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STATE NUCLEAR INITIATIVES IN THE UNITED STATES

Introduction

My topic today is last year's state nuclear initiatives, regarding the role of nuclear power in the energy future of the United States. The California Initiative of June 1976 and six similar ballot measures in other states in November created great interest around the world among persons having an interest in the use of nuclear energy in their own nations. Each state appeared to put to popular vote the question whether, and under what circumstances, use of nuclear facilities to generate electricity would be tolerated. An eighth initiative measure, in Missouri, did not explicitly address nuclear matters. However, it is also relevant here because the economic constraints it imposes on power facilities fall most heavily on nuclear facilities.

A discussion of some general principles of federal/state relations, with specific reference to nuclear regulation, will provide a necessary context for understanding why the state initiatives merit detailed attention. Then, four dimensions of the initiative phenomenon will be of interest. The first is the initiative mechanism itself -- its antecedents and uses in U.S. law and politics. Second, we will examine the legal form and background of the 1976 nuclear

initiatives themselves, as well as the results of the balloting. In this regard, I will discuss some of the reasons suggested for the defeat of the proposals in all seven states. Third will be a review of some parallel developments in state and federal legislative consideration of nuclear issues. Finally, I will attempt to draw some conclusions about the effects of the 1976 initiatives on future decisionmaking in the United States on energy policy in general, and nuclear power in particular.

I. The Federal/State Role in Nulear Energy Regulation

The United States has a federal system of government, in which an elaborate and complex system of legal concepts governs the question of which governmental activities are the responsibility of the national government and which are the primary responsibility of state and local governments. Under Amendment X of the Constitution of the United States, "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." Thus, the national or federal government is restricted to exercising powers specifically delegated to it. All other powers are reserved to states and, through them, the county or city governments which are the subsidiaries of those states, or to the people. At the same time, however, the delegations made to the national

government are stated in very general terms, and within these general terms the authority of the national government is clearly marked as supreme by another Article of our Constitution.

The generality of the delegations to the federal government has permitted a flexibility which some have identified as the genius of our Constitution. For example, while the subject of nuclear energy was not addressed in an eighteenth century document -- the Constitution -- it does not follow that nuclear regulation falls within the authority of the states. As it has in fact developed, the responsibility for nuclear energy was wholly federal at first, and the subsequent division of this responsibility between federal and state governments has been accomplished pursuant to federal law.

Once the federal power to act has been established, the operation of state law may be restricted in accordance with the established supremacy of federal law. The governing legal concept in this respect is the notion of federal preemption. The simplest case of preemption, of course, is when federal and state laws create inconsistent duties; if it is not possible to satisfy both, the state authority must to that extent give way. Similarly, federal supremacy will preclude any attempt by the states to legislate in an area in which the Constitution or the Congress has explicitly

stated an intent to make the federal government's role exclusive. The most interesting questions arise when there is neither a necessary conflict nor a clear statement that the federal role is to be exclusive. In the area of safety regulation, for example, a state may wish to call on a licensee to perform an act in addition to those which the federal government requires -- an act which would require no violation of federal duty, but threatens the uniformity of national regulation. Here, judgment will turn on a variety of considerations, such as whether the federal regulatory scheme adopted in the legislation is pervasive, occupying the field in which state power is sought to be exercised. Does the nature of the subject being regulated require exclusive federal regulation to achieve uniformity in the public interest? Will enforcement of the state law stand as an obstacle to the accomplishments and execution of the purposes of Congress in enacting the regulatory process in question? How important is the state interest being pursued?

The federal government's role in radiological aspects of the regulation of nuclear energy has consistently been viewed in the United States law as predominant over state authority. There are several reasons. First, the development of nuclear technology largely resulted from federal government research projects connected with the country's nuclear weapons program

during and following World War II. Second, the statutory system for regulating nuclear energy adopted in the Atomic Energy Acts of 1946 and 1954 is clearly pervasive, in the sense that little room was left by Congress for state regulation of nuclear energy. An exception to this general scheme is found in Section 274 of the Atomic Energy Act of 1954, which was added to the statute in 1959, to permit states to exercise a degree of regulatory authority over certain limited types of nuclear material. Third, few states realistically have the resources to conduct effective regulation of so complex a technology. Finally, the complexity of the technology requires a national industry; the existence of fifty separate state regulatory schemes would at least have impeded the development of nuclear energy sources; the difficulty of adjusting to a confusing and inconsistent maze of state requirements could introduce safety hazards as well.

One may understand, nonetheless, the responsibilities which some state politicians and citizens may see for public health and safety -- traditionally a matter for state and local concern -- in the face of a bureaucratic structure which may be located far away and may seem at times insufficiently sensitive to their worries. The states in fact retain a great deal of effective authority over the decision whether and where to construct a nuclear facility. It is the states

which control land use planning, utility rates, the economic justification for additional facilities, transmission line location, and many other issues which are controlling in effectuating a decision to construct a new facility. None of these powers, however, specifically deals with issues of radiological protection. All but one of the 1976 state initiatives on nuclear power sought specifically to raise such issues, barring or limiting further nuclear development on essentially radiological health and safety grounds. In this respect, these measures -- both candid and a reflection of the political volatility particularly of fuel cycle issues in America today -- can be seen as signalling a possible alteration in the federal dominance which has characterized radiological protection for over twenty years. The initiatives raise, in dramatic fashion, the question of what role state and local governmental bodies can and should play in determining the future of nuclear power in the United States.

II. The Initiative Mechanism

The initiative mechanism is not new to American politics or law. It was introduced into the state constitutions of many mid-western and western states at the end of the nineteenth century by populist elements to bypass the powerful special interest groups which had assumed control of their legislatures. The adoption of a concept of "direct legislation" was seen as

permitting the people to enact statutes without the intervention of the legislature.

There are two types of initiative procedures -- direct and indirect. The direct process allows measures to be placed on the ballot in a manner not requiring action by the state legislature. Usually the procedure is to circulate petitions, and when a specified percentage of the electorate (typically from five to ten percent) indicates support of a measure, it is placed on the ballot of the next regularly scheduled general election. Indirect initiatives involve referral of a proposition to the state legislatures for consideration prior to being placed on the ballot. Nineteen states, somewhat less than half, have adopted the initiative process.* Strikingly, only four of these are east of the Mississippi River, and only one, Massachusetts, was one of the original thirteen states. The use of the initiative process has not been confined to questions which could be regarded as of fundamental social or political importance. The myriad of subjects covered,

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* Alaska, Arizona, Arkansas, California, Colorado, Idaho, Maine, Massachusetts, Michigan, Montana, Nebraska, Nevada, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Utah, Washington

from the trivial to the very important, is suggested by the following list:

-- Statehood for Alaska (Alaska 1958)

-- Oil and Gas Conservation (California 1956)

-- Repeal of Prohibition on Sale of Alcoholic Beverages (Oklahoma 1959)

-- Adoption of Taxes on Cigarettes (Oregon 1960)

-- Regulation of Fishing (Oregon 1956, 1962, 1964)

-- Prohibition of Boxing Exhibitions (California 1958)

Other initiatives, showing a similar range of subject matter, shared the ballot with the California Initiative in the Spring of 1976.

III. The Initiatives

Turning now to the 1976 nuclear initiatives, each of the seven directly confronting the nuclear question was the result of the direct initiative process. Petitions signed by voters in Arizona, California, Colorado, Montana, Ohio, Oregon and Washington placed on the ballot in each state initiatives which dealt with the regulation of nuclear energy. Attempts to seek initiatives in Massachusetts, North Dakota and Oklahoma were unsuccessful because supports were unable to collect the required number of signatures.

The California Initiative, also called Proposition 15, was undoubtedly the most significant of the seven state ballot measures on nuclear energy considered in 1976. California is the largest of fifty states and voting there occurs five months earlier than in the other six initiative states; the specific provisions of the California Initiative were used as a model for the initiatives put on the ballot in most of the other states.

Briefly, Proposition 15 would have prohibited new nuclear power plants in California, and gradually inhibited those already authorized, unless three conditions were met. The first would have required the liability limits of the federal Price-Anderson Act, which protect utilities from unlimited liability in the event of serious accident, to be "removed and full compensation assured, either by law or waiver, as determined by a California court of competent jurisdiction ...." The second element would have required, within five years after the date of enactment of the initiative, that the effectiveness of all nuclear reactor safety systems be "demonstrated by comprehensively testing in actual operation substantially similar physical systems, to the satisfaction of the Legislature, [after sufficient findings and by a two-thirds vote of each house of the California Legislature]." The third

and final provision, also effective after five years, would have required the legislature to determine, by two-thirds vote, that the radioactive wastes from nuclear power plants "can be stored or disposed of, with no reasonable chance, as determined by the Legislature ... of intentional or unintentional escape ... into the natural environment which will eventually adversely affect the land or the people of California [regardless of cause, e.g., earthquakes, acts of God, theft, sabotage, etc.]."

Other state initiative measures differed somewhat from this formula. However, the basic elements -- a concern for full financial responsibility of a power plant operator in case of reactor accident, insuring safe reactor operation, and putting into place a system for nuclear waste disposal -- were common to all seven initiatives. There was an eighth initiative measure, in Missouri, which took a wholly different approach and succeeded. I will return to it shortly.

On June 8, 1976, voters in California defeated Proposition 15 by a substantial margin. Approximately two-thirds of the six million people who voted in California opposed the measure. A similar fate awaited the six other state initiatives in

November.* These results produced a rather vigorous debate in the press and public. Industry sources were inclined to ascribe the rejection of the nuclear initiatives to the good sense of the citizenry, and to see the result as a general indication of public support for nuclear power as an energy source. Supporters of the initiatives attributed the defeat to the greater sums of funds available to opponents of the measures for publicity. For example, the California Fair Political Practices Commission reported that while proponents of Proposition 15 spent a total of $1,101,285 during the campaign, opponents were able to muster $3,233,422 -- an almost three to one disparity.

In my view, the reasons for the heavy margins against the state nuclear initiatives are more complex. First, many opponents saw the issue in economic terms. Organized labor

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	For	Against	Percent
Arizona	207,828	486,467	30-70%
California	1,597,900	3,988,476	33-67%
Colorado	292,876	713,312	29-71%
Montana	120,557	175,925	41-59%
Ohio	418,567	571,243	42-58%
Oregon	1,143,675	2,435,959	32-68%
Washington	414,397	838,105	33-67%
Total	2,597,900	5,221,011	33.2-66.8%

campaigned actively against the ballot measures as embodying a threat to jobs. Proposition 15 was opposed by many business groups, as well as the California State Commission for Economic Development. Further, opponents argued that the loss of the nuclear option would result in higher costs for electricity. Proponents of the initiatives do not appear to have been persuasive in arguing that the measures would not affect the standard of living of large groups of citizens.

Interestingly, in the one state where proponents limited themselves to economic issues, Missouri, an initiative was enacted. The Missouri Initiative prohibited utilities from placing some costs for facilities under construction in their current rate base. It was well understood that the capital-intensive nature of nuclear facilities and the lengthy construction times associated with them made this, in effect, an anti-nuclear initiative. Here, however, the issue was simply economic, and avoided technological complexity.

Indeed, one important factor in the defeat of the seven initiatives which provoked your interest was the complexity of the measures themselves. The language of the initiatives was extremely involved and difficult to understand. Also the mechanism proposed in most measures for reaching difficult decisions on nuclear reactor safety and the reliability of

waste disposal facilities was unconvincing. The cumbersome approach of requiring a vote by the state legislature -- a body composed largely of persons unskilled in matters of nuclear engineering -- was evidently regarded by many with suspicion.

Two other factors may have been significant, particularly in the California vote. The first was doubt about the extent to which alternative energy sources could be relied upon to fill the gap which might result from foreclosing the nuclear option. Shortly before the California voting, a major coal-fired power plant intended to provide a major electric power source for Los Angeles was cancelled, largely because of objections to the air pollution which the plant was expected to cause. Objections had also been raised against the drilling for oil in California's Santa Barbara Channel and against the building of further dams for the production of hydro-electric power on the Colorado River. At least some must have wondered what energy sources would meet future energy needs, if decisions to exclude each potential source were made on an incremental basis. The second important factor was that the California state legislature had enacted, a week before the voting, three bills designed to impose a certain degree of state control over

the construction of nuclear facilities within California. These measures, to be discussed shortly, were seen by many as rendering Proposition 15 unnecessary.

IV. Collateral Developments

We should now turn to a parallel but doubtless related development -- the increasing legislative ferment regarding the proper allocation of responsibility for licensing and regulating nuclear power among federal, state and local authorities. The state initiative movement is only one outgrowth of an increasing effort to establish laws and institutional arrangements which will provide for decisionmaking affecting particular communities to include a broad degree of local participation, even to the point of local control. These efforts have been supported not only in city councils and state legislatures, but in the halls of Congress and in the offices of federal agencies. The Nuclear Regulatory Commission which I represent, is committed to finding appropriate mechanisms for this participation, reflecting local interests without interfering with the essentials of the federal regulation of radiological health and safety. Although no one would suggest that these developments result from the state initiative experience, neither have they been unaffected by it. To the extent that persons holding strong views about the role of nuclear energy in the U.S. economy are either

satisfied or frustrated with the results of the initiatives, their conduct may well have been altered by their perceptions.

As I indicated earlier, California's enactment of three bills concerning nuclear power may have had the effect of partially defusing the drive to enact Proposition 15. These three measures, currently being implemented, have already provided a model for similar legislation in other states (e.g., Oregon). Other state governments, as well as the federal government, are following California's implementation of this legislation with great interest, to determine whether they will contribute or detract from efforts to achieve reliable, economical and environmentally sound energy sources.

-- Assembly Bill 2820 prohibits the five-member California Energy Resources Conservation and Development Commission (ERCDC) from certifying any nuclear fission power plant for construction until it finds that the federal government has identified and approved, and there exists, a technology for the construction and operation of nuclear fuel reprocessing facilities.

-- Assembly Bill 2821 requires the ERCDC to undertake a one-year study of the necessity for, effectiveness and economic feasibility of, undergrounding and berm containment of nuclear reactors. No fission plant can be certified until the ERCDC has determined whether undergrounding and berm containment should be required.

-- Assembly Bill 2822 prohibits certification of a fission plant until the ERCDC finds that there has been developed and the federal government has approved and there

> exists a demonstrated technology for the disposal of high-level nuclear waste. The state legislature is to have 100 days to review such a finding.

At the time these remarks were prepared, the ERCDC reviews mandated by the three California bills had not been completed. However, the ERCDC has conducted extensive hearings on the issues posed in the legislation, and it may be possible to discern the direction of the Commission's thinking by the time this presentation is made.

State legislative responses to the nuclear issue have taken several directions. However, two types of enactments have predominated. The first is legislation mandating a state study of various aspects of the nuclear fuel cycle. In addition to California, six states enacted study proposals in 1976. Some (Idaho, Pennsylvania and Tennessee) merely adopted general proposals covering studies of all energy sources, including nuclear energy. Others (Louisiana and Massachusetts) focused specifically on nuclear power. Others (Kentucky and again Louisiana) joined California in directing a study of waste disposal facilities.

The second type of state legislation deals with the increasingly volatile issue of nuclear waste management. Because of the pending efforts of the federal Energy Research and

Development Administration to identify sites for the establishment of a permanent underground waste repository, state authorities have become acutely sensitive to the possibility that such a facility might be designated for their state. Four states (Minnesota, Montana, New Mexico and Vermont) have, in fact, adopted measures restricting waste management activities in their territory.

The Minnesota law forbids the importation of radioactive wastes into the state for permanent storage (they may be imported only for temporary storage up to twelve months, pending transportation out of the state). Construction of waste facilities is also banned, unless approved by the state legislature.

The Montana enactment prohibits the establishment of a waste facility in the state; the New Mexico law merely prohibits the import of radioactive material for storage or disposal until March 31, 1978. As of the end of May of this year, at least seven state legislatures were considering proposed legislation which would ban the disposal of high-level radioactive waste in their territory. Those states are Connecticut, Indiana, Louisiana, Michigan, New Hampshire, Oregon and South Dakota. Three other states have enacted measures relating to waste management. In Hawaii, the legislature expressed concern about marine dumping of radioactive materials in the Pacific Ocean; Kentucky imposed an

excise tax on radioactive waste delivered to the state for disposal; and New Jersey enacted a law prohibiting the location of radioactive waste disposal facilities within two miles of certain watercourses. Also, the Governor of Michigan has written to the Energy Research and Development Administration, requesting that his state not be considered as a possible site for a nuclear disposal facility.

This acute local interest in how the nuclear industry is regulated has also generated pressures within the United States Congress for the enactment of legislation recognizing a greater state or local voice in nuclear matters. In this regard, four bills introduced in the U.S. House of Representatives earlier this year are of particular interest.

In March, Congressman Morris K. Udall, Chairman of the House Interior and Insular Affairs Committee, introduced H.R. 5376 and 5377 -- or what he has called "nuclear states' rights" bills. The first bill would amend the Atomic Energy Act of 1954 to provide that the Nuclear Regulatory Commission could not act upon applications to construct a nuclear power plant unless the proposed facility had been first approved by the affected state. State approval standards could not be inconsistent with any standard under the Atomic Energy Act. However, inconsistency may not be found "solely on the basis

that such standard or requirement requires more stringent safety measures than [the Atomic Energy Act]." The second bill would make NRC construction permit approvals subject to disapproval by the affected state during a 90-day period following issuance.

The great interest in waste management issues which has generated state legislative proposals has also produced two bills in the Congress which would affect the ability of the federal Energy Research and Development Administration to locate a nuclear waste facility in any state. The first bill (H.R. 2675) would require ERDA to notify a state of its "intent to explore a site in that State for the purpose of construction of a radioactive waste storage facility." Construction of such a facility would not be permitted "where the State legislature by concurrent resolution states that the site shall not be used for such purpose." The second bill (H.R. 5396) would also require ERDA to notify state authorities; but would condition construction of a waste facility on approval of the site in a statewide referendum.

Although there are many other proposals before the Congress which would affect the licensing and regulation of nuclear power facilities in the United States, the four measures just discussed are particularly directed at expanding the state role in the process. At this juncture, it is not

possible accurately to guage the likelihood that any of these four proposals will be adopted. Perhaps the most likely result is that features of the bills will find their way into compromise proposals which provide for a more active state role in nuclear energy regulation, but which preserve certain areas in which the federal voice will remain supreme.

Such a compromise approach lies at the heart of proposals currently under consideration in the Nuclear Regulatory Commission, as a result of a task force study. At the time these remarks were prepared, the study* had just been made public as a staff task force draft. It is likely that by the time this paper is delivered, specific conclusions and recommendations contained in the study report may have been further refined and reflected in Commission.actions. On a preliminary basis, however, it appears that the study is tending to the conclusion that although the federal government should retain exclusive authority over the radiological health and safety aspects of nuclear energy regulation, the states possess a legitimate interest and competence in certain areas. Because the construction of a nuclear facility clearly has its major impact on persons who reside near that facility, state

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* Preliminary Staff Report, "Improving Regulatory Effectiveness in Federal/State Siting Actions" [NUREG-0195], May 1977.

or local involvement in decisionmaking is particularly appropriate in assessing the environmental effects which could result from the facility. Also, the traditional public convenience and necessity determination, largely involving whether there is a need for the power which would be generated by such a facility, seems to constitute another area in which local authorities are entitled to have a major -- perhaps dominant -- voice.

The NRC has recently had some experience in using another mechanism for rationalizing the respective roles of state and federal agencies in nuclear facility siting and licensing decisionmaking. This mechanism is to convene a hearing on such issues conducted jointly by officials of the NRC and the state agency responsible for giving approval for energy sites. The prototype for this procedure was developed between Maryland and the NRC, in 1975. A joint hearing protocol was developed to reduce duplication in considering issues and for generally expediting the licensing process. Another joint hearing protocol was entered into between NRC and the New York State Board on Electric Generation Siting and the Environment; it was published in final form in November of 1976. Both agencies have areas of concurrent jurisdiction. Utilities seeking approval to construct a nuclear power plant in New York must apply to the NRC for construction permits and operating

licenses and to the Siting Board for a Certificate of Environmental Capability and Public Need. Issues to be considered relate to the adequacy of the proposed site and environmental impacts during construction and operation. The NRC has jurisdiction over other issues involving radiological health and safety associated with plant operation, which will be the subject of a separate NRC hearing.

V. Conclusions

The most difficult part of this presentation is trying to distill from the state nuclear initiative experience some well-defined conclusions which can provide guidance for further action, or at least have some value in predicting the future course of the nuclear debate in the United States. Any views on the nuclear initiatives must remain somewhat vague and tentative.

At the least, one can say that the seven broad-guage initiative measures in 1976 did not achieve the aim which motivated many of their supporters -- namely, the imposition of strict new state controls on the development of nuclear energy facilities.

If the initiatives did not satisfy their supporters, neither did they amount to the kind of near-unanimous vindication of nuclear power that the nuclear industry and other

opponents of the initiatives may have wished. Fully a third of those voting on these measures (as complex and procedurally awkward as they were) were willing to insist on local as distinct from federal controls over further development of nuclear power in the United States. And in the eighth state, where a limited and more easily understood measure was put forward, proponents prevailed in obtaining passage of an initiative measure.

The nuclear initiatives constituted one dramatic feature of the continuing debate on the use of fission power as a major energy source in the United States. The initiatives may have served some useful public information function in the states where they were on the ballot. However, because of their complexity and because of the intensity of feeling on both sides of the issue, the initiatives did not provide an ideal vehicle for a dispassionate and reasoned examination of the costs and benefits of nuclear power.

What seems likely is that the initiatives may have sowed the seeds of their own disuse on questions pertaining to nuclear energy. Many persons appear to have concluded that the subject of nuclear power regulation is simply too technically complex to be appropriately decided by a "yes" or "no" vote of a state's qualified voters. The attempt to

frame initiative measures in a reasonable manner highlighted the distortion which may result from trying to simplify an inherently complex issue so that it may be fitted on a ballot paper. Had the effort been to frame the question in a relative way, to place the nuclear alternative in the context of coal, conservation, and other energy measures, less distortion but even greater complexity would likely have resulted. We have yet to fix upon an appropriate means for making decisions on scientific and technological issues of moment in a democratic society.

Perhaps it is only because general elections will not be scheduled until 1978 in states having the initiative mechanism, but the focus of debate on nuclear issues seems to have returned to the representative bodies which have traditionally resolved such social issues -- Congress and the state legislatures. Although the seven states which rejected nuclear control measures in 1976 are free to repeat the exercise, such an occurrence would not be consistent with the pattern established on other issues. It would seem more likely that the Congress and the states would increase their efforts to adopt legislation which provides a practical accommodation for the interests of states and localities, while preserving the role of the federal government in fashioning a national energy policy.

Perhaps most importantly, from a lawyer's viewpoint -- the failure of the initiatives averted an early and perhaps artificially abrupt confrontation between federal and state governments on the constitutional issue of preemption. The defeat of the initiatives has permitted a short breathing space in which the respective interests of local and national constituencies can be sensibly accommodated -- if public decisionmakers have the will and the intelligence to achieve such a result.

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