CONSERVATION AND THE NATIONAL ENERGY PLAN

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INTRODUCTION

The energy crisis as described by President Carter in his nationwide address of April 20, 1977, is both immediate and potentially severe. A significant portion of the Administration's proposed energy program relies upon energy conservation as an affirmative response undertaken by both the public and private sectors. The purpose of this article is to examine the more important legal and practical questions raised by the conservation aspect of the Administration's program. In so doing, this article will pay particular attention to the impact of the conservation program on state regulatory agencies.

THE CURRENT ENERGY SHORTAGE

The energy crisis, as described by both the President,1 and by other sources, such as the Federal Energy Administration,2 is severe indeed. The energy crisis, put simply, is that the United States is consuming more energy than it produces and is doing so at an ever-increasing rate. The energy supply problem is most graphically illustrated by examining the oil situation.

Oil is perhaps the most versatile and widely used source of energy, since its uses include transportation, industrial and residential heating, generation of electric power, as well as manufacturing uses. From 1945 to 1973 American oil consumption rose at an average annual rate of 4.4%.3 While oil consumption did decline

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3. See National Energy Plan, supra note 1, at 11. This use was accelerated by conversion of many utilities and industrial users from coal to oil and natural gas during the period 1969-1973 to conform to the Clean Air Act Standards issued by the Environmental Protection Agency. See 42 U.S.C. 1857 to 1857(1) (1970); 40 C.F.R. §§ 15.1 to .41, 60.40 to .46 (1977). See generally 40 C.F.R. §§ 50.01 to 55.1770, 60.1 to 87.102 (1977).
between 1973 and 1975, the rate of growth of average annual consumption increased by 6.7% in 1976.

America's dependency on imported oil has likewise increased, both relatively and absolutely. At the time of the oil embargo in 1973-74 the United States imported 37% of the total oil consumed. In 1976 oil imports averaged 7.3 million barrels per day, equalling 42% of total oil consumption. In January and February of 1977, the imported oil figure rose to a staggering nine million barrels per day, half the total domestic oil consumption. The increased dependency on imported oil, and the recent uncertainties about the price and availability of that oil, have had serious implications on the American domestic economy and on its foreign policy as well, which underscore the gravity of the energy crisis.

Moreover, the long term prospects for oil availability also look bleak, even assuming that the oil producing countries are willing to supply oil at reasonable prices and to develop their oil resources to the fullest extent possible. For example, in 1976 the OPEC countries exported 29 million barrels of oil per day. If the world-wide demand for oil continues to increase at historic rates, it could exceed 50 million barrels per day by 1985. There is considerable doubt that the oil producing countries, with the exception of Saudi Arabia, can significantly increase oil production. Even with greatly increased Saudi Arabian production, it has been estimated that with an annual world growth rate of 3% the world's estimated recoverable oil resources would be exhausted by 2020. The devastating aspect of these figures is emphasized by the fact that oil pro-

4. This decline in oil usage, as well as an accompanying decline in energy demand generally has been attributed, with various weight, to the dramatic increase in oil prices in 1973-1974 and to the general economic recession. See National Energy Plan, supra note 1, at 11. See in re Public Serv. Co. of N.H. No. 50-443, 444, 6 N.R.C. 33, 91-92 (July 26, 1977).
6. Id. at 14.
7. Id.
8. Id. at VII.
9. For example, the American merchandise trade deficit increased from $1.0 billion in 1971 to $14.8 billion in 1976, largely as a result of oil imports which cost only $3.7 billion in 1971 and an enormous $36.4 billion in 1976. Id. This adverse trade deficit was not experienced by America alone. In 1973 the oil producing countries (OPEC) and the European importing countries each enjoyed a small surplus in current account balances with the rest of the world; however, in 1974 the oil importing countries experienced a $33 billion deficit on current account, while the surpluses of the oil producing countries increased to $70 billion. Since 1973, the oil importing countries have paid over $300 billion in oil import bills to the oil producing countries.
10. Id. at 15. The 3% annual world growth rate is far less than the 8% annual growth rate experienced in the 1960's.
vided 27% of American energy consumption in 1976. Oil was widely used in residential, commercial, and industrial uses, and in addition is the greatest source of the nation's fuel for transportation.

While the availability of oil highlights the seriousness of the energy problem, it is by no means the only source of fuel and energy that is gradually becoming scarce. Two other factors in the nation's energy picture, natural gas and uranium, also present an uncertain future. Natural gas, which constitutes only 4% of domestic conventional energy reserves, furnished 27% of American energy consumption. It is estimated that by 1985 gas from existing reservoirs will be able to satisfy only 55% of natural gas demands. Yet domestic production of gas, which peaked in 1973 at a level of 22.2 trillion cubic feet, has declined since then, reaching only 19.0 trillion cubic feet in 1976. The President's plan calls for meeting this demand by production from totally new sources such as Alaskan gas, the Outer Continental Shell, deeper and tighter onshore formations, the geopressurized zones along the Gulf Coast, synthetic natural gas, and imported liquified natural gas. However, the President's program recognizes that these new sources of natural gas will not be able to reverse the downward trend in total U.S. production until at least the mid 1980's, and that subsequent production from new sources is dependent upon significant discoveries being found on the Outer Continental Shelf and technological advances occurring which make possible the exploitation of the deeper, tighter onshore formations, Devonian shale, and geopressurized zones. In short, a dependable supply of natural gas is anything but assured.

An equally uncertain future exists with respect to nuclear fuel availability. The large increases in the costs of other energy fuels has affected nuclear fuel as well, as is demonstrated by Westinghouse Corporation's attempted cancellation and renegotiation of all of its major nuclear fuel supply contracts. Aside from the in-

11. Id. at 11.
12. Id. at 10-12. Oil is needed most in the transporation section since there is no substitute readily available.
13. Id. at 16.
14. Id. at 18.
15. Id.
16. Id. at 18-19.
17. Id. at 19.
18. In 1975, Westinghouse Corporation, one of the nation's largest suppliers of nuclear fuel, announced its intention not to honor its contracts to deliver fuel to nuclear utilities at the contracted price, because of an unexpected change of circumstances, namely the unexpected rise in price of the fuel to Westinghouse. In the resulting breach of contract suit by the utilities affected, the U.S. District Court
creased cost, questions also exist about the long-term availability of nuclear fuel. Estimates of proven reserves vary widely, but the likelihood is that the uranium required for electric power plants after 1990 will be extremely costly and will involve difficult mining techniques to recover. While the President hopes that nuclear power plants providing as much as 20% of the electricity supply could be operating by 1985, it is clear that nuclear power plants as currently designed do not play a dominant part in America's long-range energy program.

The President's program has three major objectives:

1. as an immediate objective that will become even more important in the future, to reduce dependence on foreign oil and vulnerability to supply interruptions;
2. in the medium term, to keep U.S. imports sufficiently low to weather the period when world oil production approaches its capacity limitation; and
3. in the long term, to have renewable and essentially inexhaustible sources of energy for sustained economic growth.

The long-term goal can only be achieved when solar energy, alternative forms of nuclear power, and coal gasification become commercially feasible. In the interim, the President's program calls in Richmond, Virginia entered an order on February 3, 1976, which provided for Westinghouse to deliver 15 million pounds, out of a total of 80 million pounds contracted for, to the utilities involved. The court order also provided for the establishment of a committee representing the utilities, to negotiate with Westinghouse toward settlement of the dispute related to the additional uranium. Westinghouse in turn filed suit in October 1976 against 29 uranium producers in U.S. District Court in Chicago, Illinois, and alleged that a worldwide uranium cartel had conspired to drive the price of uranium from $9.50 a pound in 1972 to $40 a pound in 1974. Westinghouse had contracted to deliver 80 million pounds of uranium at the 1972 price.

The decision to suspend indefinitely the licensing and construction of the demonstration liquid metal fast breeder reactor at Clinch River, Tennessee has further emphasized the problem of uranium fuel availability. See National Energy Plan, supra note 1, at 70. The purpose of the breeder reactor is to create more nuclear fuel than it consumes by converting non-fissionable uranium into fissileable plutonium. See The Nuclear Industry 33 (1974). Questions also exist as to the accessibility of all the known uranium reserves. Australia, which contains one-fifth of the world's known uranium deposits, appears likely to follow a policy of limited development because of concerns for the environment and the aborigine settlements in the area of the uranium reserves. See Newsweek, June 6, 1977, at 28 (International Edition).

for a greatly expanded use of the nation's extensive coal reserves, continued reliance on existing nuclear power, decreased reliance on oil, and a rate of growth in energy demand considerably below historic levels. The primary method of reducing the rate of growth in energy demand is through energy conservation. The remainder of this article will be devoted to a discussion of the role energy conservation will play in the President's program, as well as a consideration of some of the legal implications of the voluntary and mandatory conservation provisions.

CONSERVATION AND THE NATIONAL ENERGY PLAN

Conservation is one of the five major principles for implementing the President's National Energy Plan. The goal of the conservation program is not to reduce energy consumption in absolute terms, but to slow down its rate of growth to less than 2% per year. The energy conservation effort is designed for virtually all major aspects of the American way of life involving the use of energy. The program calls for affirmative action by the private and public sector in such areas as transportation, buildings, appliances, standards of fuel efficiency in industry, cogeneration and changes in electric utility operations. While the program contains largely voluntary measures assisted by government incentives, there are some mandatory measures and the framework is established for more drastic and comprehensive mandatory measures if necessary.

Conservation is viewed under the National Energy Plan as the cleanest and cheapest source of new energy supply, since wasted energy—from cars, homes, commercial and industrial facilities—is

22. Coal constitutes 90% of the nation's conventional energy reserves but currently supplies only 18% of energy consumption. The president's program calls for increasing coal supply from the current level of six hundred million short tons per year to over 1,200 million short tons by 1990. Id. at 63-64.
23. The President's plan sets a goal of annual growth of total energy demand at below 2%. Id. at XIII.
24. The five major principles are:
   (1) the growth of energy demand must be restrained through conservation and improved energy efficiency;
   (2) energy prices should generally reflect the true replacement cost of energy;
   (3) both energy producers and consumers are entitled to reasonable certainty as to Government policy;
   (4) resources in plentiful supply must be used more widely, and the national must begin the process of moderating its use of those in short supply;
   (5) the use of nonconventional sources of energy must be vigorously expanded.
Id. at 28-31. Discussion of the latter four principles is beyond the scope of this article.
25. Id. at XIII, 29.
greater than the total amount of oil imports.\textsuperscript{26} The National Energy Plan calls for the embracing of a new conservation ethic and rightly concludes that the attitudes and habits developed during the era of abundant, cheap energy are no longer appropriate in light of the declining availability of the nation's primary sources of energy.\textsuperscript{27}

**TRANSPORTATION AND OIL**

Transportation, which accounts for 26\% of the nation's energy use,\textsuperscript{28} is a major target of the National Energy Plan. Both voluntary and mandatory provisions are aimed at this major usage. On a voluntary level, the Plan encourages carpooling\textsuperscript{29} and the use of mass transit, and also encourages state actions which would expedite these modes of transportation.\textsuperscript{30} The Plan recognizes the need for reliable inexpensive mass transit to serve existing spread out metropolitan areas, but contains no provisions for federal funding nor does it contain other concrete proposals for implementing this goal.\textsuperscript{31}

The goal of the National Energy Plan in the transportation area is to reduce gasoline consumption by 10\% by 1985. To help accomplish this, the Plan proposes that a graduated excise tax be imposed on new automobiles with fuel efficiency below the fleet average level required under current legislation.\textsuperscript{32} Graduated rebates would be given for new cars with mileage better than the standard.\textsuperscript{33} The Congressional Budget Office issued a Staff Working Paper in June of 1977\textsuperscript{34} which analyzes and assesses the proposals contained in the President's plan. The Congressional Budget Office estimates that this system of taxes and rebates would have the greatest potential for reducing fuel consumption,

\begin{itemize}
\item \textsuperscript{26} Id. at 35.
\item \textsuperscript{27} Id.
\item \textsuperscript{28} Id.
\item \textsuperscript{29} According to the Administration, if four commuting cars out of ten carried one additional passenger, 2.5\% of the total oil consumed could be saved, a figure which equals approximately 400,000 barrels per day. \textit{Id.} at 36.
\item \textsuperscript{30} Id. at 40.
\item \textsuperscript{31} Id.
\item \textsuperscript{32} Id. at 36. In 1975 Congress enacted legislation requiring that the average mileage of new cars be 20 miles per gallon by 1980, and 27.5 miles per gallon by 1985. (The standard actually achieved in 1974 was only 14 miles per gallon). 15 U.S.C. 2001. The statute requires civil penalties to be assessed on manufacturers who fail to meet these standards. The National Energy Plan questions the adequacy of these penalties and has proposed the graduated excise tax as a stronger incentive to achieve the reduction in gasoline needed.
\item \textsuperscript{33} NATIONAL ENERGY PLAN, \textit{supra} note 1, at 36.
\item \textsuperscript{34} CONGRESSIONAL BUDGET OFFICE, \textit{PRESIDENT CARTER'S ENERGY PROPOSALS: A PERSPECTIVE} (1977) [hereinafter cited as \textit{A Perspective}].
\end{itemize}
resulting in savings of 215,000 barrels of oil per day in 1985 and as much as 450,000 barrels of gasoline per day in 1990. The second major tax initiative affecting transportation involves a series of crude oil equalization taxes, the purpose of which is to bring the net price of domestic crude oil up to the prevailing world price by 1980. The proposal would thereby raise the price of gasoline as well as all other petroleum based products, in subsequent years. The Congressional Budget Office estimates that the crude oil equalization tax by itself would likely save only minimal amounts of gasoline by 1978, but would result in savings of 40,000 barrels per day in 1980 and about 25,000 barrels per day in 1985.

The third provision relating to gasoline consumption, and one which has become the most politically controversial is the standby gasoline tax. Beginning in 1978 if gasoline consumption exceeds a predetermined target consumption, a gasoline tax of five cents per gallon would be imposed for each full percentage point by which the actual consumption exceeds the target, with yearly increases in the tax limited to five cents per gallon and with a maximum tax

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35. *Id.* at 77.
36. *Id.* at 17, 56. Oil producers are currently subject to a price ceiling of either $11.28 per barrel for new oil, or $5.25 per barrel for old oil, compared to the world price of $13.50 per barrel. Under the National Energy Plan, the price of newly discovered oil would be allowed to rise over a three year period to the current 1977 world oil price, with subsequent adjustments based on inflation. The purpose of this provision is to establish a domestic incentive price for new oil, separate from the imponderables of post-1977 OPEC world prices. The ceiling on old oil would rise with inflation. However, in order to ensure that the market decisions made by consumers are based on the real value of oil, all domestic oil would become subject at the wellhead to the crude-oil equalization tax equal to the difference between its controlled price and the world price. This tax would be added in three increments between 1978 and 1980. The tax would subsequently increase with the world price subject to restrictions should the world price increase at a disruptive rate significantly faster than domestic prices. Net reserves from this tax would be returned to consumers through the mechanism of a per capital energy credit against other taxes or in the form of some other refund. Besides attempting to establish a more realistic energy pricing system, the tax attempts to prevent the massive windfall profits to the oil producers which would result from total deregulation, an amount estimated at $14 to $15 billion, almost 1% of the nation's gross national product. See NATIONAL ENERGY PLAN, *supra* note 1, at 50-52.
38. *Id.* at 64-66. The effect of the crude oil equalization tax appears relatively small compared to the tax and rebate system based on gas mileage because the equalization tax figure is only for gasoline. The equalization tax is an across the board tax which would affect all petroleum products gradually and indirectly, so that while its impact on a specific category of petroleum product appears small, its overall impact will be substantial. The Congressional Budget Office estimates that the crude equalization tax, in conjunction with other major provisions of the program could reduce oil consumption in 1980 by 4% and in 1989 by 17%. *Id.* at 21.
of fifty cents. The 1976 gasoline consumption was approximately 7.0 million barrels per day, while the proposed target levels of consumption would achieve a level of 6.5 million barrels per day in 1987.

The Congressional Budget Office estimates that the standby gasoline tax would probably not have any effect on gasoline consumption until the early 1980's. Fuel-economy improvements in new model cars, as well as the other aspects of the National Energy Plan, are likely to result in a pattern of gas usage that is not significantly different from the target levels of consumption.

A number of provisions which would have less impact than the three principal proposals listed above, but still have the potential for some energy savings, include such miscellaneous provisions as repealing the 10% excise tax on intercity buses; raising the existing federal gasoline tax on aviation fuel (except for use by farmers and commercial airlines) to 11 cents per gallon; initiating a major van pooling program by federal employees and requiring the federal fleet of new cars to meet an average mileage standard two miles per gallon above the average fuel economy standard applicable in 1978 and four miles per gallon above the standard in 1980.

The National Energy Plan also calls for additional drastic measures, including a tax on commuter parking and minimum automobile mileage standards, in the event the 10% reduction in gasoline consumption by 1985 to a level of 6.5 million barrels of oil per day is not met. In addition to the above programs, the federal government hopes to involve state governments in programs which en-

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*For a 12-month period ending September 30.*

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39. *Id.* at 59.
40. *Id.* The proposed target levels for national gasoline consumption are the following (millions of barrels per day): *a*

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*Id.* at 60 (Table VI-1).
41. *Id.* at 60-61.
42. NATIONAL ENERGY PLAN, *supra* note 1, at 39-40.
43. *Id.* at 40.
courage reduction in gasoline consumption.44

BUILDINGS

The next focus of the conservation program of the National Energy Plan is the 29 billion square feet of floor space involved in the nation's buildings, which consumes almost 20% of our energy resources for heating and cooling. The National Energy Plan contains a number of provisions, mostly voluntary, to encourage weatherproofing of houses. The provisions encourage both conventional insulation and use of equipment to take advantage of solar heating and cooling, through a series of grants, tax credits, and loans with a goal of bringing 90% of all residences as well as many public buildings up to minimum Federal standards by 1985.45 The only mandatory provision in the building program is the requirement on state public utility commissions to direct the regulated utilities to offer residential customers a "turnkey" conservation service, whereby customers could effectively insulate their homes and pay off the charges through their monthly utility bills.46 The absence of mandatory provisions, except for the utility turnkey service, underscores the Administration's belief that the skyrocketing costs in heating and cooling, coupled with the federal grants and tax rebates, will offer sufficient inducement for widespread voluntary compliance. The analysis performed by the Congressional Budget Office confirms this view. The Congressional Budget Office estimates that of the 23.8 million households making insulation improvements between 1978 and 1985, only 7.8 million are expected to do so as a result of the proposed tax credit.47 This is because the value of fuel savings is already three times the cost of insulation without the credit and four times the cost with the credit.48 While the Congressional Budget Office believes the Administration goal of 90% of all residences insulated by 1985 is

44. The entire Federal program of reducing gasoline consumption will have a noticeable effect on state budgets, because of a reduction in fuel tax revenues, auto license fees, and other related fees. This problem is recognized by the Administration which promises to develop a program to ease the burden on State treasuries. See id. at 40. However, no specific program is offered by the Administration to address this problem. The Congressional Budget Office estimates that State loss of revenues could be reduced in the most extreme cases by as much as 11.9% by 1990. A PERSPECTIVE, supra note 34, at 75-77.
45. NATIONAL ENERGY PLAN, supra note 1, at 40-41.
46. Id. at 41.
47. A PERSPECTIVE, supra note 34, at 81. Under the Administration's program, homeowners would be entitled to a tax credit of 25% of the first $800 and 15% of the next $1,400 spent on approved conservation measures. NATIONAL ENERGY PLAN, supra note 1, at 41.
48. A PERSPECTIVE, supra note 34, at 89.
overly optimistic, even the more cautious figure of 70% insulation leads to substantial energy savings, as the Congressional Budget Office, estimates that private consumption will be reduced by 44 million barrels of oil in 1985 through the tax credit and by 890 million barrels in total by the year 2004.\textsuperscript{49}

The Congressional Budget Office is not as optimistic about the potential savings of solar equipment from the solar tax credit program.\textsuperscript{50} Unlike the Administration estimate of 2.5 million households owning solar equipment by 1985, the Congressional Budget Office estimates only 773,000 households would install such equipment with the tax credit and 464,000 would install such equipment without the tax credit.\textsuperscript{51}

**APPLIANCES**

The National Energy Plan also takes aim at major home appliances, including furnaces, air conditioners, and the like, which together account for 20% of the nation's energy consumption. This 20% figure includes heating and cooling of buildings.\textsuperscript{52} The Administration proposes significant reductions in energy use by creating mandatory minimum standards for major home appliances. Indeed, the potential for energy savings in this field is considerable for room air conditioners which used a total of 32 billion kilowatt hours. If these units had an average efficiency of ten rather than six British Thermal Units per watt hour, energy consumption for residential air conditioning would have been reduced by 40%, to 19 billion kilowatt hours.\textsuperscript{53}

\textsuperscript{49} Id.
\textsuperscript{50} The solar tax credit for both solar space heating and solar water heating installations would initially be set at 40% of the first \$1,000 of expenditures and 15% of the next \$6,400 spent for eligible equipment. The tax credit would gradually decline and expire at the end of 1984. Id. at 83.
\textsuperscript{51} Id. at 82. The Congressional Budget Office also questions the economic justification for both tax credit programs, particularly the solar tax credit provision, which is considerably more costly than the insulation tax credit and provides considerably less results. The insulation tax credit will cost \$2.42 per barrel of oil saved in terms of lost tax revenue, while the solar tax credit will cost \$11.28 per barrel. Id. at 82-93. In light of the considerable energy savings available from the insulation tax credit, it is the author's opinion that the criticism of the insulation tax credit is unjustified. Likewise, while the price of the solar tax credit is much higher and less effective over the short term, it is the author's opinion that this provision should also be enacted, since the solar tax credit should act as an important stimulant to the development of a potentially limitless source of energy supply. The problem with solar energy is not technology but cost. Any provision which helps reduce solar costs and stimulates the development of this energy source is, in the author's opinion, to be greatly encouraged.
\textsuperscript{52} NATIONAL ENERGY PLAN, supra note 1, at 43.
\textsuperscript{53} HIRST, ELECTRIC UTILITY ADVERTISING AND THE ENVIRONMENT 14 (1972)
Cogeneration

Waste heat is generated by industrial use and by the generation of electricity. Cogeneration is, simply, the recapture of this waste heat for useful purposes, such as heating of buildings or water. The Administration's plan recognizes that cogeneration is economically feasible today, although not widely utilized, and the lack of widespread cogeneration is due in large part to institutional barriers. The National Energy Plan seeks to remove these barriers by the following measures:

1. Industries using cogeneration to produce electricity would be exempted from State and Federal public utility regulation, and would be entitled to use public utility transmission facilities to sell surplus power and buy backup power;

2. An additional tax credit of 10% above the existing investment tax credit would be provided for industrial and utility cogeneration equipment;

3. Industrial firms and utilities which invest in cogeneration equipment could be exempted from the requirement to convert from oil and gas to coal in cases where an exemption is required for cogeneration.

Should these positive, voluntary incentives not yield a significant recapture of lost heat through cogeneration, the Administration will consider penalties for failure to recapture this energy, such as by a tax on waste heat.

While the Congressional Budget Office does not directly analyze this feature of the program, it is the author's opinion that cogeneration is one of the most promising sources of reducing energy consumption. The amount of waste heat discharged from electrical generating stations every year is staggering, and where

(Published by the Oak Ridge National Laboratory for the Atomic Energy Commission).


55. Certain forms of cogeneration have long been used in certain states. For example, energy from wood waste alone accounts for approximately 15% of total energy supply in the State of Oregon. See Oregon Dep't of Energy, Oregon's Energy Future 18 (1977).


57. Id. at 46.

58. For example, the Indian Point Unit No. 3 power station on the Hudson River in New York dissipates heat into the Hudson River at the rate of 7.3 x 10^9 BTU/hr. See Final Environmental Statement for Selection of the Preferred Closed Cycle Cooling System at Indian Point Unit No. 2, Consol. Edison Co. of N.Y., No. 50-247, N.R.C. at 1-4 (Aug. 1976).
this heat is discharged into waters, the resulting impact on the aquatic environment may be severe.\textsuperscript{59} Cogeneration would have the benefit of recapturing energy that is already produced and in the process eliminate some of the undesirable consequences of industrial and electrical utility activity.

\textbf{Utility Reform}

In addition to the above measures intended to result in affirmative conservation programs, the Administration proposes a number of measures aimed at the electric utility industry directly, as a method of reducing electrical demand. As noted above,\textsuperscript{60} the generation of electricity accounts for a significant amount of all energy fuels consumed, and a substantial reduction in the growth of electrical energy usage can provide worthwhile energy savings. The National Energy Plan aims at current utility pricing practices, which are viewed as counterproductive to energy conservation goals. The Plan seeks to reduce electrical energy use generally, by eliminating declining block rates, in which the users of smaller amounts of electricity pay more than users of large amounts of electricity, such as industrial users. The Plan also seeks to reduce the “peak demand” or highest demand that a utility must meet. This peak demand may be reached by a utility on only a few days a year, but the peak demand may be considerably higher than the utility’s average load.\textsuperscript{61} In order to satisfy this seldom required peak, additional generating stations not normally used must be

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\textsuperscript{59} Concern for both thermal impacts on the aquatic environment and for non-thermal impacts such as impingement of fish species has prompted federal regulatory agencies to frequently require generating stations and other industrial sources to install a closed cycle cooling system, such as a natural draft cooling tower which discharges the waste heat into the atmosphere rather than into the body of water on which the industrial facility is located. See U.S. ATOMIC ENERGY COMM’N, COMPARATIVE RISK-COST BENEFIT STUDY OF ALTERNATIVE SOURCES OF ELECTRICAL ENERGY, 4-39 to 4-51 (1974).

\textsuperscript{60} The generation of electricity accounts for 28% of America’s energy use. NATIONAL ENERGY PLAN, supra note 1, at 95.

\textsuperscript{61} Because the peak demand must be met, if only for a short period, the utilities make the projections for the needs of their systems based on the peak demand. NEW ENGLAND POWER PLANNING, NEW ENGLAND LOAD AND CAPACITY REPORT 1975-1985 (1976) (Report issued for entire New England region). See also The Northeast Utilities System, Ten-And Twenty-Year Forecasts Of Loads And Resources 61 (1976), where a winter peak exists usually for only one hour per year. The peak may not always occur in the same season. With the widespread use of air conditioning some utilities which have traditionally been winter peaking systems are experiencing summer peaks. For example, the General Public Utilities Corporation System centered in New Jersey has traditionally had a winter peak, but the peak is expected to occur in the summer beginning in 1980. See Final Environmental Statement Related to Operation of the Oyster Creek Nuclear Generating Station, No. 50-219, N.R.C. at 8—7 (Dec. 1974).
kept available. Because they are used only part time, these stations tend to be older and less fuel efficient. In addition, as a matter of simple economics, peaking units tend to be natural gas or oil, the energy sources in least supply rather than coal or nuclear power. To change these patterns of electricity usage the National Energy Plan contains the following specific provisions:

1. Electric and gas utilities would be required to phase out promotional, declining block, and other rates that encourage energy usage.

2. Electric utilities would be required to offer daily off-peak rates to customers willing to pay metering costs, or to provide a direct load management system.

3. Electric utilities would be required to offer lower rates to "interruptible service" customers.

4. "Master metering"—the use of a single meter for a multi-unit building—would be prohibited in new structures; rather, meters recording and billing each individual unit in the complex would be required.

As a general matter, the natural gas and oil plants are fuel intensive as opposed to capital intensive, such as coal or nuclear power. This means that coal and nuclear plants cost considerably more to build than oil or natural gas facilities, but that the fuel costs are much less expensive. See, e.g., NRC Staff's Final Environmental Statement, No. 50-443, 444 (December 1974) (Table 9.1). Since the coal and nuclear plants are cheaper to run once built, (although more expensive to build) these plants tend to form the baseload of a utility system that has a variety of power plants, meaning that the utility tries to operate these plants as much as possible year round. In contrast, oil and natural gas plants, although less expensive to build, are more costly to operate per kilowatt of electricity than are coal and nuclear power. Consequently, where the utility has the luxury of a variety of power plants, the more operationally costly oil and natural gas plants are operated as little as possible, i.e., during the peak time of the year. By lowering the peak level, therefore, the National Energy Plan would in most cases be decreasing the amount of oil and natural gas currently used during these peak levels.

There is considerable disagreement as to whether removing the declining block rate structure, whereby users of large quantities of electricity (usually industrial or commercial users) pay less per unit than users of small quantities (usually residential users). Much of the disagreement focuses on the extent to which the demand for electricity is elastic or inelastic, i.e., to what extent electricity use can and will be diminished by increasing the price.

The purpose of off-peak rates is to encourage customers both industrial and residential, to shift their energy use from peak to off-peak periods and thereby flatten the peak-valley pattern that exists in most utility demand curves.

The term interruptible service customers refers to those willing to have their power interrupted during the peak demand period. This practice is currently common among certain industries but is rare for residential users.

Individual metering is in widespread use in many parts of the country. However, particularly in the eastern United States, many apartment renters do not pay a separate fee for their utilities. The Administration estimates that individual metering can act as an inducement to conserve energy by as much as 30%.
(5) electric utilities would be prohibited from discriminating against solar and other renewable energy sources;

(6) The federal government would be authorized to require implementation of similar policies by gas utilities.\textsuperscript{68}

LEGAL PROBLEMS RAISED BY THE PLAN'S CONSERVATION PROVISIONS

From the above discussion, it is clear that energy conservation constitutes a major, if not the dominant, feature of the National Energy Plan. In fact, the Plan has been criticized because of an over-emphasis on conservation, to the exclusion of stimuli to encourage additional energy development, particularly further oil and gas exploration and development.\textsuperscript{69} As explained above, the Administration's program uses a matrix of provisions including taxes, tax rebates, industry and utility minimum standards, and other measures to achieve substantial energy conservation. The measures include a mixture of voluntary and mandatory provisions. This section of the article will examine the legal basis for these provisions, and the extent to which these measures raise constitutional or other problems.

In general, it is the author's opinion that the National Energy Plan's provisions do not raise any serious constitutional questions, with the major exception of the provisions dealing with utility reform.\textsuperscript{70} A brief review of existing statutes and case law justifies the constitutional basis for most provisions in the National Energy Plan.

For example, the three principal tax provisions related to gasoline and oil consumption\textsuperscript{71} are fully justifiable, quite simply, under the commerce clause of the Constitution.\textsuperscript{72} Likewise, the repeal of the 10% excise tax on intercity buses\textsuperscript{73} and the raising of the ex-

\textsuperscript{68} Id. The Federal Government has pervasive jurisdiction over the interstate gas industry through the Natural Gas Act, 15 U.S.C. 717-717(w) (1976). The federal regulation of electric utilities is somewhat less direct and not as pervasive, although the Federal Power Act yields significant federal regulation. 16 U.S.C. 791-828(c) (1976). The question of federal jurisdiction to require the state public utility commissions to enact these proposals is discussed further in the article.

\textsuperscript{69} See comments of various economists in Time, May 2, 1977, at 21, col. 1.

\textsuperscript{70} See text accompanying notes, 60-68 supra, and text accompanying notes, 89-156 infra.

\textsuperscript{71} These three provisions are: a graduated excise tax, see text at notes 32-35 supra, a series of crude equalization taxes, see text at notes 36-38 supra, and the standby gasoline tax, see text at notes 39-41 infra.

\textsuperscript{72} Article I, Section 8 provides Congress with the power "To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes . . . ." U.S. Const. art. I, § 8.

\textsuperscript{73} See text accompanying note 42 supra.
isting federal gasoline tax on aviation fuel to eleven cents per gallon, 74 are provisions well within Congress's power under the commerce clause and probably justifiable under the taxation clause. 75 The transportation industry generally, and all its related and component parts, such as gasoline, highways, and car safety standards, have long been held to be a proper exercise of the commerce clause. 76 Consequently, the author believes that any constitutional attack on these provisions, will be unsuccessful, although undoubtedly vigorous.

Likewise, the various grants, tax credits and loans which the Administration proposes to encourage conventional insulation as well as solar heating and cooling are also easily justified on the basis of the commerce clause, particularly in light of the long standing federal involvement in the nation's housing, in terms of financing, establishing minimum standards and redeveloping urban areas. 77 As noted above, the Administration programs with respect to home insulation and solar equipment are voluntary. 78 However, in light of the extensive past federal involvement in housing, it is the author's opinion that a number of mandatory provisions would also be held constitutional, as for example, any new construction which is financed with Federal Housing Authority

74. Id.
75. Article One, Section 8 states, in part:
The Congress shall have Power to lay and collect Taxes, Duties, Imports and Excises, to pay the debts and provide for the common Defense and general Welfare of the United States; but all Duties, Imports, and Excises shall be uniform throughout the United States...
To regulate commerce with foreign nations, and among the several states


The traditional standard for justifying taxing provisions under the taxation clause has been whether a legitimate revenue-raising function is being performed even though substantial non-tax side effects may result. See, e.g., United States v. Butler, 297 U.S. 1 (1936); United States v. Kahriger, 345 U.S. 22 (1953); Bailey v. Drexel Furniture Co. (Child Labor Tax Case), 259 U.S. 20 (1922). Because most of the taxing provisions in the National Energy Plan contain a provision for returning all such revenues to the general populace, it is clear that raising revenue is not a principal, or even an important consideration in the purpose of the provision. Consequently, the author believes that justification of the tax-rebate provisions on the basis of the taxation clause alone is somewhat questionable. However, as noted above, all these provisions can be justified on the basis of the commerce clause.


78. See text accompanying notes 45-51 supra.
money requiring the installation of insulation which meets federal standards as a condition of federal financing, or a requirement that houses be insulated prior to resale. Considering the extensive federal involvement, direct or indirect, in home mortgages, the potential for federal involvement in individual housing patterns, although not necessarily desirable, is indeed great. The most troubling constitutional questions would be raised in the extreme case, which has not yet been proposed, although it has been implied as a possible emergency provision, in which the federal government would require existing homeowners to upgrade and insulate their residences. While the result of such a measure may prove highly desirable in terms of energy conservation, the constitutional questions raised by this provision are troubling, and are not disposed of by simply calling the energy crisis "the moral equivalent of war." The motto of a "man's home is his castle" runs deep in Anglo-American jurisprudence and is reflected in such constitutional provisions as the fourth and ninth amendments, and in the recognition of the "zone of privacy." Likewise, this provision would insert federal regulation in an area which has been the traditional role of state and local authorities. Zoning provisions, land use regulations, health and safety ordinances, and other measures directly affecting construction and maintenance of individual residences have been the exclusive province of the local and state authorities, and federal intrusion into this area may raise tenth amendment questions as well.

Should an emergency measure with respect in home energy use, more drastic than the voluntary measures currently proposed by the National Energy Plan, prove necessary, a more equitable

79. NATIONAL ENERGY PLAN, supra note 1, at 42.
80. The Fourth Amendment provides:
The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.
U.S. CONST. amend. IV.
81. The Ninth Amendment provides: "The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people." U.S. CONST. amend. IX.
83. The Tenth Amendment provides: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." U.S. CONST. amend. X.

Likewise, for the same reasons as explained more extensively later in the article, the author believes that a Federal order to state and local authorities requiring mandatory insulation by existing homeowners would not avoid the constitutional questions raised here.
provision would be to limit the amount of fuel available to homes each month. Since most fuel passes through interstate commerce, the use of fuel in almost all residences would be regulated and would be easily covered by the commerce clause. Besides avoiding the constitutional questions discussed above, it also leaves the homeowner with the option of insulating or limiting the use of his rationed fuel by adjusting his heating and cooling requirements.

The National Energy Plan also includes a provision to create mandatory minimum energy efficiency standards for major home appliances. This provision is analogous to federal minimum safety standards on a wide range of products and no serious constitutional challenge can be made.

The National Energy Plan's provisions with respect to cogeneration are likewise almost entirely immune to constitutional attack as a result of either the taxation clause or the commerce clause, including the federal antitrust regulation authority. These provisions include: (1) exemption from federal public utility regulation; (2) an additional tax credit of 10% above the existing investment tax credit; (3) exemption from the requirement to convert from oil and gas to coal for those industries and utilities investing in cogeneration equipment.

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85. See text accompanying notes 52-53 supra.


87. See text accompanying notes 54-59 supra.

88. While not a conservation provision per se and not the focus of this article, the National Energy Plan contains an important provision imposing a substantial tax on industrial users of oil and gas beginning in 1979 and on utilities beginning in 1983, as an incentive to convert to coal. NATIONAL ENERGY PLAN, supra note 1, at 65-66. The purpose of this provision is to conserve the increasingly scarce supplies of oil and natural gas while utilizing the nation's relatively abundant coal reserves. More than half of the anticipated savings in imported oil by 1985 under the Administration's plan, would be the result of coal conversion, totalling 2.4 million barrels per day. The Congressional Budget Office estimates a lesser savings of only 1.8 million barrels per day by 1985, absent more stringent regulations or the elimination of such logistic problems as coal transportation problems, environmental restrictions, and the disruptive effect of altering currently planned construction. A PERSPECTIVE, supra note 34, at 37. The Federal Energy Administration, pursuant
National Energy Plan that the author believes is susceptible to constitutional attack is the electric and natural gas utility regulation, which is discussed in the next section of this article.

**CONSTITUTIONAL PROBLEMS OF UTILITY REGULATION**

The National Energy Plan contains a number of provisions relating to the electric and natural gas utility industry. Electric utilities consume 28% of all fuels in the generation of electricity and constitute an important factor in any conservation program. Many of the Administration's provisions with respect to utility reform are socially desirable and constitute long overdue reforms. However, the federal government is probably not empowered to require these reforms, and the utility regulation provisions as a whole may not survive constitutional challenge.

The thrust of the utility reform provisions is that the state public utility commissions will be required to do certain things in their normal regulation of the utility industry. These requirements include:

1. the utilities must offer residential customers a "turnkey" conservation service, so that customers can insulate their homes and pay off these charges through their monthly utility bills;
2. industries which use cogeneration to produce electricity would be exempted from public utility regulation;
3. a series of provisions relating to the utility rate structures and rate practices intended to depress the peak demand.

The constitutional problem with this series of provisions is, simply, lack of federal jurisdiction. All of these provisions, and more stringent measures, could be imposed with unquestioned legality by individual state public utility commissions. However, neither the commerce clause nor any other provision in the Consti-

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89. See text accompanying notes 60-68, supra.
90. NATIONAL ENERGY PLAN, supra note 1, at 41.
91. Id. at 45.
92. Id. at 46.
tution provides a clear basis for this kind of federal activity. A brief discussion of the existing Federal Power Act and the Natural Gas Act will highlight the jurisdictional problem.

Under these two statutes, the Federal Power Commission regulates electricity and natural gas sold in interstate commerce. With respect to natural gas in interstate commerce, the Federal Power Commission exercises broad authority including the regulation of the following activities:

1. issuing permits for the construction and operation of interstate gas pipelines and storage facilities used in conjunction with the pipelines;
2. directs interstate pipeline companies to sell gas to local distributors;
3. regulates the price of natural gas bought and sold in interstate commerce.

At no time has the Federal Power Commission exercised authority over intrastate natural gas transactions.

With respect to electric power, the Federal Power Commission's jurisdiction has been more limited, by regulating the rates and services of public utilities selling electricity in interstate commerce at wholesale, but not at retail. In addition, the Commission prescribes accounting systems and reporting procedures for interstate electric power companies; directs the interconnection of electric power systems, and regulates certain sales of securities and the merger or consolidation of electric public utility companies. The limited jurisdiction of the Federal Power Commission to only electric utility activities involving interstate commerce is demonstrated by the utilities of the State of Texas, which have been generally unregulated by the Federal Power Commission, since the Texas utilities have not in the past sold electricity to other systems.

93. While other federal agencies are involved in the regulation of utilities, the scope of their regulation is confined to a specific subject, such as the Nuclear Regulatory Commission, Securities and Exchange Commission or Environmental Protection Agency. In contrast, the Federal Power Commission's authority covers a broad spectrum of utility activity per utility and in the areas where it exercises jurisdiction the Federal Power Commission is the Federal agency which carried out functions most similar to those of the state public utility commissions. For an examination of the multiplicity of federal regulations of the utility industry and the energy field, see FEDERAL ENERGY REGULATION STUDY TEAM, FEDERAL ENERGY REGULATION: AN ORGANIZATIONAL STUDY (1974).

99. Id.
or customers beyond the borders of Texas.\textsuperscript{100}

As noted above, all the utility reform measures of the National Energy Plan are provisions which could be implemented by each state public utility commission voluntarily. However, the National Energy Plan would make the imposition of these provisions by the state public utility commissions mandatory. To implement these provisions, Congress is considering provisions in the National Energy Act which would result in a far-reaching revision of the Federal Power Act.\textsuperscript{101} The proposal would establish minimum standards for electric rate making to encourage efficient use of electric energy by minimizing both energy consumption and the need for new generating capacity.\textsuperscript{102} The Federal Power Commission would oversee the program\textsuperscript{103} subject to the reorganization of the various energy agencies into the Department of Energy.\textsuperscript{104}

\textsuperscript{100} This arrangement was disrupted on May 4, 1976, when West Texas Utilities and Central Power and Light Company began selling electric energy to Public Service Company of Oklahoma, thereby making all the utilities in Texas who had system interties with West Texas Utilities and Central Power and Light Company subject to Federal Power Commission jurisdiction. The interstate transmission existed for approximately 8 hours before the other Texas utilities severed their interconnections with West Texas Utilities and Central Power and Light Company. The Federal Power Commission subsequently ruled that it did not have jurisdiction over those Texas utilities which had severed their interconnections with West Texas Utilities and Central Power and Light Company, although it did order a temporary reestablishment of those interconnections under its emergency power under Section 202(d) of the Federal Power Act. \textit{See} Central Power & Light Co., No. E-9558 (F.P.C., July 21, 1976). The other electric utilities also obtained an order from the Public Utility Commission of Texas requiring West Texas Utilities and Central Power and Light Company to sever their interstate interconnections and to reconnect with the other Texas utilities. \textit{See In re} Houston Lighting & Power Co., No. 14 (P.U.C., Tex., Interim Order, May 2, 1977, Final Order, June 2, 1977). Judicial review has been sought on the rulings of both commissions. Central Power & Light Co. v. F.P.C. Nos. 76-1905, 76-2012 (D.C. Cir. 1977); Central Power & Light Co. v. Public Util. Comm'n, No. A-77-CA-86 (W.D. Tex. May 18, 1977).

\textsuperscript{101} \textit{The National Energy Act, Comm. Print J. 91-417-1 (June 10, 1977) (Part E of the Public Utility Regulatory Policies) [hereinafter cited as Comm. Print].}

\textsuperscript{102} \textit{Id.} § 501.

\textsuperscript{103} A few functions, not here relevant would be administered by the Federal Energy Administration.

\textsuperscript{104} On March 1, 1977, President Carter transmitted to the Congress proposed legislation which would create a new Cabinet Department of Energy. The agency would replace in their entirety the Federal Power Commission, Federal Energy Administration, and the Energy Research and Development Administration. Aside from the functions now being carried out by these three agencies, the new Department of Energy would also assume certain energy-related functions now carried on by such diverse agencies as the Securities and Exchange Commission, the Interstate Commerce Commission, the Department of Housing and Urban Development, Department of Commerce, the Department of Defense, the Department of Agriculture and the Department of the Interior. The bill became enacted as the Department of Energy Organization Act, Pub. L. No. 95-91, 91 Stat. 565 (1977) (to be codified at 42 U.S.C. 7101).
The Federal Power Act Amendments forbid declining block rates unless the utility slows in an evidentiary hearing that a decrease in rates for increased consumption reflects an actual decrease in the cost of providing electric service to that class of consumers as energy consumption increases. The Amendments also require that electric service to each class of electric consumers be on a time-of-day and seasonal basis, which must reflect the costs of providing service to such consumers unless such rates have been determined in an evidentiary hearing not to be cost-effective. There are also other rate provisions aimed at reducing peak demand.

The Amendments forbid any recovery through rate relief for promotional, institutional, or political advertising by utilities and establish requirements for data gathering by utilities on the cost of their service. Automatic fuel adjustment clauses will be approved only after an evidentiary hearing demonstrates that the adjustment clause provides incentives for efficient use of resources, is necessary to enable the utility to meet its immediate short-term financial obligations, and complies with other procedural and substantive requirements. Other requirements exist in which compel the utilities to implement load management techniques, establish standards for information to consumers and establish minimum procedures for termination of electric service. The National Energy Act also provides authority for the Federal Power Commission to issue a wide variety of orders to public utilities with remedies similar to what the Commission has traditionally ordered in its regulation of interstate wholesaling of electricity. The difference, of course, is that the new provisions

106. Id. § 511(a)(2)(A)(B). The rate for a class of electric consumers is considered cost-effective only if the long-run benefits of such rate are likely to exceed the metering costs associated with the implementation of this rate schedule. Id. § 511(a)(2)(C). This results in a heavy burden being placed on the utility to avoid the imposition of the above described provisions, a burden that will probably not be successfully carried except in the most unusual of cases.
107. Id. §§ 511(a), 511(b).
108. Id. § 512.
109. Id. § 511(c).
110. Id. § 514.
111. Id. § 521. The term load management technique is defined as "any technique to reduce maximum kilowatt demand on the electric utility. Such techniques may include ripple or radio control mechanisms, energy storage devices, interrupted or interruptible electric service, load-limiting devices, and techniques to minimize inefficient end uses of electric energy." Id. § 521(b)(1).
112. Id. § 522.
113. Id. § 523.
114. Section 541 of the National Energy Act provides:
apply to all sales of electricity, wholesale and retail interstate and intrastate. There are also provisions for financial assistance for state agencies and for consumer representation before the Federal Power Commission,\textsuperscript{115} (including the establishment of an Office of Public Counsel) as well as procedures for requesting a hearing\textsuperscript{116} and provisions for judicial review.\textsuperscript{117}

Finally, perhaps as a result of a sensitivity to the constitutional problems highlighted here, the National Energy Act provides that the respective state public utility commissions may administer virtually the entire program including hearings, and enforcement, provided the program proposed by the state is approved by the Federal Power Commission as meeting the requirements of the Act.\textsuperscript{118} The delegation of the enforcement of a federal statute to state authorities is a provision common to other statutes, such as the Federal Water Pollution Control Act of 1972.\textsuperscript{119}

\textsuperscript{115} Comm. Print, supra note 101, §§ 551, 552.
\textsuperscript{116} Id. §§ 537, 544.
\textsuperscript{117} Id. § 538.
\textsuperscript{118} Id. §§ 533, 535, 537, 547(a).
\textsuperscript{119} 33 U.S.C. §§ 1251-1376 (1975). Other federal statutes which authorize state enforcement include the Clean Air Act, 42 U.S.C. §§ 1857-1857f (1970), the Toxic
ute qualified states issue the discharge permits which all industry and any other dischargers must have prior to discharging any pollutants of any kind into navigable waters. The state program must first be approved by the Environmental Protection Agency which administers the program for those states which have not received EPA approval for establishing enforcement programs of their own.

The delegation of such authority to states is desirable both from a political and practical point of view. From a political point of view, administration by the states obviously minimizes direct federal interference in activities within the state and leaves to the state, rather than in the federal government, the regulatory responsibility over the activities within its borders. From a practical standpoint, the states can often bring to the administration of a given program special knowledge and expertise of local conditions which a federal regulatory agency could not quickly develop. In addition, budget costs may be less expensive on the state level than on the federal level, and in any event, federal spending is minimized. On the other hand, since the states must qualify their programs with the appropriate federal agency prior to assuming administration of the statute, a general uniformity and minimum standard of implementation is achieved.

The delegation of enforcement to state agencies is a laudable practice; however, it does not solve the basic question of constitutionality. While the statute in a given state may in fact be administered by the statute in a given state may in fact be administered by the state as opposed to the federal government, the authority being exercised by the state in that circumstance is a delegated federal authority, thus, the delegated federal authority must be judged constitutional or not, as a federal authority. For example, the Federal Water Pollution Control Act delegates to the states certain federal authority which exists to regulate the nation's navigable rivers. This federal authority is well founded in the Constitution, and the exercise by the federal government, or by a delegated state agency of this authority clearly is constitutional.


122. 33 U.S.C. § 1251(a)(1) (1975) provides: "It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985 . . . ." (emphasis added). The phrase "navigable waters" is used throughout the statute.
123. Congress' power to regulate the "navigable waters" clearly falls within its authority to regulate interstate commerce. Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 197 (1824). Moreover, the Federal Water Pollution Control Act has been interpreted
On the other hand, if the federal government lacks jurisdiction, as the author believes, to require state public utility commissions to regulate their utilities in the manner proposed under the Act, the federal government also lacks the power to delegate the enforcement of such standards to the states. The states can voluntarily adopt the proposed measures as their own, but the author does not perceive a constitutional basis for requiring the public utility commissions to do so.

The prior actions of the Environmental Protection Agency, and the Federal Energy Administration respectively, which required utilities to burn oil or natural gas to meet air quality standards and to burn coal to conserve oil and natural gas, do not present the type of precedent useful for concluding that federal jurisdiction exists with respect to the provisions of the National Energy Act under discussion here. In both the situation involving the Environmental Protection Agency and the Federal Energy Administration, coal, oil and natural gas were the subject of the federal regulation. These fossil fuels as fossil fuels have long been the subject of federal regulation, easily justified on the basis of interstate commerce alone. Unlike these prior statutes dealing only with the fossil fuel itself, the Federal Energy Act would extend federal jurisdiction into subjects over which the state public utility commissions have always had complete control and which subjects by their nature are local matters and do not involve federal regulation. While it can be argued that a change in the rate structure or some other aspect of the National Energy Act could diminish the amount of oil or natural gas used and would thereby constitute regulation of interstate commerce, the author believes that the effect is too indirect to meet the traditional test imposed by the federal courts for meeting the interstate commerce test.

to apply not only to navigable waters, but also to any non-navigable tributary which flows into navigable waters. United States v. Ashland Oil and Transportation Co., 504 F.2d 1317, 1325 (6th Cir. 1974). This interpretation is clearly proper based on legislative history regarding the purposes of the statute. See 118 Cong. Rec. 33756-57 (1972), as well as on the long standing test as to whether the subject of the statute "serves as a link in the chain of commerce among the States as it flows in the various channels of transportation . . . ." 504 F.2d at 1324.

124. See note 3 supra.
125. Id.
A possibly more helpful precedent to the proponents of these sections of the National Energy Act is the line of cases relating to Congress's authority under the commerce clause to eliminate racial discrimination. In *Heart of Atlanta Motel v. United States*,\(^\text{127}\) the Supreme Court held that Title II of the Civil Rights Act of 1964, which forbids racial, religious or nationality discrimination in public accommodations, is a valid exercise of Congress's power under the commerce clause.\(^\text{128}\) In so holding the Court held that the Congress had the power to enact appropriate legislation with regard to a place of public accommodation such as appellant's motel even if the motel were assumed to be of a local character, since Congress's power over interstate commerce extends to the regulation of local incidents "which might have a substantial and harmful effect" upon interstate commerce.\(^\text{129}\) The Court also held that Congress's action in removing the disruptive effect which it found racial discrimination has on interstate travel is not invalidated merely because Congress was also legislating against what it considered to be moral wrongs.\(^\text{130}\) Also of note in the *Heart of Atlanta* case was the fact that approximately 75% of the motel's guests were from out of state and that the motel solicited patronage from outside the state.\(^\text{131}\)

In *Katzenbach v. McClung*\(^\text{132}\) the Court went one step further, holding that Title II of the Civil Rights Act of 1964 applied to a local restaurant in Birmingham, Alabama, since it served food a substantial portion of which had moved in interstate commerce.\(^\text{133}\) The Court held that Congress acted within its power to protect and foster commerce in extending coverage of Title II to such restaurants since Congress had ample basis to conclude that racial discrimination by such restaurants burdened interstate commerce, even though there may have been an absence of direct evidence connecting discriminatory restaurant service with the flow of interstate food.\(^\text{134}\)

Arguably the utility industry is involved in interstate commerce since the fuel used to generate electricity or power passes through interstate commerce, just as local hotels and restaurants are subject to regulation under the commerce clause because either the motel's customers or the restaurant's food pass through

\(^{127}\) 379 U.S. 241 (1964).

\(^{128}\) Id. at 261-62.

\(^{129}\) Id. at 258.

\(^{130}\) Id. at 257.

\(^{131}\) Id. at 243.


\(^{133}\) 379 U.S. at 304.

\(^{134}\) 379 U.S. at 304-05.
interstate commerce. However, there are important considerations which distinguish the civil rights cases from the energy situation, particularly in light of the Supreme Court's decision in National League of Cities v. Usery.\textsuperscript{135}

\textit{Usery} involved a 1974 amendment to the Fair Labor Standards Act\textsuperscript{136} which applied the minimum wage and maximum hour provisions of that Act to almost all public employees employed by the states by their various political subdivisions. The Court found the 1974 amendment invalid on the basis that it exceeded Congress's power under the commerce clause and violated the inherent powers reserved to the states by the tenth amendment. In so finding, the Court extended to the tenth amendment,\textsuperscript{137} the same treatment afforded in prior cases to the fifth\textsuperscript{138} and sixth\textsuperscript{139} amendments; in these prior cases the Court had held that congressional enactments which may be fully within the grant of legislative authority contained in the commerce clause may still be held invalid if found to offend the due process clause of the fifth amendment\textsuperscript{140} or the right to trial by jury of the sixth amendment.\textsuperscript{141}

The Court recognized that there are attributes of sovereignty attaching to state governments which may not be impaired by Congress\textsuperscript{142} and that the states themselves are "a coordinate element in the system established by the Framers for governing our Federal Union."\textsuperscript{143} In \textit{Usery} the Court found that the 1974 amendment would not only increase the cost of state and local services to the public, but would also affect the delivery and manner of delivery of these services by requiring states to choose between increasing the wages of its employees to the federal minimum level or abolishing the programs entirely. By injecting the federal government through this amendment into the regulation of such areas as fire

\hspace{1cm}\textsuperscript{135} 426 U.S. 833 (1976).
\textsuperscript{137} In recognizing in \textit{Usery} the substantive nature of the Tenth Amendment the Court quoted with approval from its earlier decision in \textit{Pry v. United States}, 421 U.S. 542 (1975):
\begin{quote}
While the Tenth Amendment has been characterized as a "truism," stating merely that "all is retained which has not been surrendered," United States v. Darby, 312 U.S. 100, 124 (1941), it is not without significance. The Amendment expressly declares the constitutional policy that Congress may not exercise power in a fashion that impairs the States' integrity or their ability to function effectively in a federal system.
\end{quote}
\textsuperscript{426} U.S. at 842-43.
\textsuperscript{140} 395 U.S. at 29-53.
\textsuperscript{141} 390 U.S. at 581.
\textsuperscript{142} 426 U.S. at 845.
\textsuperscript{143} Id. at 849.
prevention, police protection, sanitation, public health, parks and recreation, the Court held that Congress was displacing the states "freedom to structure integral operations in areas of traditional governmental functions" and that Congress had thereby exceeded the authority granted to it by the commerce clause. 144

The language used by the Court in recognizing the states' powers is extremely broad. The Court stated:

These activities are typical of those performed by state and local governments in discharging their dual functions of administering the public law and furnishing public services. Indeed, it is functions such as these which governments are created to provide, services such as these which the states have traditionally afforded their citizens. If Congress may withdraw from the States the authority to make those fundamental employment decisions upon which their systems for performance of these functions must rest, we think there would be little left of the States' "separate and independent existence." Coyle, 221 U.S. at 580. 145

The Court recognized the new direction taken in Usery sufficiently to overrule 146 Maryland v. Wirtz, 147 which had involved an earlier amendment to the Fair Labor Standards Act which applied the provisions of that Act to employees of state hospitals, institutions, and schools.

In the author's opinion, the regulation of utilities likewise is an area which has been sufficiently a function of state regulation to raise the same tenth amendment considerations existing in Usery. In addition, the civil rights cases can be distinguished from the situation presented by the National Energy Plan. Aside from the commerce questions raised by Heart of Atlanta Motel and Katzenbach, the history 148 of the civil rights cases presented problems of equal protection and state activity denying the constitutional protections afforded by the thirteenth 149 and fourteenth Amendments. 150 In contrast, as in Usery, the proposals under discussion in the National Energy Plan involve only the commerce

144. Id. at 852.
145. Id. at 851. The Court continues in a footnote: "These examples are obviously not an exhaustive catalogue of the numerous line and support activities which are well within the area of traditional operations of state and local governments." Id. at 851, n. 16.
146. Id. at 855.
149. U.S. Const. amend. XIII.
150. U.S. Const. amend. XIV.
clause and potential tenth amendment values, involving an area in which the states have always been heavily involved and, unlike the civil rights cases, there is no inference that the states have been acting other than lawfully in their regulation of utilities. Thus, the principles enunciated in *Usery* reinforce doubts about the validity of the National Energy Plan's provisions relating to state public utility commissions. One cautionary note needs to be added regarding *Usery*, however. The decision was rendered by a 5-4 vote with Justice Blackmun providing the deciding vote in a concurring opinion which includes the following language:

> In my view, the result with respect to the statute under challenge here is necessarily correct. I may misinterpret the Court's opinion, but it seems to me that it adopts a balancing approach, and does not outlaw federal power in areas such as environmental protection, where the federal interest is demonstrably greater and where state facility compliance with imposed federal standards would be essential. See ante, 18-19. With this understanding on my part of the Court's opinion, I join it.

The issue is whether Justice Blackmun would equate federal energy standards with the same importance as federal environmental standards.

In concluding that the provisions of the National Energy Act imposing certain requirements on the public utility commissions are unconstitutional, the author reaches this conclusion with considerable regret, for the programs themselves constitute valuable and long overdue reforms which every state should implement. Unfortunately, the legal basis for imposing these programs on every state is questionable. Thus, the Administration is left with the choice of either seeing a constitutional amendment expanding federal jurisdiction over utilities or of exhorting public utility commissions to voluntarily adopt the provisions contained in the National Energy Plan. The former method is probably unfeasible and basically unwise as well. The amount of time required to enact a constitutional amendment could be considerable, and the energy crisis requires that action be taken soon. A four or five year delay on the implementation of these standards could make them useless when finally enacted. In addition, it is doubtful whether the necessary states would ever ratify the amendment and thereby willingly give up so much regulatory authority to the federal government. On the other hand, a concerted campaign exhorting the

151. 426 U.S. at 834.
152. Id. at 856.
state utility commissions to voluntarily use these standards in regulating utilities could be substantially successful in a short period of time. The reforms themselves are reasonable, common sense reforms, which some public utilities commissions are already implementing. The urging of the federal government as well as public pressure should be able to convince most, if not all, public utility commissions to enact these reforms. The Administration has indicated a desire to coordinate the National Energy Plan with programs of state and local authorities. Nowhere is such coordination more valuable or needed than in the area of utility regulation and reform. A specific plan for such coordination should be established, for example, by holding conferences on a regular basis between responsible officials within the Federal Department of Energy and officials in state energy agencies and in state public utility commissions.

In the author's view, this is the only major constitutional problem either with the utility reform measures themselves or other aspects of the National Energy Plan. The utility reform measures do not present other serious constitutional problems, although equal protection arguments have been voiced about the use or the abolition of the declining block rates used by utilities in charging users of large amounts of electricity. While the efficacy of the declining block rate on energy demand is the subject of considerable dispute, the equal protection argument is misplaced in this situation.

The equal protection clause has been interpreted as requiring the imposition of one of two standards for determining whether unequal treatment is constitutional. If a fundamental right is involved, such as the right to vote, the right to travel, privacy or speech, unequal treatment by the states will only be justified if a compelling state interest exists for the disparity in treatment. When this strict standard is applied, very few cases of unequal treatment are found constitutional. In addition, even when fundamental rights are not involved, but there is present a classification suspect of constituting invidious discrimination, such as dis-

153. NATIONAL ENERGY PLAN, supra note 1, at 28.
154. For example, such conferences could be held under the auspices of the National Governor's Conference.
155. See note 64 supra.
Crimination on the basis of race,\textsuperscript{161} or nationality,\textsuperscript{162} the strict “compelling state interest test” is applied.\textsuperscript{163}

In cases not involving fundamental rights or a suspect category the test of “reasonable basis” is applied, where unequal treatment will be upheld if the state has a rational basis for the disparity in treatment.\textsuperscript{164} Particularly broad latitude is provided in the state regulation of business or industry.\textsuperscript{165} Therefore, either the use or abolition of the declining block method are sufficiently within the zone of reasonableness and discretion of the public utility commissions to withstand a constitutional challenge on an equal protection basis.

CONCLUSION

The preceding discussion has presented primarily a legal analysis of the National Energy Plan and its potential legal problems raised by the enactment of that program. Here a few thoughts are offered on the likelihood of success of what will surely become a major undertaking, even if substantial revisions are made by Congress in the Administrations' program.

Earlier sections of this article presented a comparative analysis of the Administration's estimates of the effects of various conservation programs and those of the Congressional Budget Office. The estimates of the Congressional Budget were generally less optimistic than the Administration on the degree of success of the program, with a difference in energy savings between the two estimates ranging from 10\% to 30\% or more.\textsuperscript{166} A perceptive analysis by Dr. Hans H. Landsberg,\textsuperscript{167} a senior fellow at Resources for the Future, indicates that the National Energy Plan will result in some energy savings, but not as much as the Plan hopes to reach by 1985. Dr. Landsberg's analysis focuses on two factors:

(1) that the National Energy Plan, while relying heavily on conservation, does not result in dramatic amounts of energy saved since without the Plan, energy consumption by 1985 will rise by 31\% and would rise 25\% with the Plan;

\textsuperscript{162} In re Griffiths, 413 U.S. 171 (1973).
\textsuperscript{163} 394 U.S. at 634.
\textsuperscript{165} 397 U.S. at 485.
\textsuperscript{166} A PERSPECTIVE, supra note 34, at xiii-xxi.
(2) the National Energy Plan makes unrealistically high estimates of the domestic energy that will be produced in 1985 from coal, oil, natural gas and nuclear power.\textsuperscript{168}

The conservation measures, thus, while extensive and far-reaching, are intended not to have a drastic impact on the economy and are deliberately intended not to be as stringent as they could become should the energy situation deteriorate further.\textsuperscript{169} Consequently, the National Energy Plan, as noted above, does emphasize the expanded use of domestic fossil and nuclear fuels in conjunction with conservation to reach the goal of importing no more than 6.4 million barrels of oil per day by 1985.\textsuperscript{170} While this article has not explored the provisions of the National Energy Plan which are intended to increase the production of domestic energy resources, Dr. Landsberg's conclusion that the National Energy Plan may fall short of its 1985 goal may well prove correct, and the analysis of the Congressional Budget Office generally supports Dr. Landsberg's conclusion.\textsuperscript{171}

Given the fact that the National Energy Plan may fall short of its overall goal the Plan nevertheless constitutes a valuable program that should be implemented as quickly as possible. While the Plan may fall short of its announced goal as presently designed, the National Energy Plan constitutes the first coherent energy policy that even begins to approach solving the nation's energy problems. As such, the National Energy Plan has resulted in focusing the nation's attention on the energy problem and has resulted in crystallizing virtually all segments of American society on the need to conserve energy and change the pattern of energy use. In addition, the National Energy Plan establishes the basic mechanism through its conservation provisions for significantly reducing energy use. Should more substantial energy reductions be required, the groundwork will be laid for quickly implementing considerably more stringent conservation measures. Finally, as Dr. Landsberg\textsuperscript{172} indicates, the National Energy Plan, even falling short of its 6.4 million barrel import target by 1985, can profitably serve the nation if the 1985 target does not become a "self-imposed

\textsuperscript{168} Id. The National Energy Plan anticipates coal production to nearly double domestic oil to rise by 12\%, natural gas to decline by no more than 7.5\% and nuclear energy to quadruple by 1985.


\textsuperscript{170} See note 88 supra. See also NATIONAL ENERGY PLAN, supra note 1, at 96 (figure IX-1).

\textsuperscript{171} A similar conclusion is reached by the draft report of the Congressional Office of Technology Assessment quoted in The Washington Post, July 22, 1977 at A23, col. 2. (Mobil advertisement).

\textsuperscript{172} See note 167 supra.
Flexibility in the target date, coupled with the ability to make mid-course corrections to reach the target sooner if necessary, can make the National Energy Plan a workable program. The reduction of America's energy dependence will not be an easy road to travel, with the risks of unemployment from extreme conservation, environmental deterioration from excessive energy production or, damaging inflation from the additional purchase of increasingly expensive foreign oil. However, the National Energy Plan begins that journey in a rational manner that, all things considered, is a substantial improvement over the meandering approach the country has taken toward energy in the past.

173. Id.