

Federalism and Nuclear Waste Disposal:

THE STRUGGLE OVER
SHARED DECISION MAKING

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Abstract *Traditionally the domain of federal agencies, authority to select sites for the disposal of commercial high-level nuclear wastes has recently been expanded to include a role for host states. State opposition to earlier siting efforts had demonstrated the difficulties federal agencies faced in resolving conflict between the local population bearing the costs and the dispersed population receiving the benefits. The new model defines the agency and the state as adversarial representatives of these competing interests. An outstanding weakness, however, is that it does not clearly specify who should speak for the state, and may actually promote intrastate conflict. The adversarial approach does not provide a generic solution to the problem of federalism, but it may prove useful at the state level for selecting disposal sites for low-level radioactive wastes and hazardous chemical wastes.*

The development of radioactive waste management, according to one study, has "bred more federal/state conflict than any other [issue] since the battle over desegregation in the South."¹ Another analysis holds that the radioactive waste problem has provided "the greatest test of American federalism in the 20th Century."² Evidence for such claims stems from the many disputes between federal and state governments during the last fifteen years—controversies that have centered on the development and use of storage and disposal technologies.³ The most intractable of the problems has concerned the disposal of spent fuel and high-level wastes from commercial nuclear power plants.⁴ Whereas most military wastes can be stored indefinitely at existing facilities, commercial nuclear plants generally have limited capacity for the storage of spent fuel. And since the federal government has accepted responsibility for the long-term management of spent fuel, new federal facilities are needed. However, disputes with potential host states had prevented the federal government from successfully developing

disposal sites for commercial wastes until Congress passed the Nuclear Waste Policy Act of 1982.

A key problem that delayed passage of a comprehensive law governing commercial waste disposal was uncertainty about how to construct a decision-making authority that included both federal and state governments. Persistent state opposition to various federal projects had called attention to the difficulties that federal agencies faced in attempting by themselves to reconcile conflicting interests in waste disposal. States felt they were entitled to share in formal decision-making. Some states requested authority equal to that of the federal government, thus advocating a process of dual sovereignty. However, permitting state veto authority over each project would have created the unacceptable possibility of fifty state vetoes and no repository. Congress thus found itself with a particularly difficult problem: how to design a model for decision making in which authority was shared in some fashion by federal and state jurisdictions without resorting to dual sovereignty.

THE INITIAL LAYER-CAKE STRUCTURE

The initial authority structure over radioactive waste management was a layer-cake model, in which all control was vested at the top in the federal level while the lower state and local levels were left without formal authority.⁵ The primary justification for exclusive federal control was that in the period following World War II, virtually all radioactive wastes were produced by the federal government for defense purposes. Through the Atomic Energy Act of 1946, Congress granted the Atomic Energy Commission an absolute monopoly over the promotion and regulation of all matters related to nuclear energy.⁶ Amendments to the Atomic Energy Act passed in 1954 ended that monopoly by empowering private parties to possess and use nuclear materials, thereby providing the legal grounds for a commercial nuclear power industry.⁷ But the AEC's regulatory authority was expanded to include the licensing of all commercial owners and users, and the AEC retained responsibility for the long-term management of radioactive wastes.

In 1959, Congress passed the "Agreement States" provision which authorized the AEC to relinquish to willing states the authority to regulate certain nuclear facilities that presented a lesser radiation hazard to the public health and safety, including uranium milling operations, decommissioned facilities, and commercial low-level waste disposal facilities.⁸ Twenty-six states accepted the offer and assumed responsibility over these areas by entering into formal agreements with the agency.⁹ Although constituting an exception to an exclusively federal regulatory system, the exception was a minor one; for it granted very little autonomy to the states, and it did not include the more hazardous types of wastes.

When the Energy Reorganization Act of 1974 dissolved the AEC and assigned its regulatory functions to the Nuclear Regulatory Commission, the exclusive federal control remained intact.¹⁰ The AEC's promotional activities were transferred to the Energy Research and Development Administration (ERDA), and then in 1977

to the newly-created Department of Energy.¹¹ As part of its research and development responsibilities, DOE was charged with all R&D pertaining to the management, storage, and disposal of radioactive wastes. DOE thus became the lead agency in organizing radioactive waste disposal programs, but was explicitly banned from exercising regulatory authority.

Not until 1978 did Congress specifically address the issue of federal/state responsibilities in nuclear waste storage and disposal. Although it did not modify the structure of authority, it did direct the NRC to issue a report on "means for improving the opportunities for state participation in the process for siting, licensing, and developing nuclear waste storage or disposal facilities."¹² Thus, as of 1980, states possessed no explicitly-granted authority to participate in federal decisions to manage, store, and dispose of radioactive wastes of any sort (with the two exceptions of the agreement states program and a 1978 law outlining a national management program for uranium mill tailings).¹³

If a state attempted to assert its authority over the management of radioactive wastes within its boundaries, its actions could have been preempted under the provisions of the Atomic Energy Act. That is, any direct conflict between a state law and congressionally-granted federal authority would have been resolved by the Constitution's Supremacy Clause, which holds that the laws of the United States are the supreme law of the land.¹⁴ To be sure, the Tenth Amendment to the Constitution reserves for the states a variety of police powers to protect the public health and safety. And if Congress had not created a federal regime to regulate the hazards of radiation, states could have used these powers to construct their own waste management systems. Indeed, it is likely that a determined state could have used its authority over such areas as transportation, zoning, worker health and safety, economics, etc. to thwart a federal siting effort by challenging it in the courts and causing substantial delays.¹⁵ Such tactics might have been especially successful in blocking the siting of repositories for commercial nuclear wastes.

**REPRESENTING
CONFLICTING
INTERESTS**

According to the layer-cake model, the head of the the lead executive agency had exclusive authority to make siting decisions for nuclear waste repositories, subject to review by the President. Congress exerted influence through the budgetary process, but formal authority over siting resided in turn in the Atomic Energy Commission, Energy Research and Development Administration, and Department of Energy. Each of these agencies was thus responsible for representing the public's interest in nuclear waste disposal.

That public interest consists, however, of two distinct sets of interests that are in competition. On the one side are the interests of the sector of the public that would receive most of the benefits from an efficient waste disposal system. Comprised mainly of consumers of nuclear-generated electricity and other individuals interested in the long-term health of nuclear power, this population

is dispersed across many states. By working to construct a successful management system, the three agencies have acted, in effect, as the formal governmental representatives for the interests of this group. The role has been especially important to agency officials because this population has also been the major constituency for other key agency policies. Promoting nuclear power was the AEC's primary objective; ERDA and DOE have been centrally concerned with the development of nuclear energy, even though also broadly responsible for energy research and development.

On the other side are the interests of that sector of the public that stands to bear most of the health, safety, and socioeconomic costs of nuclear waste disposal. A smaller population, it is concentrated in the area of the repository site and usually confined within the boundaries of one state. By working to construct a safe facility and to mitigate and compensate for the adverse effects of its construction and operation, the three agencies also represented the interests of this localized population. But since its membership was project-specific, shifting from state to state depending upon the agencies' siting decisions, it constituted a much narrower and less permanent constituency. And since its interests were in conflict with those of the agencies' primary constituency, its members had reason for concern that the agency might fail to give full consideration to their views.¹⁶

As long as the host state had no decision-making authority, the federal agencies were responsible for representing both sets of interests simultaneously. Since any action that favored the interests of one side necessarily impinged on the interests of the other, meeting that responsibility was a difficult task. Maximizing safety, for example, demanded a deliberate pace for site selection and construction, while seeking to remove a barrier to nuclear power development required efficient siting and construction processes. The responsibility to balance these interests in an equitable fashion placed the agency in a "structural tension." That is, by virtue of its status in the authority structure as a governmental actor representing both sets of interests, the agency was responsible for performing actions that could have contradicted one another.

The magnitude of this tension varied depending upon the agency's relationships with host states, whose primary concern was the health and safety of their citizens. When a state was satisfied that the agency was adequately representing those interests, the structural tension was minimized, requiring no modifications in agency action. Adequate representation meant that the state was confident that the likely hazards were as low as technically feasible and comparable to other acceptable hazards, and that the agency was giving consideration to all potential costs in a credible fashion. At the same time, if a potential host state found the agency's technical plans to be flawed or its credibility to be suspect, which became increasingly the case, the result was state opposition to the project and an intensified structural tension for the agency. In short, the political adequacy of agency representation was a

function of the technical adequacy of the siting process, which in turn depended, in part, upon the agency's credibility.

The layer-cake model allowed the agency but two options in dealing with state opposition: to grant the state greater participation in agency decision making, or to assert its preemptive authority. As we shall see below, both options threatened the success of repository siting efforts. The AEC, ERDA, and DOE tried both; initially devaluing localized interests in favor of the dispersed interests in nuclear power, and then later overreacting to meet state concerns by proposing variations of dual sovereignty.

INTERGOVERNMENTAL CONFLICT

Although formal authority over the management of radioactive wastes remained in federal hands until 1980, the political relationship between federal and state governments changed dramatically over time. Initially, during the period 1956-70, when the AEC was concerned only with temporary storage, the relationship was a positive one. The AEC had established an advisory committee of state officials and it frequently consulted with and sought the advice of state and local health, water pollution control, and other environmental agencies. During this period, however, the states requested no formal authority in decision making, and the AEC offered none.¹⁷

The near absence of conflict between the state and federal governments was evident in 1970 when the AEC agreed to a request from the state of Idaho to remove plutonium-contaminated wastes that had been shipped there following a fire at a weapons' facility in Colorado. The AEC agreed to remove these long-lived "transuranic" wastes by 1980 because it expected that government-owned geologic repositories would be open long before then. Although the expectation was wrong, the AEC had for the first time altered its waste management policy to meet a state request.¹⁸

The AEC's first attempt to establish a pilot repository to handle these military wastes proved to be a dismal failure. The agency had sought to capitalize on a research effort by the Oak Ridge National Laboratory that involved simulating the storage of radioactive wastes in an abandoned salt mine in Lyons, Kansas. The AEC plan seemed auspicious at the time, for the Oak Ridge experiments appeared to confirm the prevalent belief that salt was the optimal medium for permanent disposal and the project was enjoying local acceptance. However, the AEC decision to use the Lyons mine was based on unwarranted enthusiasm and an inadequate technical analysis, reported initially in less than eight pages.¹⁹

Technical research in radioactive waste management had been funded poorly in the past; therefore, the AEC was unable to rely on completed studies to support its claims that the risks were negligible. As technical justification for the Lyons site, the agency could point only to ongoing research and to its own safety record on other projects. Officials of the Kansas Geological Survey found

such evidence to be grossly inadequate. The agency's weak technical case was then eroded further by the discovery that industrial research teams had drilled at least a dozen small boreholes in the area that provided potential pathways for groundwater to flow into the repository and leach out the wastes.²⁰

Project officials also undermined their own technical claims by failing to establish credibility with the state. Although they had received directions to "consult with state officials" in order to secure the state's support, they failed both in giving serious consideration to the concerns of those officials and in candidly responding to legitimate questions. From the state's point of view, the AEC's declining credibility actually increased the health risks of the project because it raised questions about the agency's technical competence and its willingness to fully evaluate the potential costs. A U.S. Congressman, several state and local officials, and, finally, the Governor spoke out in opposition to the project. In addition, Congress passed non-binding legislation that prohibited disposal at the site until a President's advisory committee verified the project's safety. Although that legislation gave the state no formal authority in what was still a wholly military project, it was clearly responding to the state's concerns.²¹

Despite this opposition, the AEC remained adamant in support of its plan until the technical argument for the site was irrevocably damaged by the discovery that 170,000 gallons of water had been lost in an adjacent mine. Since that water could have leached wastes out of the repository and into sources of groundwater, its presence rendered impossible any claim that the repository would be adequately safe. By the time the AEC quietly cancelled the project early in 1972 the agency was not only without a disposal plan but it had also already suffered a serious loss of credibility with the states that would diminish their confidence in future projects.²²

Following the demise of the Lyons Project, the AEC abandoned its effort to locate a site for a deep geologic repository and turned instead to the concept of temporary storage of spent fuel and high-level wastes in above-ground concrete mausolea. After a two-year effort, however, the program was cancelled—this time amidst concern that economic considerations and institutional inertia would turn adequate temporary storage into inadequate permanent disposal. Although the project had received negative comments from a number of states, the major blow to its development came when the Environmental Protection Agency gave the project its lowest possible rating. As a result, the Energy Research and Development Administration cancelled the project shortly after its creation in 1975, and found itself without a management plan for radioactive wastes.²³

ERDA inherited a difficult position because declining storage capacity at nuclear power plants meant increasing pressure to find a permanent solution to the problem of commercial spent fuel. At the same time, expanding public controversy over nuclear power increased the likelihood of state opposition. California took

the lead by passing legislation in 1976 that prohibited all new construction of nuclear power plants in the state until the federal government successfully demonstrated a disposal technology for high-level wastes. And President Ford added a stimulus from the executive level by announcing that a federal mechanism for disposing of commercial nuclear wastes would be in place by 1985.²⁴

ERDA elected to return to the concept of deep geologic disposal as the most technically-defensible alternative; but the increasing potential of delays or cancellations caused by state opposition was a source of great concern. In order to enhance the probability of state support, ERDA sought to establish a new basis for its credibility. It instituted a dramatic change in the siting process, offering states actual participation in decision making.

Following the passage of the California law in November 1976, the ERDA administrator wrote to governors and state legislatures offering to abandon any new waste disposal project if ERDA were unable to resolve legitimate state concerns. Since ERDA was legally constrained from granting the states formal authority in the siting process, the agency was, in effect, seeking to establish an "informal dual model" of decision making. That is, it intended to interact with individual states *as if* they possessed sovereign authority.²⁵

At the same time that it was offering to share decision-making authority, however, ERDA was also planning a massive siting effort; it announced in December 1976 a 36-state search for six commercial repository sites. The primary effect was to alarm the states concerned, since all were well aware that legally they had no formal decision-making authority. Accepting the offer of informally shared decision making would have been an act of faith, and the AEC's two failures had generated more suspicion than trust. No state offered itself without reservation and several, including South Carolina, Kansas, Michigan and Wisconsin, refused to permit even preliminary site exploration.²⁶

The ERDA effort spurred governors and state legislatures to develop responsive measures in a variety of states. By May 1978, 33 states had passed laws regulating some aspect of radioactive waste management, and by October 1979, 19 states had enacted bans or moratoria on the siting of a nuclear waste repository. One state, Louisiana, even struck a deal with ERDA in which it agreed to serve as the site for the storage of the nation's strategic petroleum reserve in exchange for a permanent ban on nuclear waste disposal within its borders.²⁷

Faced with the prospect of continued state resistance, ERDA found itself with two possible courses of action. One was to continue to build a technically-defensible process for systematically identifying potential sites on the basis of generic criteria, while also formalizing a substantive role in decision making for potential host states, possibly by seeking Congressional legislation. In retrospect, this option was probably the path of least resistance; but at the time it must have appeared an impossible undertaking to ERDA officials. The agency was also aware that the newly-elected Carter administration would soon incorporate it into a cabinet-

level Department of Energy. With the likelihood of a comprehensive reformulation of policy coming down from the top, it made sense to avoid confrontations with unwilling states. As a result, ERDA adopted the second possible course of action—one that promised to preserve its preemptive authority with a minimum of inter-governmental conflict. It turned to the state of New Mexico, which appeared agreeable to hosting a nuclear waste repository.²⁸

THE WASTE ISOLATION PILOT PLANT

After cancelling the Kansas salt mine project in 1972, the AEC had turned initially to the undisturbed salt beds in southeastern New Mexico as the site for a new repository project. The agency's objective was to reduce the large uncertainties associated with using an abandoned mine by sinking a shaft and mining out the salt. The agency had begun wisely by visiting the state and obtaining the endorsement of state and local officials for a preliminary study of the site. The effort had been abandoned when the surface storage facility was proposed as a means for storing all military and commercial wastes generated through the year 2000. Later, when ERDA scrapped that plan in 1975 and began to think again about geologic repositories for commercial high-level wastes, it turned back to New Mexico for the disposal of the Idaho wastes.²⁹

Now known as the Waste Isolation Pilot Plant, the New Mexico project developed as an exclusively military transuranic waste facility during the period 1975–78. However, because of increasing pressure on ERDA to find a repository for commercial wastes, project staff planned WIPP so that it would be licensable by the NRC, a prerequisite for a commercial spent-fuel facility but not for a military transuranic waste facility. They wanted to be prepared in the event headquarters elected to expand its scope.³⁰

Yet military and commercial wastes have different political implications for a state selected to store them. The disposal of military wastes can be justified as part of a state's patriotic duty, but the prospect of including commercial wastes raises the so-called "backyard problem" in stark form. That is, on what grounds can a federal agency justify asking a state to use its territory as a backyard disposal site for wastes that were generated by private firms in other states? It was this prospect that had aroused the ire of states included in ERDA's November 1976 search.³¹

As long as WIPP was conceived solely as a military facility, ERDA had no intention of including the state in the decision-making process. Nor did the state request such authority; it merely monitored the project's development. In fact, the legislature's strongly pro-nuclear energy committee went so far as to invite ERDA to site a "demonstration nuclear fuel cycle center" in the state, including reprocessing, enrichment, mixed oxide, and waste repository facilities.³²

But by October 1977, it became increasingly clear that WIPP would be expanded into a commercial repository. The New Mexico House of Representatives considered a constitutional amendment

into the state. The proposal failed, however, when DOE shocked state officials by offering the state actual veto authority over the project. Although the offer entailed once again an informal dual-model status for the state that could be withdrawn at a later date, it also signalled a willingness by this new agency to modify current policy and treat the state as an equal partner in decision making. The offer was a surprise not only because it constituted a sharp break from the existing authority structure, but because it was not in keeping with what had become an established agency pattern of opting for solutions that preserved its exclusive authority. Although, in describing the power to be accorded to the state, the term "veto authority" was gradually replaced over the next several months by the more equivocal term "concurrence authority," agency officials solidified the offer through the sheer force of repetition.³³

DOE formally proposed in March 1978 to expand the scope of the Waste Isolation Pilot Plant and to include commercial wastes. However, the agency soon encountered in Congress what would become an insurmountable obstacle to this proposal—the House Armed Services Committee. The Committee was concerned that licensing the combined military and commercial repository, along with providing for state participation in the siting decision, would set precedents that could compromise the future siting of other military facilities. That is, if a dual authority model were permitted in one military decision, might that not provide grounds for granting state authority in other military decisions? For the next two years, the House Armed Services Committee successfully refused to accept any alterations in the initial scope of the WIPP project.³⁴

During this same period, the newly-granted state role in decision making that had first appeared inexact now became nonexistent. In December 1979, the General Accounting Office released a report stating that DOE had no legal authority to offer either veto or concurrence authority because such delegations of power violated the layer-cake structure established by the Atomic Energy Acts. The state legislature responded with a law claiming concurrence authority for the state in WIPP decision making. It also created a legislative committee and an administrative task force to represent the state in future activities concerning WIPP.³⁵

Meanwhile, the Carter administration was moving to achieve what ERDA had earlier been unwilling to attempt: the development of a comprehensive authority structure for radioactive waste management, including a siting mechanism for high-level waste disposal. Responsible for this development was a body made up of representatives from fourteen different federal agencies, called the Interagency Review Group. Among the many decisions it reached in a remarkable display of compromise and consensus, this group recommended in March 1979 that states be offered "consultation and concurrence" authority rather than veto authority in the siting process for high-level waste repositories. Unfortunately, the term had no precise meaning. It seemed to imply that states would have some authority in decision making but not so much that the federal government would ever have to confront fifty state vetoes.

The recommendation was a key step because it represented the first effort to grant formal state authority through some means other than a model of dual sovereignty.³⁶

In the case of WIPP, however, which was to include military wastes as well, the House Armed Services Committee stood its ground in opposing all DOE and state efforts to convince Congress that the state should have concurrence authority. It proposed "consultation and review" as an alternative; but the state rejected the concept as but a restatement of the existing structure. At the eleventh Congressional hour in November 1979, the various parties finally reached a compromise agreement to label New Mexico's authority as "consultation and cooperation." Although imprecise, the term implied that DOE had a formal burden to provide the state with information and to cooperate by seeking to resolve the state's concerns as they arose. In other words, although the legislation did not alter the layer-cake structure, it did enjoin DOE to act as if a dual model were in effect at the risk of legal penalties and delays in the project. It also gave DOE and New Mexico until September 30, 1980 to translate the term into a formal set of procedures.³⁷

In triumphantly announcing his comprehensive radioactive waste management policy in February 1980, President Carter adopted "consultation and concurrence" as his administration's policy on how the host state's authority should be structured in all repository projects. He also proposed that all repositories be licensed by the NRC, in order to enhance the credibility of the site-selection process by providing uniform safety standards and an independent review. Since these policies were inconsistent with WIPP's mandate, Carter proposed to cancel the project. However, Congress continued to authorize WIPP; but now once again as a wholly military facility for transuranic wastes and without NRC licensing. The WIPP project thus became an anomaly in the Carter policy, by far the most advanced disposal project underway, yet it was never mentioned in the administration's 400-page "National Plan for Radioactive Waste Management."³⁸

Apparently interpreting the Congressional decision on WIPP and the installation of the Reagan administration as a reaffirmation of its exclusive authority, DOE moved swiftly. But the agency had failed to obtain a signed "Agreement for Consultation and Cooperation" with the state, detailing an information-sharing process and scheduling milestones at which the state could halt progress on the project until DOE resolved specific state concerns. Although a consensus on the language of the agreement had been reached prior to the September 30, 1980 deadline, DOE had refused to accept either that its provisions were enforceable in court or that the state retained the right to seek judicial review of any further DOE decisions—in short, that the agreement constituted a legal contract. However, after the state moved to halt construction by filing suit in federal court, DOE agreed to the state's terms and signed the agreement in July 1981.³⁹

Since 1981, the state has sought to insure that since its authority in the project is now limited, the scope of the project should remain so as well. In November 1984, after a prolonged set of negotiations, the state secured modifications in the original agreement with DOE that set a limit on the types and amounts of waste to be shipped to the site. The agreement also discourages DOE from seeking to revise the project's scope by asserting that "WIPP is not designed for the permanent disposal of high-level waste, nor has the WIPP site itself been characterized for such permanent disposal." Still, since the authority to define the project resides in the hands of Congress, a future change in scope remains a possibility. The repository is now under construction and is scheduled to begin receiving wastes sometime in 1988.⁴⁰

JOINT SOVEREIGNTY While the WIPP project forged ahead, Congress lagged behind in legislating a comprehensive package for the management of radioactive wastes. In 1980, it was unable to agree on whether or not to distinguish between the host state's roles in military and commercial waste disposal. It therefore passed separate legislation that addresses the commercial low-level waste portion of the problem. Narrowing its focus to the disposal of commercial high-level wastes, Congress then struggled for two more sessions to define the state's role in the authority structure without creating a model of dual sovereignty. Each time the Senate easily passed its version, while competing committees in the House battled over a number of alternatives. Finally, on the last possible day during the December 1982 lame-duck session, the House passed its version, the two houses agreed on common language, and Congress approved the Nuclear Waste Policy Act of 1982 (NWPA).⁴¹

The sixty-three page Act provides, in part, for the sequential siting of two repositories according to a process that is designed to achieve credibility by selecting the best possible sites. DOE is responsible for conducting initial surveys of potential geologic sites, nominating five sites for further study, and then selecting three for characterization—an expensive step that involves sinking shafts in order to obtain site-specific data. Additional caveats insure that a minimum total of eight sites are nominated for the first two repositories.

Following these rules, DOE initially nominated nine sites in six states for the first repository. After conducting a series of public hearings and further site-specific analyses, it then narrowed this pool in December 1984 to sites in Nevada, Texas, and Washington. DOE has also notified seventeen states in the northeast portion of the country that they may be nominated as potential hosts for the second repository, and it is formalizing its criteria for further screening these sites.⁴²

The Act's major innovation is its decision-making arrangement in which authority is shared by federal and state jurisdictions without resorting to a structure of dual sovereignty. It achieved

this end by translating the concept of consultation and concurrence into a two-step siting procedure. The first step is simply that of consultation and cooperation. It involves a state role in DOE's screening and characterization studies to be outlined in signed agreements. The second step provides the key change: authorizing the potential host state to halt development of a recommended site by formally notifying Congress of its disapproval. That is, if a state feels that legitimate reasons exist for not going ahead after a given site has been formally recommended by the President, it has the option of sending to Congress a "Notice of Disapproval." However, the state action is not binding; it can be overridden by a majority vote in both houses of Congress.

By providing states with the authority to disapprove, the Act charts a middle ground between authorizing host states to veto siting recommendations in a formal dual model and limiting them to either the informal dual model or the consultation and cooperation model. It shifts some decision-making authority from the lead federal agency to the potential host state without yielding the federal government's control over the final decision. Moreover, by putting Congress in control, the Act takes advantage of the structural ambiguity built into the Congress—a federal decision-making body populated by representatives from the states. The formerly exclusive federal mechanism is thus transformed into a mechanism of joint sovereignty—a process of national decision-making without opting for a popular vote.

DOE and the state as formal adversaries

An interesting characteristic of this decision-making structure is that it formally defines DOE and potential hosts states as adversarial representatives of competing interests. What had become an increasingly obvious political reality since the early 1970s is now part of the legal structure of governmental authority.

By granting states disapproval authority in the site selection process, the Act removes from DOE the responsibility for internally balancing the two sets of interests and it designates the state government as the primary legal representative of the localized set of interests. It frees DOE to concentrate on the technical components of the siting process because its responsibilities to local interests are now limited to maximizing safety and completing the formal requirements of the consultation and cooperation mechanism in a credible fashion. By transferring from DOE to Congress the responsibility to make the final siting decision, the Act also equalizes the statuses of DOE and host states in the authority structure—casting both in subordinate roles. Although required to work together, each makes a separate siting recommendation to Congress.

DOE retains an edge over the state, however, because it controls the production of data about the site—data the state requires to make an informed assessment of the agency's siting activities. And, since the agency's credibility continues to be a point of contention, it is possible that this screening and characterization process could become a source of conflict with potential host states. Evidence

is already beginning to accumulate to that effect.⁴³ Because of this lingering problem of credibility, DOE's remaining authority in repository siting eventually may be transferred to a public corporation chartered by Congress. In a draft report released in November 1984, an advisory panel mandated by the Act made such a recommendation; but Congress has not yet begun to consider the matter.⁴⁴

Who speaks for the state? Despite its acuity in addressing the issue of how to share decision-making authority, the Nuclear Waste Policy Act is flawed in a key respect. It outlines a clear-cut status for the states; but it does not specify who has the authority within each state to speak for it in the actual siting process. The problem occurs in the "disapproval" process which grants both the governor and the state legislature the authority to represent the state in deciding on a facility. "Unless otherwise provided by State law," reads the relevant provision, "the Governor *or* legislature of each State shall have the authority to submit a notice of disapproval to the Congress. . . ."⁴⁵ Allowing either branch to act for the state government potentially promotes an adversarial relationship *between* them.

One possible consequence of this ambiguity in designating authority is the development of distinct decision-making processes, each with its own data, analyses, and political constituency. In such a case, proponents and opponents would rally behind those officials most likely to support their respective causes. DOE would probably have to negotiate separately with the legislative and executive branches of the state government, and Congress could face conflicting judgments from the two. To ordinary citizens, an already complex process would appear at least doubly so.

This potential dilemma stems from well-intentioned efforts not to weaken the states' new authority by requiring them to make their decisions according to a specified procedure.⁴⁶ Moreover, the policy of noninterference by the federal government affirms the goal of maintaining a sharp boundary between the federal and state realms of authority. That Congress did not anticipate these intrastate implications is demonstrated by a preliminary section of the Act that contradicts the above provision. It points out that a site automatically becomes eligible for NRC licensing "unless the Governor *and* legislature of the State in which the site is located . . . [have] submitted to the Congress a notice of disapproval. . . ."⁴⁷ Notwithstanding this sentence, the Act's later explicit assertion that either the governor *or* the legislature may issue a notice of disapproval clearly represents Congress' intent.

The tension accidentally created between the governor and the legislature by the disapproval provision appears also in the consultation and cooperation processes that take place prior to final site selection. The Act is inconsistent in specifying who should represent the state—a vagueness that tends to diminish the involvement of the legislature. For instance, the legislature is excluded from the initial process of developing siting guidelines, which are issued by the Secretary of Energy after "consultation with interested

[g]overnors." The Secretary's nomination of five sites for further study involves notifying both the governors and the legislatures, but follows consultations with the governors alone. Finally, the Secretary is to provide both branches of any state considered for nomination with complete information regarding DOE's plan—whether requested or unrequested. Thus, the legislature is not consulted before a site is nominated, but is provided with information about the proposal and is subsequently notified of the actual nomination.⁴⁸

After the President has selected three sites for characterization, the formal information-sharing process called "consultation and cooperation" takes place. Both the governor and the legislature are authorized to express their concerns through this process, and both are permitted to review DOE's site characterization plan every six months. However, once again these provisions are contradicted by an earlier one, which specifies that all characterization activities should be conducted in consultation with the governor alone.⁴⁹

Finally, the Act requires DOE to "seek to enter into a binding written agreement" with the state, but it fails both to designate a state signatory and to specify who within the state is responsible for implementation. If no formal agreement is reached, however, only the governor is authorized to explain the state's position to Congress. Despite the fact that Congress grants consultation and cooperation authority to state legislatures, it apparently assumes that the governor of the host state will conduct the negotiations with DOE and alone sign the formal agreement, as was true with the New Mexico agreement on WIPP. However, if both the governor and the legislature are to have disapproval authority, it seems reasonable to assume that both would be able to participate in all decisions concerning the written consultation and cooperation agreement.⁵⁰

One modification that would have made the Act internally consistent while providing a well-defined line of authority would have been to grant disapproval authority solely to the governor. If interested in participating, the state legislature could have forbidden the governor to sign a notice of disapproval without the legislature's consent; otherwise, no other action would have been required.

**Clarifying state
decision making**

Because Congress is unlikely to provide a statutory solution to the problem of intrastate conflict, the states and DOE may have to design strategies themselves. Three categories of actions are likely to be necessary.

First, by consulting and cooperating with both the governor and state legislature, DOE could increase the credibility of the siting process and reduce the possibility of opposition from either one. DOE has typically dealt with a single contact within the executive branch of state government. Such a choice is not surprising; executive branch officials are more likely to possess the capability for technical review and they are full-year employees, whereas legislators often work part-time. Furthermore, several states have

themselves identified executive agencies as their principal spokesmen. Yet the net result is that DOE has not developed working relationships with the legislative branches of potential host states.

A second category of actions would involve each state establishing a clear line of decision making, both to strengthen its credibility and to produce a single state decision on the repository. A state government could find itself in a decidedly weak position, appearing indecisive both to its citizens and to the members of Congress, if internal disagreement led to conflicting judgments about a site. However, creating a structure that enables the state to exercise its authority as a single actor could be difficult because the state must make evaluative judgments on issues that are both technically complex and politically sensitive. These include: conducting and monitoring technical reviews of the project's progress, identifying and evaluating a wide range of potential impacts as well as requesting and distributing impact assistance, developing state policies on institutional issues such as emergency planning, state liability, and transportation, offering formal comments at various points in the siting process, negotiating and implementing the written agreement with DOE, supplying its citizens with information about the project, organizing intrastate participation and resolving conflict among competing parties, and deciding whether or not to intervene in the NRC's licensing process.⁵¹

In addition, because each state has a somewhat distinct governmental structure at both the state and local levels, designing a generic mechanism is unlikely to prove fruitful. Many possible mechanisms exist for achieving joint decision making. A state legislature could, for example, defer to the governor's judgment or it could prohibit the governor from issuing a notice of disapproval without its consent. It could assign responsibility for consultation and cooperation to a lead agency constrained by shared decision making at a later stage, construct separate review mechanisms connected only at final decision point, or even create a separate review entity that has responsibility to consult and cooperate with DOE and to make a final siting recommendation to the governor and legislature. Numerous states, including all six initially nominated to host the first repository as well as some of the seventeen states also being considered for the second repository, have created structures for developing intrastate policy and exercising consultation and cooperation authority. Each contains some combination of six units: the Governor's office, an executive agency, an executive task force, a state review board, an advisory committee representing both branches, and legislative committees.⁵² Very few states, however, including none of the three with sites selected for characterization, have established a mechanism for reaching a single state decision. Since any state mechanism will need time to achieve credibility, the best way to insulate a formal decision-making process from political change may be to institutionalize it at the earliest possible date. Still, uncertainty about the relative advantages and disadvantages of various alternatives poses a formidable barrier.

A final approach to preventing formal conflict within the state is to establish and maintain informal cooperation between the governor and state legislature. Just as an early separation between the branches could increase the probability of direct conflict at the later site selection stage, so working together from the outset could cement their relationship. If the common goal of the governor and state legislature is to achieve a unified state voice, then they have a common interest in developing a review mechanism that attains that goal. Dissension at any stage could cause confusion both in DOE and in Congress as to who is speaking for the state.

**APPLYING THE
ADVERSARIAL
STRUCTURE**

The difficulty of balancing opposing interests in the siting of nuclear waste repositories has been reflected in the significant conflict between federal agencies and state governments. Yet since a certain degree of resolution has been achieved in key governance issues,⁵³ this case may be instructive for decision-making problems in other areas, particularly those involving natural resources and the environment in which the "New Federalism"⁵⁴ is a current concern. Such areas include research and development on federal lands, lease sales for the extraction of natural resources, construction of deep-water ports, livestock grazing, management of coastlines, regulation of air, water, and noise pollution, allocation of water rights, and the management of toxic and other hazardous substances.⁵⁵

It should be noted, however, that the authority structure for siting nuclear waste repositories does not provide a generic model for shared decision making between federal and state governments. In fact, it is not even widely applicable. A key finding of this analysis is that the unique nature and distribution of public interests involved in the disposal of commercial high-level wastes justified establishing an adversarial relationship between DOE and the state in repository siting. The Nuclear Waste Policy Act did try to maximize intergovernmental cooperation; but because of the large uncertainties involved in repository siting and the potentially catastrophic effects of accidents, Congress relieved DOE of the responsibility to balance conflicting interests in an effort to strengthen the credibility of the siting process. Congress's Office of Technology Assessment had earlier reported that "[t]he greatest single obstacle that a successful waste management program must overcome is the severe erosion of public confidence in the Federal Government."⁵⁶ If final authority had remained with DOE, local interests would have had to rely on the agency's eroded credibility as evidence that they were receiving adequate representation.

In contrast with this case, public decisions concerning the management of natural resources and the environment usually involve distributions of costs and benefits among populations that significantly overlap *within* individual states. Also, the costs generally entail lower uncertainties and less potentially harmful consequences, reducing the importance of agency credibility. Disputes over the use of federal lands, for example, typically involve ranchers, timbermen, and extractive industries competing with hunters, fish-

ermen, and recreational users—all within the same states. And pollution control frequently produces economic costs and health and aesthetic benefits that affect the same populations.

An adversarial relationship between federal agencies and state governments would not enhance the representation of competing interests in these cases because both sides would bear the responsibility for balancing those interests. In addition, Congress may be willing to assume the time-consuming role of arbiter for a policy that is likely to require its attention only two or three times in this century; but it would probably balk at the significantly greater involvement required if the adversarial model were applied in other areas.

Rather than by stripping away agency authority and granting it to the states, many intergovernmental disagreements can be managed better by incorporating state participation into agency decision making. Including a state's views requires the agency to make its decision-making process explicit; otherwise, it cannot justify the claim that it gives full consideration to all interests. DOE's decision-making process was obscure to the public in part because the agency was inclined to show greater consideration for one set of interests—those desiring a speedy solution to the waste disposal problem. The stated goals of other agencies may not ally them with particular interests; and in these instances, the possibility is greater that agencies will tolerate modifications in decision making that lead to increased state participation. That participation must be genuine, however, for although varying in significance the credibility of federal agencies is likely to remain a significant factor in intergovernmental relations.

Numerous mechanisms exist for enhancing state influence in agency decision making. Recent examples established by Congress include permitting a Governor to temporarily delay federal plans to permit coal mining in a National Forest, creating a federal/state council to plan the use of lands in Alaska, requiring the Interior Department to accept a Governor's recommendation for off-shore lease sales if it reasonably balances federal and state interests, and conditioning the licensing of deepwater ports in order to be consistent with state programs.⁵⁷ One device developed for the nuclear waste case that may prove particularly useful in other areas is the written cooperation agreement. By requiring frequent discussions through a formal contract accepted by both parties, the congressionally-mandated process requires the agency to respond to the state's concerns, and any failure by either party to show good faith is subject to judicial review. The cooperative agreement may be especially appropriate when the agency's executive officer serves as the arbiter of disputes with states, because it protects the state in the event of intragency bias.⁵⁸

Although the intergovernmental authority structure for commercial high-level waste disposal may not be generally applicable to conflicts between federal and state governments, it may indeed prove useful for resolving conflicts between state and local governments over the disposal of low-level radioactive wastes and

hazardous chemical wastes. Both of these problems are primarily the responsibility of state authorities, and the intrastate distributions of costs and benefits involved come close to replicating the national distribution of costs and benefits involved in the disposal of commercial high-level wastes.

Since hospitals, universities, and nonnuclear industries generate nearly half of the commercial low-level wastes produced each year, the disposal of low-level wastes provides benefits to virtually the entire population of each state. The costs of disposal are also distributed throughout the country because large volumes of wastes mean that many disposal facilities are needed. Finally, the technology of near-surface disposal has been used with moderate success in several states indicating that although the potential for catastrophic accidents always exists, the total costs of a well-managed facility are probably comparable to the total benefits.⁵⁹

The Low-Level Radioactive Waste Policy Act of 1980 granted states exclusive authority over siting, formally acknowledging that states with disposal facilities experience both costs and benefits. And because many states do not generate sufficient volumes to justify even the economic costs of disposal, the Low-Level Act also sought to equalize the costs and benefits of each facility by allowing it to serve a regional population. States are now permitted to enter into interstate compact s which, after receiving Congressional approval, will have the authority to exclude out-of-region wastes.⁶⁰ The significance of the compact structure is that once a compact decides which state will serve as host, that state will become responsible for siting a facility within its boundaries. The state government will have to balance the interests of the local population bearing the costs against the interests of the regional population receiving the benefits. It will also face a credibility problem similar to that now felt by DOE in high-level waste disposal because the state will be responsible both for developing a technically-sound siting process and for getting the wastes into the ground as quickly as possible.

The NWPA structure could work at this level because the state body charged with developing the facility and the local government are likely to become adversarial representatives of the competing interests. Applying the NWPA structure would involve authorizing a state agency to develop and manage a systematic process of site selection. Characterizing sites for low-level waste disposal will take less time than for high-level waste disposal because no shafts have to be sunk; but the agency's credibility would be enhanced by following procedures specified in consultation and cooperation agreements with local governments. Each local government could develop the capability for technical review through financial support from the regional compact. It would also then have the authority to halt a formal siting recommendation by issuing a notice of disapproval which could be overridden only by a two-house vote in the legislature.

By previously ratifying the compact agreement, the legislature would have certified its willingness to approve of a facility that

had been sited credibly. Likewise, the executive agency would be encouraged to carry out a rigorous site-selection process because it would face legislative scrutiny. Finally, any host community intent on disapproving of a siting recommendation would have to convince its peers around the state that the siting process was not done in credible fashion.

The problem of hazardous chemical wastes differs from that of commercial low-level wastes because state governments are not, at present, responsible for insuring that siting efforts succeed. States do have the authority to develop new facilities because the balancing of competing interests is, once again, an intrastate process; the benefits of disposal are shared widely by the consumers of chemical products, while the costs are concentrated in local areas. Although the federal government has assumed responsibility for managing the clean-up of old sites and for licensing new ones, the need for many new sites throughout the country removed any justification for federal authority over siting. But since states cannot under current law exclude out-of-state wastes, state governments are not required to find new sites.⁶¹ Each can justify inaction by assuming that adequate disposal capacity will become available elsewhere.

The primary incentive for constructing a hazardous waste facility is thus economic rather than political, and the roles of participating actors adjust accordingly. The lead actor in the siting process is likely to be a commercial company specializing in chemical waste management. The state government's role will probably be limited to insuring that commercial companies do not impose unreasonable costs on local residents and to arbitrating disputes between a company and a local community. A local community that accepts a disposal facility will do so primarily for economic reasons. Opposing the facility is likely to incur relatively few political costs because cancellation of a project does not mean that some other locality must serve as host. Unfortunately, significant opposition is highly likely in most areas, making it extremely difficult to site a disposal facility.⁶²

In the absence of a formal responsibility to direct the siting process, state governments concerned about the future availability of disposal facilities for chemical wastes have been limited to trying to reduce local opposition through creative siting mechanisms.⁶³ These generally involve adopting strategies to mitigate and compensate for expected costs to the local community, as well as a variety of institutional innovations to maximize the credibility of the siting process. Under the present legal structure, the NWPA model cannot be applied to resolve intrastate disagreements, because the state and local governments are not adversarial representatives of competing interests.

If, however, Congress permitted states to exclude out-of-state wastes or to form interstate compacts that could exclude out-of-compact wastes, the problem of hazardous waste disposal would parallel that of low-level radioactive waste disposal and the NWPA authority structure could become appropriate.⁶⁴ The compact system

seems applicable because many states do not generate enough wastes to justify the costs of a disposal facility. By authorizing the exclusion of wastes produced outside the compact and making state governments responsible for siting, this system would grant political legitimacy to the position that some local communities must bear the costs of disposal. Otherwise, the only localities that will accept disposal facilities are likely to be those that actively seek them.

In sum, the struggle over the allocation of authority in nuclear waste disposal offers a lesson in resolving intergovernmental conflicts by demonstrating that no decision-making model is applicable to all disputes. Rather, the appropriate distribution of authority varies depending upon the nature and distribution of the public interests involved. The adversarial model is useful only when the competing authorities clearly represent competing interests. Since credibility is a particularly salient problem for both federal and state agencies in projects that involve significant uncertainties, the place to begin in most every case is to enhance agency credibility through informally-shared decision making with lower governmental authorities.

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- NOTES**
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 4. Radioactive wastes are usually divided into four general categories: (1) *high-level wastes* (HLW) consist both of solid spent fuel from nuclear reactors and the concentrated fission products left in liquid form after spent fuel has been chemically reprocessed to retrieve plutonium and unfissioned uranium; (2) *transuranic wastes* (TRU) consist of materials, usually in solid form, that have been contaminated with elements heavier than uranium, primarily the plutonium used in making nuclear weapons; (3) *low-level wastes* (LLW) are a residual category consisting of the large volume of solid and liquid materials that are contaminated with small amounts of radioactive elements through a variety of industrial, medical, and research activities; and (4) *mill tailings* consist of the refuse material, either in solid form or a liquid slurry, that is produced from the separation of natural uranium from mined ore, which emits low levels of radioactive gas. HLW's are at high temperatures and emit intensive levels of radiation. TRU wastes are normally at room temperature and emit radiation in a broad range of intensities. Both will be disposed of in deep geologic repositories, although liquid HLW's must first be solidified—a technology that is not yet available. LLW's are disposed of in near-surface facilities. The volume of mill tailings is so large as to prohibit permanent disposal, thus solid tailings piles are "stabilized" with clay covers.
 5. When I use the terms "layer-cake" and "dual model" in identifying governmental authorities involved in nuclear waste disposal, I am

not entering into the political science debate over "layer-cake," "dual model," "cooperative federalism," and "intergovernmental relations" as alternative general theories of federal/state relationships. Rather, as a cultural anthropologist, I am using the terms to characterize alternative models of social structural organization that are created through the cultural device of statutory law. I also characterize the political interests involved in nuclear waste disposal as a separate mode of social structural organization and then examine the historical relationships between them in the development of government action concerning nuclear waste disposal. This approach to examining public decision making contrasts with those of political scientists and legal scholars by not granting analytic priority to either of the two cultural domains of law or politics.

6. Atomic Energy Act of 1946, P.L. 79-585, 60 Stat. 755-55, 42 U.S.C. Sections 2011-2296 (1976 & Supp. V 1981). The details of the Act's legislative history are discussed in S. Rep. No. 1699, 83rd Congress, 2nd Session (1954); H.R. Rep. No. 2181, 83rd Congress, 2nd Session (1954).
7. Atomic Energy Act of 1954, P.L. 83-703, 68 Stat. 919, as amended 42 U.S.C. Sections 2011-2296 (1979).
8. Atomic Energy Act of 1959, P.L. 86-373, 42 U.S.C. Section 2021 (1976 & Supp. V 1981). See also Hearings on Federal/State Relationships in the Atomic Energy Field Before the Joint Committee on Atomic Energy, 86th Congress, 1st Session, 1959, Sec. 14(b).
9. Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, Rhode Island, South Carolina, Tennessee, Texas, and Washington.
10. Energy Reorganization Act of 1974. P.L. 93-438, 88 Stat. 1233 (1974), 42 USC 5801 *et seq.*
11. Department of Energy Organization Act. P.L. 95-91, 91 Stat. 565 (1977), 42 USC 7101 *et seq.*
12. Nuclear Regulatory Commission Authorization Act of 1978. P.L. 95-601. See also *Means for Improving Participation in the Siting, Licensing and Development of Federal Nuclear Waste Facilities: A Report to Congress*, NUREG-0539 (Washington, D.C.: U.S. Nuclear Regulatory Commission, Office of State Programs, March 1979).
13. Uranium Mill Tailings Radiation Control Act of 1978, P.L. 95-604, 92 Stat. 3021 (1978), 42 USC 7901 *et seq.* I take 1980 as the reference point at which federal authority over radioactive waste management began to diminish because in that year Congress passed the Low Level Radioactive Waste Policy Act which advanced an innovative model of state/regional decision making in order to resolve conflict during the late 1970s (see conclusion).
14. The legal grounds constraining state action on nuclear waste disposal were in fact more complicated than this, involving a combination of (1) the principle of intergovernmental immunity, (2) the Commerce Clause, and (3) the doctrine of federal preemption. In addition, federal authority has been limited to protecting the public from the hazards of radiation. State laws that seek to regulate radioactive waste management on other grounds could conceivably escape preemption (see Note 26). For further discussion, see Green, Harold P. and Zell, L. Marc, "Federal-State Conflict in Nuclear Waste Management: The Legal Bases," in *The Politics of Nuclear Waste*, E. William Colglazier.

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15. Graff, Thomas J., "Legal Constraints on Consultation and Concurrence," in *Consultation and Concurrence: Workshop Proceedings*, (Seattle, Washington: Battelle Memorial Institute, Office of Nuclear Waste Isolation, ONWI-87, Distribution Category UC-70, January 1980): p. 59.
 16. The costs are also borne by the residents along transportation corridors, yet their interests have not been a major consideration in disputes over repository siting. Since this population is dispersed across many states, the only clear representative of their interests is the federal government, and the U.S. Department of Transportation has already asserted its preemptive authority over the regulation of transportation. The issue has been a factor in repository siting only to the extent that the host state bears a disproportionate amount of the transportation hazard. For further analysis of the problem of transportation, see National Academy of Sciences/National Research Council, *Social and Economic Aspects of Radioactive Waste Management: Considerations for Institutional Management* (Washington, D.C.: National Academy Press, 1984).
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 18. *Ibid.*, Metlay, 1985, p. 222.
 19. Metlay, 1978, *op. cit.*, note 17: pp. 5–6; Bradshaw, R. L. and McClain, W. C., eds., *Project Salt Vault: A Demonstration of the Disposal of High-Activity Solidified Wastes in Underground Salt Mines* (Oak Ridge, TN: Oak Ridge National Laboratory, April 1971).
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 22. Metlay, 1978, *op. cit.*, note 17, pp. 6–8; AEC Authorizing Legislation for Fiscal Year 1972, Project 72–3.
 23. EPA response to Draft WASH-1539, November 15, 1974, cited in Metlay 1978, *op. cit.*, note 17, p. 8.
 24. The California legislation later survived judicial review. See Pacific

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 43. "Nevada on the HLW Program," *The Radioactive Exchange* 3(17,18) (November 12, 1984); "Texas on the HLW Program," *The Radioactive Exchange* 3(19) (November 30, 1984): pp. 7-14.
 44. The DOE Advisory Panel on Alternative Means of Financing and Managing Radioactive Waste Facilities, which was created by NWPA, recommended that Congress create the Federal Corporation for Radioactive Waste Management (FEDCORP) to manage the siting process. For further discussion, see *The Radioactive Exchange*, 3(17,18) (November 12, 1984) and 3(19) (November 30, 1984).
 45. NWPA, Sec. 116 (b)(1); emphasis added.
 46. Edward Helminski, Editor, *The Radioactive Exchange*, personal communication.
 47. NWPA, Sec. 115(b); emphasis added.
 48. NWPA, Sec. 112(a); Sec. 112(b)(1)(A); Sec. 112(b)(1)(H); Sec. 117(a)(1-2).
 49. NWPA, Sec. 117(b); Sec. 113(b)(1); Sec. 113(b)(3); Sec. 113(a).
 50. NWPA, Sec. 117(c); Sec. 117(b)(1-11); Sec. 117(c).
 51. Gervers, J. H., "State Organization Programs for Review and Evaluation of Nuclear Waste Repositories," (Washington, D.C.: Legislative Working Group, December 16, 1983): p. 3.
 52. *Ibid.*, pp. 4-6.
 53. See Helminski, Edward, "Finally! A National Nuclear Waste Management Policy," editorial, *The Radioactive Exchange*, 1(20) (January 1983): p. 3: "With all the talk of new federalism over the past several years, from Governors, Presidents, scholars [sic], no single piece of legislation puts the principle more to the test than the Nuclear Waste Policy Act of 1982. Nuclear waste management is now the shared responsibility of the Governors and state legislatures, governing bodies of Indian tribes, the Congress and the President. . . . No other national program so critical to the overall national interest comes as close to the Federalism the Governors have been asking for and what Administrations have been saying they would grant, than this."
 54. For a report of the administration's commitment to "New Federalism," see *The New York Times*, January 28, 1982, p. 1.
 55. See "Federalism and the Environment," *op. cit.*, note 1, especially Babbit, Bruce, "Federalism and the Environment: An Intergovernmental Perspective of the Sagebrush Rebellion," pp. 847-862.
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