically number 2 fuel oil, or the higher

costs associated with SNG, LNG, Canadian imports, or Alaskan gas, whichever is less assuming both options are available. These steps will mean that instead of the present in which most gas customers find their percentage of dollar saving is a mere fraction of their gas saving, conservation will at least be proportionally matched by dollar savings. Tax credits, interest subsidies, education and the rest are fine but gas tariff restructuring must be an integral part of any national conservation and conversion program.

* "Finders-Keepers," which means that gas saved in a consuming state should stay in that state unless there is a life threatening national emergency, should be specifically included in the national energy act. This can be accomplished by basing pipeline natural gas allocations, called curtailments, on a fixed base period and not as the present practice on the previous year's volume and patterns of gas use. State regulatory commissions would be far more progressive in ordering gas utility rate reform, financing, and even providing, residential insulation if the "finders-keepers" protection were available to them.

* All efforts to keep utilities and state regulatory commissions out of insulation programs are totally inappropriate and, despite the rather strange alignment of special interest groups, should be rejected by the Congress.

* Money collected in states to encourage conversion from natural gas should be returned to the state to finance

insulation. States should, however, if they can design a more comprehensive program, be offered the option of designing a substitute conversion-conservation program under "finders-keepers" protection, which could be submitted to the Secretary of the Department of Energy in lieu of the tax on natural gas use proposal of the President.

Finally, I have attached some information on my state of Wisconsin, so you can see that I am not here for the purpose of having the Congress do the job of state regulatory commissions. I believe Wisconsin is a leader in both time-of-use pricing for electricity as well as in reforming natural gas marketing.

In this regard I shall say only two things in closing. First, I do not believe that we must be protected for being out front on these issues because the benefits far exceed the associated costs. Second, industry in Wisconsin is coming to support such reforms, and I believe they will elsewhere just as long as price restructuring does not mean higher prices for industry.

Thank you for letting me share my views with you on these most important national concerns.

Appendix A

Summary of Operating Characteristics Of And Time-of-Day Pricing Programs Of Major Electric Utilities in Wisconsin

Utility	Service Area	Approximate No. of Customers	Approximate (%) Of Total Wisconsin Electric Revenue	Time-of-Day Pricing Programs
Wisconsin Electric Power Co.	Southeastern Wisconsin, including Milwaukee	665,000	37%	WEPCO has proposed time-of-day rates for all customer classes, and hearings are scheduled for August, 1977.
Wisconsin Power and Light Co.	South Central Wisconsin	270,000	17%	WP&L has implemented time-of-day rates for all industrial-commercial customers (130) with maximum demand over 500 kW in January, 1977.
Wisconsin Public Service Corp.	Northeastern Wisconsin	250,000	16%	WPS has developed and has proposed(Spring 1977) time-of-day rates for all industrial-commercial customers (80) with a maximum demand over 1,000 kW. WPS has implemented time-of-day rates in a pricing experiment for residential customers (700) in May, 1977.
Northern States Power Co.	Northwestern Wisconsin	125,000	10%	NSP has conducted a time-of-day pricing experiment for residential customers (40) during 1976. NSP is developing time-of-day rates for large industrial-commercial customers (30).
Madison Gas and Electric Company	Madison	90,000	5%	MG&E has implemented time-of-day rates for 2 large industrial-commercial customers in January, 1977. MG&E is developing time-of-day rates for customers (80) with a maximum demand over 500 kW.

Sources: See attached papers and annual reports of major electric utilities in Wisconsin.

Appendix B

State of Wisconsin \ PUBLIC SERVICE COMMISSION

March 31, 1977

FILE NO. 05-GV-2

TO ALL CLASS A GAS UTILITIES:

On January 26 and 28, 1977, in Docket No. 01-GI-3, the Commission conducted an inquiry into the natural gas supply for the State of Wisconsin. On February 7 and 9, 1977, in Docket No. 05-GV-1, the Commission conducted an inquiry into the development of a statewide curtailment plan for that portion of the state supplied with natural gas by Michigan Wisconsin Pipeline Company. From the information obtained at those hearings, and additional information concerning the national natural gas supply, the Commission concludes that the remaining supply of natural gas available to Wisconsin must be carefully and wisely used.

It is apparent that proper insulation of residences will elicit immediate and significant natural gas conservation, as well as dollar savings to the residential customer. Providing such proper insulation at as early a date as practicable is of paramount concern to the Commission.

The Commission therefore orders that each Class A gas utility, not later than April 27, 1977, or one week after President Carter's energy message is transmitted to Congress, whichever shall be the later date, shall submit to the Commission a proposal for insulating the existing gas heated residences in the utility's service area. The proposal shall include:

1. Each utility shall provide four alternative plans, in a form to be placed into operation before the 1977-1978 heating season, based on the following:

   a. The utility providing financing loans for insulation installed by the customer;

   b. The utility providing financing and installing the insulation for the customer;

c. The utility providing and installing insulation with the costs treated as a utility cost of service;

d. Any combination of a, b, or c or any alternative insulation plan the utility would wish to propose.

2. The number of gas heated residences by district in the utility's service area, the number insulated and the level of insulation.

3. The target number of existing gas heated residences by district in the utility's service area to be insulated to a minimum recommended level prior to the 1977-1978 heating season, in each of the two succeeding heating seasons, and thereafter for each of the alternative programs contained under 1 above.

4. The estimated cost of achieving the target number under 3 above.

The Commission will notice hearings on the natural gas conservation proposals submitted at times and places to be set, but within and not beyond the two weeks following the date of submission of the proposals.

Yours truly,

Lewis T. Mittness
Executive Secretary

LTM:kjn

The CHAIRMAN [presiding]. All right. Mr. Mayo, member of the Florida Public Service Commission.

Mr. MAYO. Thank you, Senator.

STATEMENT OF WILLIAM T. MAYO, MEMBER, FLORIDA PUBLIC SERVICE COMMISSION

Mr. MAYO. I have been sitting here listening all morning, and I think I have already heard so much diversification of opinion as to what this bill means and what it is going to do to the various States around this country.

I think it is the greatest single argument that I have heard all day, all yesterday, all last week against that portion of the bill, which in effect, I believe and a lot of other people believe would give the Federal Government a right to usurp the authority in the rate structure part of regulation and take away from the States if they did not conform to Federal requirements the rights which we have all heard.

Now you have heard here today and I have sat here and listened—to prove my point to the many differences that there are among the States related to this problem. And I just don't believe that we will ever get any type of plan in effect that would be workable in this country whereby a Federal bureaucracy here in Washington could be so much better familiar with the problems of the individual States as to be able to do a better job of it.

Now, I want to endorse here this morning and call your attention to the testimony of Mr. Swidler and remind you of that gentleman's background. When he was Chairman of the Federal Power Commission and I was on the Florida Public Service Commission, there were plenty of times when Mr. Swidler and I did not agree, but thank goodness Mr. Swidler finally became chairman of the New York Public Service Commission and got the same experience in a State that I have been getting for several years, and I find today that our views are very coincident, and I want to highly endorse the very comprehensive statement which he made here today.

That man speaks from both sides of the fence. He has got the advantage that none of us here have of knowing what Federal bureaucracy can do in the position which he formerly had. He then learned something about the responsibilities that became his as chairman of the New York commission.

So I think he has given you the most balanced testimony and comprehensive of any that I have heard here today. Now, I am going to use the few moments that I have left to briefly condense an already condensed version, and I do request that my testimony be recorded in the record.

The CHAIRMAN. For all of the panelists, your statements will be placed in the record in full.

Mr. MAYO. Thank you. Now, let me get down to the specifics that we in Florida see about this bill. They are both critical and offering constructive suggestions, we hope. Two things will greatly improve this bill. One will avoid chaos and the other will cut down drastically on capital requirements, speed up the lowering of our dependence on foreign oil, and create jobs more quickly.

The first would be to strike the provision which would create a new Federal bureaucracy to comprehensively regulate and incidentally strangle rate design, load management, and bulk power supply.

These provisions wipe out in one stroke the entire flexibility to experiment which is the fundamental strength of the Federal system. If the State regulatory commissions had been sitting idly and doing nothing, I might see some justification for this regulation.

But that has not been the case. In fact, State regulatory commissions with Florida, I would modestly admit, in the foreground have moved rapidly in every area which the legislation before you addresses. In many cases we have been doing things for years that are now proposed.

There are two overwhelming advantages, however. I would like to remind you of regulation by State commissions. First, State commissions are necessarily closer to the local problem than the Federal bureaucracy. And, second, good solutions by one State can be applied to another, to the extent that their problems are similar. Mistakes made by one State can also be profited by others, by not duplicating the same error.

Now, some of our problems are different today, but financing is still going to remain a major concern, especially in the sunbelt States and other areas where rapid growth has taken place.

The cost of coal conversion, nuclear construction, and pollution of coal. What has been the responsibility of the States in these problem areas? In Florida we have tried nearly everything that this legislation mandates, at least in principle. Some of it appears to work, some of it doesn't. And in some cases the answers aren't in yet.

For example, we have flattened some rates in Florida. We have tried an experiment on peak-load pricing or time-of-day, as you would like to call it, and one of the practical reactions that we got from our public in Florida—remembering Florida's climate—far different from Wisconsin or some other State—was we had a great deal of problem with peak-load pricing trying to explain to people why a rate that would permit them greater use of their air conditioning in the cool of the evening was more sensible than to give them a rate that would permit them to use that air-conditioning in the heat of the day when they really needed it.

You just can't get the public to understand that. And I might make a statement here regarding pricing. I think that in any business, you had better price your product in a manner which the public will understand or you are going to have difficulty selling it.

And in the case of regulated utilities they have to have it, so they have it rammed down their throats, whether they like it or not. But the fact remains that there are a lot of differences in a State like Florida and other States.

Now, we have had fuel adjustment hearings in Florida, for example. I think that is covered by your bill. But in Florida we had hearings on the fuel adjustment problem every month, public hearings and our staff down there audits the regulated utilities and we have a very accurate and up-to-date method of determining exactly the fuel adjustment clause.

Now, some States—and I think Florida was among the first to have a public council down there who fully represents the rights of the individuals—we have gone into a grid situation down there in Florida. We have got a grid bill we have had for several years and this commission has just recently spent about a half of a million dollars

having a study made of the implementation of our grid bill to determine what progress we have made in it.

In fact, that is being released in Tallahassee today while I am up here. But we are making the same point individually as States I think this bill encompasses. And, therefore, I don't quite see the urgent necessity of taking away from the States their own rights to solve their own collective or individual problems in trying to make them so uniform that it is going to naturally impose some serious inequities on the ratepayers of the individual State.

Now, the point is that a State such as Florida is doing all that can be done in the area of redesign, load management and bulk power supply. Not only are these areas so complex that even the experts disagree, they are areas where a very long leadtime and heavy commitments of men and money are concerned.

Mistakes must be paid for over the 30 year life of bonds by the ratepayers. And so I think that it is just not the right thing to do, to discard a system that has worked very well in the past and replace it with a sort of, I call, the blunderbuss approach to the legislation which you are considering, because I just think it is a bunch of darn foolishness to destroy a system that has worked as well as this.

And I will close with one final point, which I think indicates the weakness in some of this. If you will all recall, President Carter got on television a few months back and he asked the people of this Nation to lower their thermostats to 65 degrees.

Well, we had some patriotic Floridians who listened to that message and promptly lowered their thermostats to 65 degrees and you know what happened? Their air-conditioners came on.

Now, I think that is the best way that I could close. And thank you very much.

The CHAIRMAN. Well, Mr. Mayo, you are the last witness and I want to ask you a question about the subject of senior citizens' lifeline rates. You have a few in your State.

Mr. MAYO. We sure do.

The CHAIRMAN. So I thought that I would put the question to you.

Mr. MAYO. All right.

The CHAIRMAN. Do you have any provision in your ratemaking that gives a preference, one way or the other, in any form for senior citizens?

Mr. MAYO. Not truly as lifeline has been generally described. As you say, we do have many senior citizens in our State and we have recently tried something which is not really a lifeline concept, as I understand it. It has been a method of freezing a rate increase on one particular utility at a 750 kilowatt level and then letting that increase apply for all consumers above the 750 level.

Now, that thing has only been in effect for 6 weeks and I can tell you right now that we are already getting complaints from people in the hot peak summertime who are using excessive quantities of electricity because of this new plan. It is having a detrimental effect to roughly—well, our statistics shows that when we put it into effect, 28 percent of that particular company's ratepayers. I begin to believe from the telephone calls my office is getting that all 28 percent of them must have called us by now, because it was supposed to have

benefited to 72. I am not sure you can take something like that on the basis of 1 or 2 months and make a proper evaluation.

Now, as to the philosophy of what I think should be done about protecting the senior citizen, I do not think that is a problem that should be resolved by any regulatory commission that is in charge of electric rates. That is a welfare and social problem and if we have food stamps in the country for people who can't afford to buy food, then I think agencies that are more concerned with welfare should also implement, sir, and devise a plan that would protect those people who need electricity just as badly as you and I do.

But do it through that method and not put that burden on the regulatory commissions at either State of the Federal level.

The CHAIRMAN. Well, I think you missed my main point, though. You don't want to assume that people 65 and older are in the welfare category.

Mr. MAYO. Not all of them.

The CHAIRMAN. But don't you have a lot of them in Florida that are not on welfare that are 65 and older? They come down, retire.

Mr. MAYO. Yes, sir.

The CHAIRMAN. What percentage of the residents of Florida are 65 and older?

Mr. MAYO. When I heard somebody ask another witness that same question, I thought, my lord, I don't know. It seems like from the mail we get it must be 90 percent, but I am sure that is not right.

The CHAIRMAN. Well, at least I am on the right track here. I am trying to test out these theories here. In other words, some utilities are in areas where it has to be over 50 percent.

Mr. MAYO. I am sure you are correct. On the lower east coast of Florida and also the west coast of Florida, the percentage is extremely high and there are all degrees of affluence represented among those senior citizens.

The CHAIRMAN. That is my point.

Senator HANSEN. I would like to say to my good friend, the chairman, that growing old isn't so bad when you consider the alternatives.

Mr. Mayo, I think that you have put things into proper perspective when you observe, as you did, that the problem of older people and the inability of many to pay for the essentials of life is not a problem that should be handed to public service commissions or any other regulatory commission. I think it very properly and appropriately should be addressed by welfare agencies and I see no reason at all, if there is a consensus that we want to do something about it, I am sure many people share that view, then I would say let's consider what we have done with food stamps.

But it seems to me to do violence to the whole concept that has mandated responsibilities to regulatory agencies to say that they are to include among the other considerations in setting rates the problem of trying to see that every person who is unable to pay for as much as he might need will get electricity at a special price.

Mr. MAYO. That is the problem with this legislation, gentlemen. You are trying to put too many problems into one basket, and if you will divide it, and leave the States to that which they can do best, and let the Federal Government do that which they can do best, we will share the burden and get the job done better.

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[The prepared statement of Mr. Mayo follows:]

STATEMENT OF WILLIAM T. MAYO, MEMBER, FLORIDA PUBLIC SERVICE COMMISSION

Good morning Mr. Chairman and mmbers of the Committee. My name is Billy Mayo, of the Florida Public Service Commission. Since we are somewhat pressed for time this morning, I will be brief. As already arranged with your staff, my remarks will be supplemented.

You know well enough that the choices you make in the next few weeks could very well set the pattern for the next generation. That responsibility is a heavy one, especially since the problems are difficult even to define accurately, much less to solve. However, neither you nor I was elected to find solutions for simple problems, but to cope with complex ones. We have achieved a national quality of life unequalled in the history of the world. To keep it and improve it is going to require hard work and hard decisions. If we had started using our resources wisely 50 years ago, or even 20, it would have been easy. Today, it will be difficult. In 10 or 20 more years, it may well be impossible.

I start from the fundamental premise that there are answers to our energy and environmental problems. As the most technologically advanced nation, with the strongest economy in the world, we are best equipped to find the answers. We can have a clean environment and the energy we require for an appropriate lifestyle. To have one without the other is to have nothing.

That is the broad overview. Now, let me get down to specifics. Two things will greatly improve this bill: one will avoid chaos and the other will cut down drastically on capital requirements, speed up the lowering of our dependence on foreign oil and create jobs more quickly. First, strike the proviisons which would create a new federal bureaucracy to comprehensively regulate—and incidentally strangle—rate design, load management and bulk power supply planning. These provisions wipe out at one stroke the entire flexibility to experiment which is the fundamental strength of our federal system. If the state regulatory commissions had been sitting idly by since the oil embargo and done nothing, such a drastic step might merit consideration. Even then, it is so massive a shift in state and federal relations that its Constitutional overtones would cry caution.

In fact, state regulatory commissions, with Florida in the forefront, have moved rapidly into every area which the legislation before you addresses. In many cases, we have been doing for years what is now proposed. There are two overwhelming advantages to regulation by state commissions: First, state commisions are necessarily closer to local problems than the federal bureaucracy ever can be. Second, good solutions developed by one state can be applied by others to the extent their problems are similar. Mistakes made by one state can be learned from by all. During the last 25 years, the system has worked well in meeting a host of severe problems.

Some problems today are different, although financing remains a major concern, especially in sunbelt states and other areas of rapid load growth, given costs of coal conversions, nuclear construction and pollution control. What has been the response of state commissions to these new problems? In Florida, we have tried nearly everything which this legislation mandates, at least in principle. Some of it appears to work; some of it does not; and in some cases the answers are still out. For example, we have not only flattened rates. we recently set an inverted rate for our largest utility. We have also experimented with peak load pricing. One interesting fact which is true of Florida, New England and other areas with a lot of oil fired base load generation is that while peak load pricing more closely tracks costs, it has the incidental effect of increasing oil consumption, which is obviously undesirable. This fact is one example of why uniform standards are silly nonsense.

Florida, and many other states, have independent, fully staffed Public Counsels to represent consumer viewpoints. We also do our work in adversary hearings, completely on the record and subject to judicial review. In addition, we have very broad powers to assure a reliable statewide energy grid. Both planning and operation of the peninsular electric grid is coordinated among all our generating utilities, both public and private. It is a fine example of cooperation from which all benefit.

The point is that the states, such as Florida, are doing all that can be done in the areas of rate design, load management and bulk power supply. Not only

are these areas so complex that even the experts disagree, they are areas with very long lead times and heavy commitments of men and money. Mistakes must be paid for over the thirty year life of the bonds by the ratepayers, so care is needed. Junking what works well and replacing it with the blunderbuss approach of the legislation before you would be damn foolishness.

At the outset, I said there were two things you could do to improve the bill. Cutting out those sections related to rate design, load management and bulk power supply planning is one. That avoids the chaos. Now, let us go to the positive side—cutting down on capital requirements and creating jobs. For openers, the new Department of Energy should be authorized to help the states do studies and gather data to improve their own programs to meet the energy crisis. This kind of help is always welcome, and exemplifies the cooperation inherent in federalism in its finest sense.

The best thing you could do to create jobs would be to set up a one-stop federal permitting system within the Department of Energy to license nuclear power plants and related facilities. As it stands now, to license a nuclear power plant is a time consuming and ruinously expensive process. We take 10 to 12 years in this country to build nuclear power plants from decision to go until the plant is on line. Such a time frame is not only totally unjustified, it runs the costs of nuclear plants—and our oil bill—out of sight. In comparison, the Japanese build nuclear plants in four years. The Japanese do not neglect nuclear health and safety, either. We can hardly forget that the Japanese have special reasons to be sensitive to nuclear health and safety issues. On their crowded islands, they also have every reason to be concerned about their environment as well.

A well designed one-stop permitting system at the federal level, especially if it were coordinated with state one-stop permitting systems, would be a much better vehicle to hear and resolve all the issues which naturally arise with nuclear power plants. Let me give you a brief outline of how such a system works, and its advantages. The first premise is that a timely decision is important, whether that decision is to build or not to build. We view the matter as a simple weighing test: need versus environmental impact. The various viewpoints are represented by all the governmental agencies with subject matter jurisdiction, and any citizens or public interest groups who wish to intervene. All parties are bound by the outcome. Those who do not get in the proceeding cannot colatterally attack it, since there are very ample notice provisions. If a permit issues, attached to the permit are the conditions of operation. There are provisions for modification in the event standards change.

The essential point is that within 14 months, the utility knows whether it can build a plant, and if so under what construction and operating conditions, at the site in question. Assuming a plant to be properly designed and at an acceptable site, many hundreds of millions of dollars would be saved by cutting the lead time from the 10 to 12 year figure down to four or five. In turn, this saving would cut financing requirements, which would both free capital for other uses in the economy and also bring such plants within the reach of more utilities. In turn, building these plants would both create more jobs quicker and provide nuclear baseload quicker to cut down on our need for imported oil. Most importantly, by getting all the issues on the table in one proceeding, it would produce the most equitable result, especially with respect to the long term environmental impacts of construction and operation.

As I mentioned at the outset, the details will be filed with your staff in the next few days. One-stop permitting flows from the same concept of putting related activities together as does the new Department of Energy. The two are a logical mix. The concept was thoroughly explored and approved by both a Nuclear Regulatory Commission panel on which I served and a workshop of the National Governors Conference, so it has adequate support. Our Florida working experience has been good. The same panel and workship strongly urged dropping anti-trust review as part of nuclear licensing, since utilities' relations with their customers are regulated at both the state and federal level, and anti-trust review does nothing but waste time and offer another forum to relitigate the same issues. This conclusion was reinforced by the fact that anti-trust review was aimed at component suppliers rather than utilities in the first place.

As a final illustration of the need for flexibility that only state regulation can provide, recall when the President came on television and urged everyone to lower their thermostats to 65° to save energy. Many people in Florida did so, and the air conditioning came on. What worked in Connecticut and New Hamp-

shire did not in Florida, Louisiana or New Mexico. I will be happy to answer any questions. Thank you very much for inviting me today.

The CHAIRMAN. Senator Stone, a former member of this committee is here. I think he would like to make a comment or two.

STATEMENT OF HON. RICHARD STONE, A U.S. SENATOR FROM THE STATE OF FLORIDA

Senator STONE. Thank you so much, Mr. Chairman. I miss the commitee and I appreciate the opportunity to be here today.

And I want to say to Commissioner Mayo, he speaks for a very important Florida concern. I am sure the other gentlemen of the panel also share that concern and that is that we do not want to heap onto the back of ratepayers burdens which are put there in the name of worthy purposes, if consumers cannot afford to pay those burdens and we do want to avoid both blackouts and unnecessary costs.

The responsiveness of the State regulatory system is fairly good and the public promptly knows when the system acts or fails to act. But because of the remoteness and the delays of the Federal regulatory system it doesn't respond in that same fashion when there is a regulatory pinch or failure to act promptly in some of these regulatory matters.

And I am sure Commissioner Mayo has been eloquent on that point. And I would subscribe to what he has been trying to convey to this very fine committee.

I thank the chairman for letting me appear here with you.

The CHAIRMAN. Thank you, Senator Stone.

Before you came in we had an interesting colloquy here on the issue of special rates for senior citizens, and I think it does pose a real problem because this issue is coming up in many different areas.

There is a discussion in Florida where you have—it is not unusual, it is to be expected, but a high percentage of senior citizens and how we deal with this problem is a very difficult one because it gets into other areas as well—such as taxes on homes.

I think you have a special provision under Florida law that gives a certain preference for people 65 and over.

Senator STONE. Mr. Chairman, I know you have a hard issue ahead and I appreciate your thoughtfulness on this particular matter.

The CHAIRMAN. Thank you very much, Senator. We are delighted that you could be here. I regret that it was necessary for me to step out for a little bit. I have been advised by staff that there has not been any comment regarding the interconnection provisions of the bill pending.

Would anyone like to comment briefly on that? Then we will adjourn this hearing.

Mr. MORRIS. May I comment, Senator?

The CHAIRMAN. Yes, sir. And please use the mike.

Mr. MORRIS. It seems primarily that the provision of the interconnect, of course, it is either directed primarily to the Texas system, or at least, it probably effects the Texas system as much as any system in the country because most of the other systems are interconnected to some extent either on a regional or on a national basis.

The Texas interconnect system consists of about 280 generating units with a capacity of about 35,000 megawatts operating in syncretist.

This is a system that began developing as far back as 1924 and there has been millions of dollars spent in setting up and building the transmission lines to hook this system together and it has developed into and has the history of being one of the most reliable systems in the Nation.

And it is large enough to have excellent reliability, and in order to connect this system into the national grid, it is estimated—at least by some of the testimony that we have received at our commission, that it would take in the neighborhood of a billion dollars to interconnect it, to interconnect it with the national system.

And after interconnection, the reliability would not be increased and there is a great possibility that the reliability would be decreased. And I think, if I understand the evidence that we have received before our commission, at least, that the larger the system becomes, the longer the time between an outage or a loss of a unit until you can stabilize the system.

And that if you don't stabilize the system within a given time, it starts breaking up and I think this is pretty well underlined by what happened in New York, not only the other day, but what happened I think in New York—what was it? In 1965 when the system started cascading and they went clear down into Georgia Power before they were able to isolate the system enough to stop it.

The CHAIRMAN. Don't you think that the main problem here is ideological? I mean, if we get into a national grid, there is a fear that you will have the Federal Government taking over the power distribution of the system. Hasn't that been a part of the problem?

Mr. MORRIS. I don't think that is part of the problem. It may have some effect on it. I think it is really the dollar cost and who is going to bear that billion-dollar cost. You know, are the ratepayers of our State going to bear that billion-dollar cost or are the people outside of our State that want to interconnect, are they going to bear that billion-dollar cost?

And if you add that billion dollars on top of the high cost of fuel and the high cost of conversion, it is quite a burden on the rate payer and unless there is some benefit to the ratepayer—and as far as I have been able to determine and as far as the evidence that we have had before our commission, no one has shown us that there would be one iota of benefit to the ratepayer of our State or any increase in reliability to our State if we were to interconnect.

The CHAIRMAN. Well, I know there is a long argument about this and there are many different points of view. We are sorry we don't have a chance to go into all of that. We want to thank all of the members of the panel for your participation here this morning. Thank you very much.

We will have a brief recess while we get ready for the markup.

[Whereupon, at 10:10 a.m., the hearing was recessed, subject to the call of the Chair.]