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A Report to
The Utility Nuclear Waste Management Group

THE U.S. DEPARTMENT OF ENERGY'S IMPLEMENTATION OF THE CONSULTATION PROVISIONS OF THE NUCLEAR WASTE POLICY ACT

August, 1985

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TABLE OF CONTENTS

SECTION I: INTRODUCTION

The Nuclear Waste Policy Act of 1982 (NWPA) directed the Department of Energy (DOE) to proceed with the siting of two nuclear waste repositories, and the construction of one repository. Under the provisions of the Act, DOE was also directed to conduct a program of consultation and cooperation with each of the potentially affected states and Indian tribes. The Act also states that "State and public participation is essential in order to promote public confidence in the safety of disposal of ..."waste and spent fuel."

This report was prepared for the Utility Nuclear Waste Management Group (UNWMG), an association of forty-six nuclear (investor-owned and public) utilities, and provides an independent assessment of the adequacy of DOE's consultation and cooperation and public participation programs to date. It also contains recommendations for a program to develop agreements among all the parties for improvements in that program.

The Consultation and Cooperation Provisions of the Act:

The NWPA was passed by Congress during a post-election session in 1982, and signed into law by President Reagan on January 7, 1983. Passage of the Act was in doubt until the last minute, and it is probable that had the Congressional session not been extended by a filibuster on another issue, the Act would not have passed during that session of Congress. Other than tax laws, it is one of the most detailed and prescriptive pieces of legislation ever passed by the U.S. Congress.

The passage of the Act was the culmination of more than six years of effort, and required an extensive lobbying effort by a coalition of industry, environmental groups, and the states. The passage of the Act also required major concessions or compromises by all parties. No one got everything they wanted, but there was something in it for everybody. The two crucial concessions were made by the utility industry and the states.

The crucial concession made by the utility industry was that it agreed to pay a fee of 1 mil per kwh into a Nuclear Waste Fund from which the siting studies and construction would be funded. Previously the industry had taken the position that waste storage was a national problem, and therefore the federal government should construct the repository, with utilities paying fees for actual disposal. In return for footing the bill, the industry was given a commitment that DOE would begin accepting waste in 1998. This agreement was formally acknowledged after the passage of the Act by contracts signed between DOE and the nuclear generating utilities.

The concession made by the states was to give up the claim that potentially affected states must have the power to veto the location of the repository in their state. Going into the negotiations the National Governors' Association (NGA) had taken the position that each state should be given an absolute veto. But this raised the considerable possibility that billions of dollars in studies could be conducted, with no state being willing to accept the repository. This was unacceptable to Congress, not to mention the industry which would be paying the bill. As the negotiations on the Act proceeded, it became clear to the states that the Congress would never grant an absolute veto, and the governors began to recognize that there was a real possibility that all governors might succumb to intense political pressure at home, leaving the problem unsolved. During these discussions it also became clear that the states were not the only affected entities, and that Indian tribes also had rights which had to be legally recognized in this situation.

The compromise which was reached had two components: 1) states and tribes were given the right to file a notice of disapproval, but Congress was given the power to overrule this disapproval, and 2) the Act specifically directed DOE to develop a program of "consultation and cooperation" with the states and tribes. Various sections of the Act also made provisions for public information, public hearings, and public participation programs.

The term "consultation and cooperation" was in itself a compromise. An Interagency Task Force, established during the late 1970s, had originally coined the phrase "consultation and concurrence," and this phrase had been used by the states and environmental groups for several years. However, the word "concurrence" implied a veto, so was softened to "cooperation."

The Act specifies that DOE is to develop written consultation and cooperation (C&C) agreements with the states. Under the C&C agreements DOE would provide grant monies from the trust fund to provide the technical assistance which the states and tribes would need to participate in the decision-making process. The C&C agreements could also include mechanisms for conflict resolution, including such possibilities as negotiation and arbitration. In other words, DOE could go beyond simply permitting the states and tribes to review its decisions, and agree to a conflict resolution process.

Because of the two major concessions which took place during the development of the Act, there is an inherent tension in the Act between the commitment made to the states and Indian tribes to provide consultation, and the commitment made to the industry to stick to a time schedule which would culminate in accepting high-level nuclear waste in 1998. This tension between competing objectives was aptly described by Mr. Ed Davis, Senior Vice President of the Atomic Nuclear Energy Forum, at a meeting of the American Nuclear Society in 1984. Mr. Davis stated:

"In general, the NWPA can be reduced to two basic Congressional mandates:

1) A strong mandate to take the necessary steps and make the decisions required to bring into operation nuclear waste disposal facilities in a timely manner, and

2) A strong mandate to involve the states and public in an extensive participatory process, involving all decisions related to siting a repository or other Federal waste facilities.

"To some extent these two mandates appear somewhat inconsistent. However, successful implementation of the NWPA is mutually dependent on both of these mandates. Without firm schedules, the participatory process will have no reasonable bounds; and, hence, the objective of siting a repository will prove elusive. On the other hand, an approach that is blindly tied to meeting schedules at all costs, threatens to undermine the very confidence and credibility that the NWPA drafters sought to create through the participatory process."

"Various constituency groups will align themselves with one or the other mandates, depending on their point of view, and can be expected to strongly speak out when a particular mandate is being sacrificed to meet the other...but in order for the NWPA to be successful, there must always exist tension between the two primary mandates. To tilt the program entirely in favor of any particular mandate would be ignoring the other basic objective of the NWPA."

Mr. Davis' prediction that constituency groups would speak out strongly if they felt one of the mandates was being sacrificed has already come true. By late 1984, a number of the first repository states were complaining about the manner in which DOE was conducting its consultation process.

Independently, the UNWMG undertook a two-phase program designed to result in enhanced consultation with the U.S. Department of Energy for all non-DOE participants in elements of the Nuclear Waste Policy Act (NWPA) implementation. The UNWMG decided to retain an independent consultant to first conduct an assessment of DOE's program, and then develop an approach for getting agreements on improvements, if needed. The Consultant who was retained has developed public participation manuals, guides, and training programs for many federal agencies, and also recently authored a public participation manual for the Edison Electric Institute for use within the utility industry. He has not been a consultant to either DOE or any of the states or tribes in connection with the repository program.

As part of this study, the Consultant interviewed sixty-seven people representing the states, tribes, interest groups, DOE staff, DOE contractors, and the utility industry. The list of people interviewed

is provided in Appendix I. A priority was given to the three states -- Nevada, Texas, and Washington -- in which DOE recommended sites for characterization as part of the first repository program. But an effort was made to consult with all interests, including two second repository states.

SECTION II: CURRENT PROGRAM

Any detailed description of DOE's current consultation and cooperation and public involvement programs would run to many pages. The program is substantial. However, a detailed exposition is not necessarily required in order to understand the issues which were raised by the people interviewed. The description below is an effort to supply sufficient information to serve as a context for the discussion of issues in the following sections, rather than an effort to be definitive.

First Repository Program:

The major decision points specified by the NWPA were: 1) to develop guidelines which would be the basis for selecting sites to be "characterized" (meaning that shafts will be dug and a major research effort mounted to understand the characteristics of each site), 2) selection of three sites to be characterized, and 3) after the characterization -- which will take a period of approximately five years -- one site is to be picked as the site for the first repository.

To date, DOE has completed one major milestone, the development of guidelines to be used in selection of sites for characterization. According to the NWPA, these guidelines were to be promulgated within 180 days from the enactment of NWPA. In fact, however, there was extensive involvement of the states and DOE's first draft of the guidelines came under heavy attack. Acting Director Morgan then made the decision that the schedule would have to slip until the guidelines were acceptable. They were finally published in mid-1984.

DOE is now approaching the second major decision point, selecting the three sites to be characterized. DOE has issued nine draft Environmental Assessments (EAs) -- one for each site considered -- and has announced that it is preparing to recommend to the President that the Hanford site in Washington, the Yucca Mountain site in Nevada, and the Deaf Smith County site in Texas be characterized. Following a public review, DOE will finalize the Environmental Assessments, and send forward its recommendation to the President. DOE believes it went the extra step in permitting this public review of the draft documents, which it believes was not required under NWPA. However, an opportunity for public review is consistent with the expectations that most federal and state reviewing entities have under the National Environmental Policy Act (NEPA).

Throughout the discussions on the guidelines and the selection of sites to be characterized, DOE has developed and utilized a number of mechanisms for consultation with the states and tribes, and participation of the public.

The primary mechanism of consultation with the states has been through the field offices. Consultation with the State of Washington and the three Indian tribes is handled through a program office in Hanford, Washington. Consultation with the State of Nevada is through the Las Vegas, Nevada office. Consultation with the three "salt states" -- Texas, Utah, and Mississippi --is handled through a program office located in Columbus, Ohio. Consultation takes place through a variety of mechanisms including letters, phone calls, and meetings. The program offices are in touch with the states frequently and regularly. The states generally report that they have effective working relationships with the Program Offices.

Each of the states and affected tribes have been provided grant monies, taken from the Nuclear Waste Fund, to participate in the consultation process. This includes money for the states and tribes to hire consultants to assist and advise on technical issues. These grant monies are substantial in size, totaling nearly $1 million dollars in some states. The three tribes have pooled a portion of their money to support a technical analysis conducted by the Council of Energy Resources Tribes in Denver, Colorado.

One issue which has emerged regarding the grant funds is whether or not the state will be given money to independently validate studies conducted by DOE and its contractors. The State of Nevada believes it has the right to grant funds for this purpose, and has initiated a lawsuit against DOE for refusing to release funds for this purpose.

In addition to regular consultation with program office staff there are also periodic meetings between DOE HQ staff and state and tribal representatives. While scheduled on an "as-needed" basis, these meetings have occurred on nearly a bi-monthly basis. During the last half of 1984, there were meetings on almost a monthly basis in an effort to define what "consultation" meant. Distinguished by their candor, these meetings are often jokingly referred to as the "encounter group" meetings. While the states and tribes believe that some degree of understanding was achieved in these meetings, the publication of the draft EAs led the states to feel that DOE still did not understand what consultation meant, since states felt they were excluded from consultation on the methodology used in the EAs to rank the sites.

In addition to periodic meetings with Washington HQ staff, there have also been several workshops designed to address a particular topic, such as transportation. In many cases these workshops include representatives from the second repository states as well. In some cases

these workshops have actually been called by the states, or by an organization such as the National Conference of State Legislatures, with DOE simply providing technical staff.

In addition to consultation with the states and tribes, DOE has also conducted a number of public meetings and hearings. In particular there have been many meetings in the "salt states," during the process of screening down the number and location of the sites. In the last series of screening meetings, a total of more than 1,800 people participated in meetings in three states. In Washington there was a first round of workshops during the fall of 1984, and then another round of workshops which coincided with the issuing of the EAs. Subsequently, the State also conducted an additional set of workshops. This was followed by formal hearings to permit public comment on the EAs. In Nevada there was also a round of workshops preceding a round of formal hearings on the EAs.

A number of public meetings -- over and above those outlined above -- have also been held at the request of the public. Citizens or local elected officials in an area may, for example, invite DOE to meet with them to discuss an issue of concern.

The ONWI Program Office (salt program) in Columbus has also established public information offices in each of the three salt states. Each of these offices is staffed by local people who have been trained to answer questions and locate information. The Public Information offices are not intended to advocate on behalf of the repository, but are simply designed to provide an easy source of reference for the local public. The Utah and Mississippi Public Information Offices have been operating for several years. The Texas Office was established at the end of 1984. Previously, the local Congressman had opposed such an office, claiming that it would be used for advocacy of the repository and was a waste of taxpayers' money. In deference to his wishes DOE did not put an office in Texas until considerable local pressure built for such an office. The last election also resulted in the election of a new Congressman.

Other than its numerous reports, DOE has issued relatively few general information documents. In the past DOE has been accused by several Congressional committees of publishing advocacy documents, and as a result DOE has been cautious in the publications area.

Despite this extensive consultation program, DOE has not reached "consultation and cooperation" agreements with any of the states or tribes. In fact, only Washington State has entered into formal negotiations on a C&C agreement. Twice negotiators from the State and from DOE have reached tentative agreements. The first time, the State legislature took a role in redefining the concerns of the State team, and sent the team back for a second try. New language was negotiated and has been presented to the Nuclear Waste Board for approval, following which the legislature and Governor will also have to approve the language.

There are two issues between the State and DOE which were not worked out. These are the issue of unlimited liability, and State review of the defense waste storage program at Hanford. The State's position on liability is that if this repository is as safe as DOE says it is going to be, DOE should be willing to grant unlimited liability. DOE states that it is unable to grant unlimited liability without Congressional authorization, nor has Congress ever granted this kind of unlimited liability on any other issue. Washington's concern about liability is likely to be raised by any state negotiating a C&C agreement. The concern with defense waste is more unique to Washington, because of the history and function of the Hanford Reservation, but Nevada might have similar concerns regarding the Nevada test site.

The problem with the signing of C&C agreements is that there is a perceptual difference about what it means to sign an agreement. DOE, and many state staff, believe that the C&C agreements are simply procedural. If anything, according to this view, the C&C agreements are almost entirely to the advantage of the states and tribes, because the agreements guarantee rights to the tribes and states which exist right now only because DOE is willing to grant them. Also, DOE staff argue, there will be greater funding flexibility under the agreements. Virtually anything agreed to in a C&C agreement can be funded, while currently DOE must operate under more limited procurement rules.

But others, particularly within the states, feel that signing a C&C agreement is an act of complicity with DOE, and grants DOE a legitimacy which they don't believe DOE deserves. These people treat the C&C agreements as more of a political document, so that the agreements would contain both procedural and substantive items.

At the present time, these forces exert enough influence within the states that it is not certain whether C&C agreements will ever be signed, and particularly not until some of the bad feeling about the site selection process has subsided. DOE is currently operating "as if" the basic rights which it assumed would be granted in C&C agreement were already in force, and therefore there is no urgency to push for negotiation of formal agreements at this time. Further discussion of this issue of the C&C agreements is provided in Section IV.

Second Repository Program:

The major challenge facing the second repository is to screen numerous sites in seventeen states, and begin to narrow both the sites and the states which justify additional study. The second repository program has the advantage that the reality of a second repository is in the future, so that the states feel less threatened. The disadvantage, though, is that the number of states involved creates both complexity and a strain on resources.

The second repository program faces its first major decision point at the end of 1985, when it selects sites which will receive further study. It is anticipated that this will sharply reduce the number of potentially affected states.

The second repository program is run out of the Chicago Operations Office, assisted by Battelle staff in both Chicago and Columbus.

The second repository program employs most of the same mechanisms discussed in the description of the first repository program. The most important mechanism for consultation is through frequent and regular communications directly between the field office and the states. This communication is augmented by regular meetings between the Program Director and representatives of the states. At present there are no Indian tribes which have been designated as having affected status, but a contract has been issued to the National Congress of American Indians to provide all the potentially affected tribes with information about the program.

The states also participate in occasional meetings conducted by DOE HQ staff, although there have not been as many of these meetings as with the first repository states.

There are no C&C agreements signed with any of the states or tribes, and because of the early stage of analysis there is little need for one. DOE has provided grant money to each of the states, averaging about $200,000 per state.

The most notable difference between the first and second repository states -- in terms of mechanisms used for consultation -- is that the second repository program has involved the states directly in designing the methodology which would be used to select the sites for further study. This methodology was developed in a series of workshops. The states will also be involved in a series of workshops during which they will employ the methodology to rank the sites being considered. The states' rankings, as well as the rankings of DOE staff and consultants, will all be public information, and will be considered by DOE in developing recommendations.

Because the states have been involved in developing the methodology, and there will be considerable visibility for how it is used, the states are generally pleased with the methodology, and the manner in which the second repository program is being run.

DOE is currently not planning a formal series of public meetings to discuss its upcoming recommendations, but will respond to requests from the states or communities. DOE anticipates that it will be asked to hold public meetings in virtually all the states, with the possible exception of states in which there are no sites recommended for futher study.

AMFM Panel:

Even in passing the NWPA the Congress was not convinced that it had identified the best mechanism for financing and managing the repository program, and directed the Secretary of Energy to conduct a study of alternative methods for financing and managing the program. The Secretary appointed a "blue ribbon" panel to consider the issue and prepare a report. The AMFM Panel concluded that the present management structure -- embedded within DOE -- lacks the stability and continuity for effective program implementation. The Panel recommended the establishment of a federally chartered corporation which would assume the responsibility from DOE for the siting and management of the repository program. The Panel also made a number of recommendations for steps they believed needed to be taken regardless of which entity manages the program.

The AMFM Panel's report was submitted to the Secretary, reviewed by the Office of Management and Budget, and transmitted to Congress on April 18, 1985.

SECTION III: STATE & TRIBAL POSTURE TOWARDS THE REPOSITORY

This section briefly describes the concerns about the repository expressed in the five states and three tribes where interviews were held, and the manner in which these entities are organized to participate in the consultation process. Although it isn't mandatory to know the position of the states and tribes, it does provide a useful context in which to interpret the issues raised in Section IV.

INDIAN TRIBAL GOVERNMENTS

Nez Perce:

The Nez Perce Tribe was the last of the three tribes to be granted affected status, and really didn't meet with DOE people until January 1985. They are in the process of hiring a full time staff person to work on the project, but had not hired anyone at the time of the interview. The tribe receives its technical support from the Council for Energy Resources Tribes, in Denver, Colorado, and has entered into a joint contract with Umatilla and Yakima tribes for these services.

The Nez Perce have not taken an official position regarding the repository. Their primary concern is transportation. They are particularly opposed to transporting high-level waste along Highway 12, since they report a history of numerous truck and trailer wrecks, particularly along the Wild and Scenic River portion of the route. Their concern is that waste released by an accident could get into the river and affect everybody downstream.

The tribe is concerned about the release of radioactivity anywhere in the Columbia River system, even downstream of them, since anadromous fish would have to pass through the area of radioactivity in their passage upstream.

They are basically suspicious of claims about technology's ability to contain the waste, and point to the releases of toxic wastes as evidence that well-intended programs often do not succeed. As the tribal representative put it: "As soon as man can cap Mount St. Helens, then I'll feel safe."

Umatilla Federated Tribes (Pendleton, Oregon):

The three major concerns of the Umatilla tribe are: 1) the potential impact on fisheries covered by radioactive contamination of any part of the Columbia River system, 2) transportation of waste, since the reservation is bisected both by Highway I-84 and the Union Pacific Railroad, and 3) protection of archeological and cultural sites sprinkled throughout the ceded lands.

The tribe has not taken an official position regarding the repository, and describes its posture as "just trying to participate meaningfully." To date it has gathered baseline data about the tribe and its resources, and has just hired a Resource Director who will represent the tribes' interests in the repository program. This new staff person was just beginning work in February 1985. Until now the tribe has been represented either by its attorney, or its Staff Director.

The tribe relies heavily on the technical counsel of the Council of Energy Resource Tribes in Denver, Colorado, under a joint contract with the Nez Perce and Yakima tribes.

Their assessment of the general political climate in their part of Oregon ranges from general apathy to strong opposition to the repository, with no apparent support.

Yakima Indian Nation:

The Yakima Indian Nation has been concerned with the repository issue for some time, and worked hard lobbying Congress to ensure that the consultation and cooperation language regarding the tribes was in NWPA. The tribe prides itself on being moderate and responsible in the political tactics they employ. As they describe it: "We've never participated in a demonstration and never carried a picket sign...but we may be the most litigious tribe in history."

The tribe describes its position as "pro-safety," rather than "anti-repository," but it is clear that they are opposed to locating the repository at Hanford. As they put it: "We think we've got the cards, so we don't have to play political games. Consultation is the way to show that the repository shouldn't be at Hanford." They stress that

their culture is dependent on the totality of the environment, with the water the most crucial element of survival, and fish the next most important. They believe a repository at Hanford threatens both these resources. They also state that their culture has a very long-term perspective, so it isn't concerned primarily with the impacts upon this generation. In a culture which reveres ancestors, each person gains respect by caring for future generations.

One of the major concerns of the tribe is the existing defense waste at Hanford. As they see it, the only rationale for why DOE is even considering the Hanford Site is that it is on a federal reservation. But that doesn't take into account the cumulative effects of combining the existing defense wastes with new commercial wastes. They claim that there are as many as 400 Superfund-level toxic waste sites on the reservation (citing Washington State staff), with as many as 115 springs "putting stuff into the Columbia River." They also claim that radioactivity levels at the tritium pool far exceed federal and state standards, and ducks or other birds which land on the pool pick up significant amounts of radiation. They also point out that DOE is operating what amounts to a breeder reactor as a test project, even though the Carter Administration claimed that breeder reactors were unsafe. All of this is rationalized by virtue of the facility being "temporary," even though it has been operating since World War II.

The tribe believes that they may be able to block a commercial repository just based on the hazardous waste problems which already exist on the site, and believe this is why the EA doesn't address present conditions. But under NEPA, they believe, DOE will be forced to discuss cumulative impacts. They also point out that the federal reservation was established under the War Powers Act, but believe this will not hold up for a commercial respository.

The tribe believes the Hanford site is fatally flawed because of groundwater problems, and states that: "When they open that shaft they'll have a cascade of water. They won't be able to store spuds in that hole, let alone nuclear waste." But the tribe is doubtful that Hanford will receive an adequate evaluation because the same people doing the technical studies (Rockwell) have a tremendous stake in keeping this site under consideration. If another site is picked, Rockwell will be out of work.

FIRST REPOSITORY STATES

Nevada:

Just a few years ago Nevada experienced the decision-making process which went on during the Carter Administration regarding siting of the MX missles. As seen by Nevadans, the "blue-suiters" from the Air Force epitomized the federal government's arrogance towards the states, and personified all their fears about not being consulted about the future of their own state. However, as they see it, Nevada

eventually beat off "the feds," and learned some lessons in political organizing along the way. When the NWPA passed, Nevada saw the need to get organized down to the local level quickly, believing that they "got burned" on MX because this was not done.

Because of the Nevada test site, the State and DOE have had an on-going relationship for many years, and some discussions about the possibility of a repository occurred as early as 1974. In 1980, prior to passage of the NWPA, DOE offered Nevada the opportunity to receive funds to review DOE's program, but the previous Governor felt that acceptance of funds would be viewed politically as acquiescence to a repository in Nevada. When the present Governor entered office in 1982 he reversed this policy, despite a strong stand against the repository, and directed State staff to get the funds to do a very thorough review. Originally, responsibility was located in the Nevada Department of Energy. But when this organization was abolished, the program was moved to the Department of Minerals, but attached directly to the Governor's Office because of his personal interest in it.

The Governor's opposition to a repository in Nevada is reported to be very strong, and the position of the staffleve1 people is described as "hardening." There are those who claim that the Governor's opposition is a matter of strategy, and might change under the right conditions. Others close to the Governor believe that public opinion will be substantially shaped during the next six months, and if it hardens into opposition, will remain unchanged.

In the State legislature, however, there is a wider range of opinion, and if the legislature were asked to take a vote of the issue at this time it is not clear how that vote would come out. Even legislators who are mildly supportive, however, are aware that it is an issue which could be used against them effectively, so are being very careful.

The legislature has established an interim joint committee to review the State's program and keep the legislature informed. Legislation is currently pending to make this a permanent committee. Members of this committee work closely with staff in the Governor's Office, to ensure that the State presents a unified front to DOE. This committee is anxious, however, to ensure that Nevada maintains a cooperative relationship with DOE, if possible. Members of the legislative committee have also been active in getting the National Conference of State Legislatures to play a role in the process, and have been among the most active legislators in NCSL activities regarding the repository. They stress that DOE needs to pay attention to the legislatures, not just the governors.

Nevada is unique among the states in having established a formal process for consultation with local governments. As noted above, this was done in response to "lessons learned" during the MX siting process. Funds are passed through to local governments to cover costs of participation, local governments are kept informed of any major meetings or reports,

and local comments are solicited as part of formulating the State's position. While most local officials are complimentary of the State's efforts, at least one official complained that the NWPA had a fundamental flaw in putting the State in the position of representing local communities.

The overwhelming concern expressed by Nevadans is that if the repository is located in Nevada, people will see Nevada as an unsafe or unattractive place to visit, and the all-important tourist and gaming industry will dry up. It isn't even a matter of whether or not the repository is safe. As long as people perceive it as unsafe, they may not come.

This perceptual problem is particularly tied to transportation, since the major highway routes would require that the waste be trucked through or near Las Vegas. The major concern, of course, is some sort of accident which releases radioactivity in Las Vegas. Fears are expressed of terrorist attacks while "drivers stop at McDonald's in town for a snack." Some developers have discussed delaying developments along major highways which trucks might travel, for fear knowledge that nuclear waste is being transported past these homes will affect the marketability of their developments. Local officials report that "there will be a fight to the death if they try to bring that stuff downtown." While most of the concern is linked to highway transportation, there was also one report of a development being held up because it is bisected by the major train route.

Nevada officials are uniformly critical of the transportation studies which have been done so far, because they are broad and generic, without any consideration of local factors and roads. They also complain about the fact that the Department of Transportation sets rules regarding transportation, and they have no influence over DOT. They are concerned about the control of private contractors who will be doing the transporting, and cite a number of supposedly "safe" toxic waste transportation systems which have failed due to lack of control or regulation of the private contractors.

Officials see the "inadequacy" of the transportation studies as symptomatic of DOE's failure to address off-site impacts. As they see it, DOE is totally concerned with geologic containment, and sees the offsite issues as minor and peripheral. To local communities they are much more significant than geologic containment.

Another source of concern to local officials is the cost involved in providing emergency response in case an accident does occur. They complain that DOE makes lots of promises that these problems will be addressed, "but it is always treated as some minor problem they'll get around to eventually."

Texas:

Among the three priority states Texas is unique in that there is an existing, economically viable, use of the land already. Without DOE activities, neither Hanford nor Yucca Mountain would be anything more than desert. In Texas, however, there has been considerable agricultural productivity on the land since the turn of the century. The area around the proposed Texas site, for example, produces 90% of the world's hybrid sorghum seed.

The area also has a strongly defined culture, and sees the proposed project as a threat to the family farming way of life which has been there for many years. People from the area are quick to point out that the jobs generated by the repository would not employ farmers, but would likely involve technical people and scientists who would live in Amarillo, the nearest town of any size.

Not only would the new jobs not be in agriculture, but they see the repository as threatening the agricultural jobs which already exist. Several of the major employers in the area, most notably Frito-Lay and Richardson Seed Company, have indicated that they would have to reevaluate whether they could continue to operate in the area if the repository were built there. Their concern is that even if there were no risks, if people across the country even perceived there could be risks, people might buy their competitors products instead of theirs. Just to be competitive, they might have to consider moving. So, as locals see it, the project would spell the end of the way of life that exists there now. It might employ lots of people, but in the process it would destroy the existing agricultural base.

Locals are also deeply concerned about radioactive leakage into the two aquifers, the Santa Rosa and the Ogallala (the country's largest), which must be penetrated in order to construct the shafts. Construction of the shafts would require use of cryogenic technqiues which have been used previously in oil well drilling, but locals question whether the technology has ever been used on anything of this size and complexity. In fact, there are considerable concerns that the characterization process itself, whether or not a repository is ever built, could do irreversible damage to the aquifers.

Another concern of the local agricultural community is that farm land values have already dropped 30-50% since the possibility of the repository was announced. While acknowledging that some of this drop is due to economic conditions in farming generally, they feel a significant percentage of this drop is due to the repository. Even if they are paid the fair market value of their land, they wonder, will it be the fair market that existed previously, or the fair market after threats of the repository reduced land values.

So, unlike Nevada and Washington where it is the local community which supports the repository, in Texas there is considerable evidence that the local community does not support the project. An argument can be

made -- and is made by some DOE and Battelle people -- that the "anti's" constitute only a small group of 60-100 people, and the rest of the public hasn't yet made up its mind. But unlike Hanford and Nye County, the "anti's" clearly have a strong base of support in the community. Only with some difficulty is it possible to find anyone who will admit to being even mildly supportive of the project.

The two major citizen groups in the area are STAND (Serious Texans Against Nuclear Repositories) in Swisher County, and POWER in Deaf Smith County. These two groups have retained an attorney and a technical advisor who are associated with an environmental information center in Albuquerque, New Mexico. This is of considerable interest, since the alliance between the local Texans and the environmentalists is not a natural or normal phenomenon. In this part of Texas environmentalists are seen as "opponents" of agricultural interests. But on the topic of the repository they have established a "marriage of convenience."

One of DOE's problems in Texas has been its "revolving doors" -- frequent changes of staff at a Washington HQ level. As a result, the same faces have rarely reappeared in Texas, and there have clearly been major shifts and changes in policy each time someone new appears. The result is that DOE's credibility on the ground in Texas is extremely low. The local culture is such that "a man's handshake is his bond," and may even bind his family for several generations. In this context, the changes in faces and policy have not been viewed as inefficiency or ineptitude, but as a basic lack of integrity.

At a State level, the Governor has expressed strong opposition to the repository, and the State legislature seems content to have the Governor take the lead. As a result, unlike Nevada, where there is a formal process of consultation with local governments, or Washington, where decision making is shared between the Governor and the legislature, in Texas decisions regarding State policy have been made primarily in the Governor's Office.

Washington:

Unlike Nevada and Texas, Washington has not taken a formal position of opposition to the repository at Hanford, but has pursued a policy of careful oversight of the process. The State legislature has passed a "memorial" stating that it is the policy of the State of Washington that Hanford not be considered unless granite sites are compared with it, and Hanford shown to be the safest site. The political reality in the state is that people in the Tri-Cities (Hanford-Richland-Pasco) area vocally support the project because of its potential economic benefits, while there is highly organized opposition to the project in many other parts of the state. The state's rather moderate position is also tactical, with key state figures believing that if they express overt opposition, any technical points they raise can be dismissed by DOE as simply being used for opposition. If they remain

neutral, but responsibly critical, then they believe that Congress and the courts, if not DOE, will have to take their concerns seriously. Some of the people who take this position are in fact opponents of the project, but believe that any objective review of Hanford's groundwater-movement problems will result in Hanford's elimination. However, this position was undermined somewhat by Hanford's inclusion in the final three sites, and there is some indication that major political figures in Washington State are considering whether or not they need to be more actively opposed in order to protect the State's position.

Because the Hanford Reservation has operated in Washington for many years, there has been an ongoing relationship between the State and DOE over the years. During the time that Dixie Lee Ray was Governor, a working group was established which met several times a year. Everybody agrees that this was more a matter of DOE briefing the State about what was going on, rather than a genuine consulatation process. But when Governor Spellman came into office the working group became dormant.

But in the summer of 1982, with the NWPA pending in Congress, the State decided it needed to take a more active role. The Governor issued an Executive Order which established a Nuclear Waste Board, which reported to him, and a Citizens Advisory Committee. With the passage of the NWPA, the State legislature became concerned that the program was essentially under the Governor's control and passed legislation which called for equality between the Governor and legislature in management of the program. The program was transferred into the Department of Ecology, but the Nuclear Waste Board and Citizens Advisory Committee structure was maintained. There are seven voting members of the Board, and eight non-voting legislators who play a very active role.

The major concern raised in Washington about the repository -- other than the unlimited liability and State oversight of defense wastes issues discussed in Section IV -- is about the adequacy of the geologic containment in light of significant groundwater movement on the site. Several of the people interviewed believe that the groundwater movement is a "fatal flaw" on the Hanford site, and that an objective review will result in its elimination. There are also concerns expressed about the feasibility of constructing the shaft, due to rock bursts and sheers. The concern is that the technology being proposed has not been used before under these conditions, and may not be as effective as estimated. This is particularly true because of the many uncertainties of working in basalt. There is a fear that DOE will get committed to a site, and push beyond its technical capability.

SECOND REPOSITORY STATES

Minnesota:

Minnesota has three staff people working on the project, as well as contracts with other State agencies and a hydrogeologist. As a result, it is about the largest and most active of the programs amongst the second repository states, with only Wisconsin on a par.

The program is directed by an advisory board which includes State commissioners, legislators, and citizens. This committee is not statutory, but as established by executive order of the Governor.

The State has taken an offical position of opposition to the siting of the repository in Minnesota. The State has also passed legislation stating that the State of Minnesota will not grant drilling permits to DOE until there is a C&C agreement between DOE and the State.

Because no specific site has been selected, the State's concerns about the repository are rather general in nature. The State is very concerned about the transportation and the pre-closure handling of the material (particularly in Minnesota's severe climate), and the potential for groundwater transport after closure. Any site in the east will be below the water table, in the saturated zone, so "the repository will be flooded as soon as it is closed up."

The State is hopeful that no second repository will ever be built. They suspect that as the costs on the first repository mount there will be a tendency to want to sit back and see what happens with the first repository before committing further funds.

There is a strong and active environmental community in Minnesota, and the State is already under some criticism for attempting to put out "objective" information. The result of so-called "objective" information, environmental groups feel, is that it comes off as if the State is not concerned, when in fact the State is in opposition. This opens the State up to charges that it is in complicity with DOE.

New Hampshire:

New Hampshire has been actively involved for only approximately a year. The designated contact point for the State is through the State Planning Office, but it is clear that key legislators are also staying actively informed. The Chairman of the Assembly Committee on Science and Technology, in particular, maintains a particularly active interest, because of his membership on the AMFM panel.

At this stage in the process the State is primarily concerned with the credibility of the screening process. The State has not taken a formal position regarding a repository.

New Hampshire officials feel that there are going to be considerable social and economic effects for any state which takes the repository, beyond those which can be directly identified and reimbursed. As a result there will need to be incentives for the states beyond simple reimbursement for local services. They point to the fact that many hazardous waste siting laws now build in incentives for any state or locality which will accept them.

SECTION IV: PROBLEMS AND ISSUES

This section summarizes the problems and issues the Consultant identified regarding DOE's consultation and cooperation program.

It is always difficult when dealing with problems and issues to deal with the question of motivation. Are these issues of genuine concern to the person raising them, or are they an expression of opposition to the repository? If DOE responded genuinely to these concerns, and resolved them, would there just be another set of complaints following right behind because the people raising the issues have a stake in questioning the program?

All the actors in this situation have a self-interest, and many actors have an interest which can be served by raising problems with the manner in which DOE is conducting the program. States and tribes which oppose the program can attempt to delay the process by challenging the manner in which it is conducted. Many consultants and researchers, both within the federal reviewing agencies and among those hired by the states, look at the repository as an opportunity for funding of research which they believe is important, but which may or may not contribute directly to completion of the repository. As a result, it is easy to dismiss all complaints as simply an expression of opposition, or as an attempt to get more research dollars.

The difficulty is that once this becomes the prevailing attitude -- that issues are just being raised to block things -- the actions of the agency tend to become a self-fulfilling prophecy. If you assume that issues are not genuine and don't have to be addressed, then you will act in ways that will increasingly give "the opposition" genuine and legitimate complaints to use as a cudgel against you. Typically the negative perceptions of each other become stronger, and the cycle of adversarial action escalates.

While trying to validate claims, and drawing from past experience in this area in an effort to discern the wheat from the chaff, the Consultant has chosen to "take seriously" the problems and issues which were raised. In the realm of political reality, perceptions dictate action. If a state or tribe is convinced that DOE's studies are not credible, it will act accordingly, whether or not that perception is accurate. For this reason, this report presents perceptions

as significant and relevant data. It is not a "fact" that the perception is accurate, fair, fully informed, unbiased, etc.

Nevertheless, these perceptions are important to DOE. In many ways, DOE is dependent on the states and tribes for the credibility of the program. DOE is dependent both in the sense that the states' and tribes' reactions will greatly influence public opinion, and dependent in that the states and tribes serve in an oversight role which the public will need to be satisfied that the program has been adequate. As someone from one of the states commented: "Even DOE will admit that the state's participation has improved the program."

FIRST REPOSITORY PROBLEMS AND ISSUES

1) Overall Evaluation of the Consultation Process:

Representatives of the states -- and to a lesser extent the tribes -- are deeply dissatisfied with the manner in which DOE has conducted the first repository program. Their complaints are not leveled primarily at the Program Offices, but rather at DOE Headquarters' policy and staff. Recent efforts of the Office of Policy and Outreach to improve the program have been undercut by the overwhelming skepticism which the states and tribes have towards the Draft Environmental Assessments issued in December, 1984 (see discussion below). The states now talk openly of a protracted legal and political battle with DOE, and believe that DOE has virtually no possibility of completing characterization of three sites within a five-year time period.

The resistance of the states hardened noticeably even during the period in which the Consultant conducted interviews. The issue of greatest concern is the manner in which decisions were made to select the three priority sites.

The states are already under intense pressure from internal constituencies to be more overt in their resistance to the repository. There is only very limited support for the repository in any of the priority states. There is support in the Hanford area in Washington, and in Nye County, Nevada, but it would not take too sophisticated a politician to count the votes in those areas and contrast them with the votes in much more populous areas in which the range of political opinion ranges from apathy to overt hostility, with no base of support at all.

Even in those parts of the state where there is some support for the repository legislators are very wary. One potentially supportive legislator stated: "DOE just hasn't given us what we need to be able to publicly defend the program." No state is likely to embrace the program. But if they are going to be able to even participate in a consultation program without being accused of complicity, they must be able to defend the adequacy of the consultation process.

From a political perspective, DOE must meet the burden of proof. So far they have not met this burden to the satisfaction of the states.

The current resentment of the states can be interpreted as a natural function of being selected as a site. The resentment may lessen as states "get used to the idea," or if the compensation concerns of the states are addressed by "putting more on the table." There is at least one key utility industry figure who believes that DOE has the opportunity to build a base of positive support over the next five years. On the other hand, public opinion could harden into opposition which might be difficult to alter no matter how credible the remainder of the program is, or what incentives are offered to the states.

From the perspective of the utility industry, the primary concern is whether the level of opposition in the states will result in major time delays or cost overruns. There is also the possibility of the characterization program being completed, with DOE unable to go ahead with construction of the repository because the program doesn't have sufficient credibility to permit a Congressional override.

2) Exploratory Research versus Applied Engineering:

There appears to be a fundamental difference of perception between DOE and the federal, state, and tribal reviewing entities as to whether or not the repository program is applied engineering, or exploratory research which pushes the outer edge of the state-of-the-art. At times this difference in perception was so pronounced that moving from interview to interview the Consultant found it was almost as if people were talking about a different project. In some cases people were talking as if DOE was getting together a permit application for a very large and complex facility, with the challenge being the complexity of the task, while in other cases people were talking as if DOE were finding out whether or not it was going to be possible to build a repository at any of the sites.

It appears certain that the attitude of key DOE staff at the time of the passage of the NWPA was: "All we need is just a little more research, and we'll be ready to build it." The attitude of the other federal agencies the Consultant interviewed was that there continue to be significant basic research questions which are unanswered, and like all basic research, the possibility remains that fresh discoveries may occur which will fundamentally alter the definition of the problem.

At a generic level, the concerns at each site are:

Hanford:

1) Groundwater Movement: There are a number of people who believe that the amount and speed of movement of groundwater far exceeds the estimates made in the models. Even the people who developed the model will say only that they have

made professional judgments based on available data and there are areas of substantial unknowns where new data might fundamentally alter their estimates of groundwater movement. This is a particular problem at Hanford because the proposed site is only six miles from the Columbia River.

2) Sheers and Bursts: Basalt is a volcanic formation, with successive layers of rock. Some of these layers are under intense pressure, and it is not clear whether this pressure will be released in some unpredictable manner if a shaft is built through these layers. Also, the layering effect is of some concern as regards groundwater movement. Because it is a volcanic formation, the top of each layer was exposed to weathering between volcanic events. These may mean there is higher porosity -- and resulting water transport -- between layers.

Yucca Mountain:

1) Seismic Activity: There are indications that severe earthquakes may have occurred in the Yucca Mountain area in the distant past. Theoretically anything below ground would be moving with the quake, rather than antagonistically, and would not be damaged. But that is a theory.

2) Uncertainties about Tuff: Rather little basic research about tuff has been conducted, in part because it is in the unsaturated zone. Historically, geologic research has been conducted primarily in those areas where there was some hope of finding groundwater, rather than in areas where there is none. So comparatively less is known about the transport characteristics of tuff.

Deaf Smith County:

1) Breaching the Aquifers: Construction of shafts at Deaf Smith County will require breaching two aquifiers, one of which, the Ogallala, is the largest in the United States. A cryogenic technology will be used, which has been developed in the mining industry. Some perceive this as the simple application of an existing technology. Others see this as extending far beyond the existing technology, and point out that little is known about the speed at which water is moving in the aquifer. If water is moving too rapidly, they believe the technique will not be usable.

Some aspects of the repository are relatively straight forward, if complex, while other aspects are stretching the outer edge of present knowledge. This dual nature of the program contributes to the problems the states have in reviewing the program. There are many post-closure questions that can only be answered through characterization. To

states which are used to being able to insist that applicants answer questions before they begin construction, DOE is, in effect, saying: "Let us get in and do the site work, and then you'll get your answers."

The problem is that because there are many questions which cannot be answered except by characterization, DOE cannot prove that one of the other sites is not better even though it believes -- based on the present stage of knowledge -- that it picked the best three sites from among the first repository options. What DOE is doing might be far better explained as: "Given finite resources, it is reasonable to put our dollars into exploring a limited number of sites. Although there are questions remaining about each one site, based on what we know so far -- and there is plenty we don't know -- it seems reasonable to concentrate our resources on these three sites, knowing full well that we may run into problems on any of the sites which could rule it out completely."

The states feel that sometimes DOE admits to the exploratory nature of the program, and other times it is back into the "we just need a little more data and we're ready to start construction" attitude which existed in DOE in 1982.

The result is a confusion about the standard which is to be applied during evaluation. The standard appropriate to an exploratory program is much less rigid. But it is not possible to turn around at the same time and say, "Don't worry, we've got everything figured out."

Even within DOE there is not a a clear agreement about which image of the program is correct. DOE is committed to the schedule in the NWPA, but there are people within DOE who acknowledge that there are major questions unanswered.

Some utility observers are critical of DOE for not doing a better job of distinguishing what is known -- and proceeding with those parts of the program -- from what is unknown and still requires additional research.

3) The "Horserace" Heritage:

In both Washington and Nevada the question of whether the program is exploratory, or simply applied engineering, is colored by the history of DOE's efforts prior to the passage of the NWPA. In both those states the Project Offices had the feeling of being in a "horserace" to see which one could land the repository. Whichever office got their data completed first would win the repository. It was assumed that it was desirable to win. It was just who could get there first.

It is also clear that DOE's contractors shared in the horserace, for, as is discussed below, different contractors are associated with the different sites and stand to gain considerably by having the site on which they are working picked as the ultimate repository. In one case

the project manger for one of the contractors became so much a booster for "his site" that he had to be replaced. It is hard for the public to believe that the same man who is out "selling" the advantages of locating a repository at a particular location is simultaneously managing the scientific studies in such a way as to meet the most rigorous tests of objectivity.

While the states acknowledge that the Project Offices show a considerable shift in attitude, they remain concerned that the inherent self-interest in "winning" the repository for a particular site remains lurking under the surface.

The "horserace" mentality has died out substantially, but states and tribes still fear it will re-emerge and remain somewhat suspicious of DOE's ability to be objective.

4) A Good Site versus The Best Site:

There is another important question about the standard which must be met for site selection. DOE has said repeatedly that in the first repository program it is not trying to locate "the best" site in the country, merely a site which is fully adequate. The US Geological Survey (USGS), with experience in screening sites, accepts this standard as well, believing that it is imposible to pick a best site, and reasonable to select from those sites about which the most is known.

In conversations with the states, though, it is clear that the standard they are expecting is that "the best" site will be picked. In public meetings it is also clear that the public assumes that the "best site" is going to be picked. This has to do, of course, with the public perception that nuclear waste is incredibly dangerous, therefore it is only realistic that only the safest or "best" site will be chosen. Most of the public is totally unaware of how the waste is stored now, and the safety risks associated with that.

The states' belief that "the best" site should be the standard reflects the political problem for a state administration in a state picked as a repository site. Each of the priority states faces the possibility that it may have to explain to its constituents why the repository is going to be placed in that state. If a state can say, with some confidence, that the reason the repository is going to be located in that state is because the federal government has determined that "the best" site is in that state, then there is some chance of public acceptance, albeit grudging. But if the state has to defend a site which is merely "adequate," there is always the risk that the public will wonder whether they are getting the repository because the leadership of their state was not as effective as the leadership of other states. This is not a good question to have people asking when you are running for public office.

The same problem also applies to Congressional vetos. Will Congressmen be willing to override a state's objections for an adequate site, or will they need to be convinced that they are voting for the best site?

This problem was inherent in the decision to "grandfather" the first repository sites. The public perceives an immense risk associated with a repository and will have difficulty accepting a site which does not meet the same standards as a second repository site. The problem is particularly acute at Hanford, where there is a rather common knowledge that if DOE were to start from a national screening, the Hanford site would not have been included. With both Hanford and Yucca Mountain there are problems convincing people that they aren't included just because they are federal reservations, rather than because of their safety.

5) Understanding what Consultation Means:

This issue was succinctly stated by a DOE Program Officer who said:

> "DOE doesn't yet have a clear understanding of what consultation and cooperation or public participation means. The states view consultation and cooperation as a full partnership. DOE tends to define C&C as a matter of defining our own position, getting it written up, then letting the states react to it."

In the fall of 1984 DOE conducted a series of monthly meetings with state and tribal leaders which addressed precisely this issue. After three such meetings there was a general consensus that consultation meant the states and tribes would "have an opportunity to influence" decisions. Such a definition stops short of a full partnership, but as the situation has become more adversarial the states themselves have pulled back some, fearing that full participation would result in co-optation. Whatever consensus was developing seems to have been voided by the publication of the EAs, as the states feel they were excluded from development of the methodology used in site selection.

The Consultant conversed with a staff member of the U.S. General Accounting Office who had conducted an extensive review of the legislative history of the Act in an effort to establish the Act's intent. Twelve different Congressional committees played some role in the passage of the Act, and the record indicates that each of these committees had a somewhat different interpretation of the consultation and cooperation provisions of the Act. Since there was no conference committee report, and the final drafting was done hurriedly before the close of a post-election legislative session, there is little other basis for establishing intent. The basic situation is: "what you want to see is what you get."

The Act itself defines consultation and cooperation in different ways in different parts of the Act. In Subtitle A, which covers the siting of the repositories, it states:

> "...the Secretary shall consult and cooperate with the Governor and legislature of each State and the governing body of any affected Indian tribe regarding the public health and safety, environmental, and economic impacts of any such repository. In carrying out his duties under this subtitle, the Secretary shall take such concerns into account to the maximum extent feasible and as specified in written agreements entered into under subsection (c)."

In Subsection B, which refers to interim storage, the Act states:

> "For the purpose of this subsection, "process of consultation and cooperation" means a methodology by which the Secretary (A) keeps the State and eligible Tribal Council fully and currently informed about the aspects of the project related to any potential impact on the public health and safety and environment; (B) solicits, receives, and evaluates concerns and objections of such State and Council with regard to such aspects of the project on an ongoing basis; and (C) works diligently and cooperatively to resolve, through arbitration or other appropriate mechanisms, such concerns and objections. The process of consultation and cooperation shall not include the grant of a right to any State or Tribal Council to exercise an absolute veto of any aspect of the planning, development, expansion, or operation of the project."

Although this language in Subsection B seems to imply a stronger effort to resolve differences by referring to "arbitration or other appropriate mechanisms," this apparent difference may be resolved by the fact that the definition in Subsection A refers to the written agreements in subsection (c), which states:

> "Such written agreements shall specify procedures...(11) for resolving objections of a State or affected Indian tribes at any stage of the planning, siting, development, construction, operation, or closure of such a facility within such State through negotiation, arbitration, or other appropriate mechanisms."

The present situation is one in which both sides accuse the other of failing to fulfill the intent of the Act. The states believe that DOE makes up its mind, lets the states react, and then goes ahead and decides whatever it wants. This is not, they believe, genuine consultation. DOE, on the other hand, points out that "cooperation" requires the commitment of both parties, and claims that the states have assumed an adversarial posture which makes cooperation very difficult. It is possible that Congress was a little naive about the willingness of the states to work with DOE in a cooperative problem-solving process, since it would put the states in the position of

appearing to cooperate with DOE in siting the repository. In many states this would be a very risky political position. It is difficult to determine how much of the state concern about co-optation is a function of this political reality, and how much a function of the manner in which DOE has acted since the passage of the NWPA. The states' most frequent complaints are 1) that DOE does not provide early participation, but includes states only after it is already committed to a decision; (2) there is no way to track how particular comments affect DOE decisions, and 3) having gone through the process of consultation, DOE just proceeds with its announced position anyway.

6) Attitude/Culture:

Throughout the interviews there were constant complaints that even when DOE HQ staff attempted to consult with the states, a basic attitude came through which sabotaged this effort. Examples of comments were:

"They still have the old AEC mind-set the public doesn't need to know, and it is in their best interests not to know."

"There's this wall. You can tell they just don't understand the social ramifications and public perceptions involved."

"When they hold briefings you can tell it is just an exercise. The underlying attitude comes through."

"The overwhelming impression is of complete dogmatism: this is the way it is."

"The problem is that DOE doesn't even know what it is they are doing wrong."

"DOE was arrogant. This is a hangover from the AEC days, but the states aren't used to having to deal with it. Industry is much less arrogant than DOE."

"They have a bureaucratic outlook which gets communicated to the public. Basically what they communicate to the public is "I'm DOE and I'm the expert. You're the local yokel from the boonies. You can't expect me to take time to educate you. Here's a stack of reports. If you have questions I'll answer them. "

From these comments, it would seem that DOE's problems with the states and tribes have every bit as much to do with attitudes and skills as it does with mechanisms.

Because of its AEC history, DOE has had less experience consulting with the public than other agencies such as the Corps of Engineers, Forest Service, and others. As a result, there does not seem to be a "culture" within DOE as a total agency which supports consultation, or

inculcates skills for doing it. The consultation efforts made by the Office of Civilian Waste Management have been exceptional by DOE standards, and it is clear that attitudes and behavior within the Office have changed since the passage of the Act. But it has been painful, and it is not uniform throughout the program.

The agency has not, however, provided public participation training for its staff. The Consultant found only one instance of training, in which a program office sponsored a brief training program on handling hostile audiences prior to a series of meetings. There also seems to be little awareness of the available public participation manuals, guides, or expertise within the other federal agencies. The Consultant has developed a public participation manual for DOE's own Bonneville Power Administration, an agency which has developed a very extensive public participation program in the past several years. The Corps of Engineers, which fifteen years ago had a reputation similar to DOE's, has developed five different levels of training in public participation.

7) Consultation and Cooperation (C&C) Agreements:

As discussed in an earlier section, only one state -- Washington -- has even entered into negotiations on a C&C agreement. Each time a tentative agreement has been reached, political pressures within the state have forced the State to back away from the agreement. The two issues which seem to be most crucial are the demand by the State that DOE provide unlimited liability and give the State an oversight over the defense waste storage program at Hanford.

While the defense waste issue may be of particular concern in Washington, the unlimited liability issue is likely to be raised by all states. What is even more significant is that as states get closer to signing agreements, this mix of procedural and substantive items is likely to characterize the negotiations. Increasingly there are major interest groups who see the C&C agreements as complicity on the part of the states.

As a result, there is a serious possibility that no C&C agreements will be signed in the near future, and possibly never. The State of Minnesota has passed a law saying that it will not grant a drilling permit until it has signed a C&C agreement with DOE.

At the present time DOE is acting substantially as if there were agreements in effect. Grants have been given. Consultation has been taking place. The states might gain some increased leverage by including conflict resolution mechanisms by signing C&C agreements (see below), and there is some indication from DOE of greater flexibility in funding things which are covered by C&C agreements. But beyond that, the states may believe there is little advantage to signing agreements.

Political reality may have overtaken the C&C agreement concept in the NWPA. The political climate is such that it may not be possible for any state to sign an agreement, and in particular no state can afford to be the first to sign.

It might be possible for C&C agreements to be signed if all the states were, in effect, to sign an agreement simultaneously. This might be accomplished by negotiating the agreement through an organization such as the National Governor's Association or the National Conference of State Legislatures. Whether these entities could sign for the states may be questionable. But it might be possible to develop a collective agreement through such an organization, then have all states sign simultaneously. Another alternative would be to sign more limited procedural agreements, rather than full-fledged C&C agreements.

8) Conflict Resolution Mechanisms:

Since the early 1970s most federal legislation in the planning and environmental arena has included provisions for public participation. The NWPA is unique in its emphasis on consultation with the states and tribes, and goes further than any previous legislation in discussing conflict resolution mechanisms. As noted earlier, the NWPA states that the consultation and cooperation agreements "shall specify procedures ...for resolving objections of a State and affected Indian tribes at any stage of the planning, siting, development, construction, operation, or closure of such a facility within such State through negotiation, arbitration, or other appropriate mechanisms." <Sec. 117 (b) (11)>. In other words, by mutual agreement, DOE and the State and tribes are permitted to define mechanisms which go beyond DOE simply listening to concerns and responding as it chooses. The one clear limitation would be the language in the Act that the states and tribes are not granted any form of absolute veto.

At the present time, DOE is in a position where it is the final decision maker. The states and tribes can express their views, but once DOE makes a final decision, that's it, unless someone can get a judge to overrule it. There is no mechanism for conflict resolution except the courts.

A number of people believe that DOE should consider alternative methods of resolving conflicts other than DOE making decisions and the states and tribes contesting them in courts. Ultimately this approach can paralyze the program. Given the language of the Act cited above, it is clear that Congress envisioned that through the C&C agreements DOE could go beyond the traditional decision-making role and consider new and less conventional decision-making mechanisms.

For example, DOE is now in the position of deciding which expenditures are reasonable and should be included in the grants to the states. From DOE's perspective, this is not only reasonable, they would be irresponsible if they didn't exercise reasonable control. From a

state's perspective, however, here is an "applicant" coming to the state and proposing to construct a facility in that state. Is the state going to give an applicant full authority to decide how much review the state requires? If it were a local utility company, the state certainly wouldn't think the utility company should decide what is a reasonable review. So why should DOE? This is the kind of situation in which a neutral third-party would be just as capable as DOE of being fiscally responsible, and would be more credible to the states and tribes as an arbiter.

Over the past decade a number of techniques have evolved in an effort to resolve conflicts. Some of these techniques have been developed to improve the effectiveness of participatory decision making. The use of neutral meeting facilitators can often improve decision-making meetings. A great deal has been learned about involving the participants early in problem definition, and getting people involved in defining interests which have to be met by a solution, rather than taking fixed positions. Techniques have been developed for more effective generation of alternatives. Workshopping techniques have consistently proved to be far more effective than hearings or formal meetings in obtaining useful information or resolving issues. Participatory conferences have proved effective in resolving technical controversies such as the priority of research needs, or standards and criteria for research. When properly structured, advisory committees can sometimes serve as a forum for achieving consensus.

In addition to the improved participation techniques, there has been a considerable amount of experimentation in the past decade in the use of negotiation, mediation, and arbitration as mechanisms for resolving conflicts. It may be possible -- as suggested above -- to define some specific areas which are particularly susceptible to these approaches.

This is not to suggest that improved participatory techniques or use of conflict resolution mechanisms could solve all DOE's problems. Given the present political climate, for example, it is extremely unlikely that any state would enter into a mutual agreement to accept the repository. In addition, many of the techniques suggested above require a "mutual problem-solving" climate rather than an "adversarial" climate, if they are to be effective. There is little question that the present climate is adversarial. DOE is discouraged with the results of its own efforts to improve its participation process during the past year. Without some change on both sides it is likely that the conflict resolution process will be a legal process rather than a consultation process.

The one constant problem, though, is that without political credibility the repositories may never be built, even if DOE wins the legal battles. There is little question that DOE has the ultimate decision-making authority. The question is whether those decisions are ever implemented. As suggested in Section V, there are a number of people who believe that the utility industry has a stake in trying to change

the present adversarial climate and help all the parties develop new mechanisms for resolving as many decisions as possible by mutual agreements.

9) Credibility of the Environmental Assessments (EAs):

In the Consultant's opinion, there is no issue right now which is more central to whether or not the first repository program will be politically credible than the acceptability of the EAs which DOE is preparing as documentation for its decision to recommend three sites for characterization. As has been discussed earlier, DOE's problem is not just making the right decision, but proving it is making the right decision.

The first problem is that the states and tribes feel they were excluded from the development of the methodology by which the sites were ranked. As they see it, the guidelines were sufficiently general that there was no way to get from the guidelines to site selection without an intervening methodology. The states and tribes claim that Acting Director Morgan promised them that they would be included in developing such a methodology. They also point to the example of the second-round program, where the ranking methodology was developed in workshops, and the states are participating in the ranking process.

DOE staff report that more than 100 technical experts were involved in the technical evaluations which went into the rankings. They acknowledge that a very limited number of people were involved in putting the information into final form (even DOE's contractors were excluded from this process), but claim this was necessary to prevent politicking and advocacy from consultants and Program Office staff.

The crucial chapter in the draft EAs, they state, is Chapter 6. If the technical evaluations in Chapter 6 are accepted, then the rankings in Chapter 7 result from the simplest kinds of mathematical processes. They selected very simple kinds of ranking procedures precisely so they would be easy to understand and credible. The Secretary accepted their recommendations without making any changes.

The states and tribes are very upset with the lack of visibility to the process, and have requested information about who the technical experts were who participated in the process. They also want information about their affiliations, suspecting that they were all experts who were "beholden" to DOE, or had a stake in the outcome. A particular concern is that contractors at the various sites have a great deal to win or lose depending on whether or not those sites were selected. The states and tribes claim that DOE has so far refused to give them this information, even though they believe that they will be able to obtain this information through interrogatories during the various lawsuits which are bound to occur.

The other federal reviewing agencies will also have a number of substantive criticisms of the EAs. Whereas the states tend to concentrate on preclosure issues, the federal reviewing agencies tend to be particularly concerned with post-closure issues. Because of this they are critical of the rankings procedure which DOE used. As they see it, because there are so many questions about each of the sites post-closure, DOE ended up giving virtually the same or very similar scores to each site on those guidelines involving post-closure. Because more was known about pre-closure conditions, there is a much wider variation among pre-closure scores. Although post-closure was given slightly more weight (51% post-closure to 49% pre-closure), the wide variation in the pre-closure scores still meant that pre-closure issues drove the selection.

A second fundamental problem (although this is a function of the current stage of the project), is that the data is incommensurate from site to site. A great deal is known about some sites, on some issues, while little is known about the other sites on the same issues. Right now the states have the perception that storage in granite is much safer than basalt and tuff, but this may be a function of the fact that much more is known about the basalt and tuff sites. The whole issue goes back to the problem of whether or not the program is exploratory research or applied engineering. If it is applied engineering, then the gaps in the data do not meet the standard which is usually applied to engineering projects.

But the single most important factor in the attitude of the states and tribes towards the EAs was failing to include the states and tribes in developing the methodology, and maintaining secrecy throughout the process. In the "participation game," visibility breeds confidence. Even if there might have been more advocacy in an open process, the advocacy would have been visible and people could have seen what result it had. A higher standard applies in this case: the process can't just have been adequate, it must also be credible, and in this case the loss of visibility undermined its credibility. The example of the second repository program also has been held up by the states and tribes as a demonstration that it is possible to involve the states and tribes in developing the methodology and participating in the rankings.

On the other hand, the second repository program is not as far along yet, and may become far more contentious as it moves towards selection of sites. It is also true that the states and tribes have a political need to criticize the decision. However, the Consultant does not believe that justifies the level of skepticism he encountered. As one federal reviewer put it: "The EAs don't pass the 'straight-face' test." Assuming that an honest effort was made, this level of skepticism can only be accounted for by the failure to include people in the process, and keep it visible at all times.

10) Transportation:

The states and tribes are deeply concerned about transportation of the nuclear waste. In Nevada, for example, this is probably the significant issue for the general public, because truck transport would bring the waste through or near Las Vegas. The fear is that this could result in a perception that Las Vegas is not a safe, healthy place, and there would be a resulting decline in the gaming industry, which is all-important to the Nevada economy.

The problem is that DOE's studies so far are at a generic level, not showing specific routes on actual highways. The states make numerous criticisms that DOE doesn't know about the physical characteristics of the roads, and hasn't accounted for weather conditions. At the present level of study DOE can't refute these criticisms.

At a more basic level, the transportation issue draws in a large number of corridor states. DOE has not fully addressed how these corridor states will be consulted.

DOE's position has been that there is a long time before the transportation system has to be operating, and there is plenty of time to deal with these issues. However, the level of state criticism has prompted DOE to conduct two workshops on transportation for the states and tribes, which have been acknowledged as "a good starting point."

As the number of possible sites narrows, of course, it becomes much easier to get specific about the transportation system. Also, if a Monitored Retrievable Storage (MRS) facility is built, it is likely that it would be used as a place to make up unit trains, so that large quantities of waste could be shipped to the repository by rail on a single train. This would make it much easier and economical to provide adequate security, and it is even possible that an emergency reponse team might travel on the train.

The other transportation issues of concern to the states and tribes are: 1) Safety regulations regarding transportation are set by the Department of Transportation, not the Department of Energy, and the states and tribes have no leverage comparable to the provisions of the NWPA to force DOT to consult with them; 2) DOE has not yet committed to observing the same rules for defense waste, as for commercial waste; and 3) the states and tribes believe that DOE does not have an adequate monitoring program for its transportation contractors, and essentially tells the contractors to comply with DOT regulations, and accepts that they do.

Unless something like unit train shipment from an MRS occurs, the Consultant believes that the transportation issue holds as much or more potential for political explosiveness as any single issue regarding the repository program because it greatly increases the number of actors who perceive that they may be greatly affected, but at the

same time there are presently virtually no incentives for states which will be part of the transportation corridor. With the repository, at least, there is a potential for considerable local economic benefit. With transportation, there is virtually none. That's a good prescription for a very difficult political situation.

From an engineering point of view it may make sense to move slowly on transportation issues. But to a private citizen, with an instinctive fear of nuclear waste, it is the transportation which is thought about first. In political reality it may be one of the most important issues, not something to be postponed.

The Consultant understands that now that the President has approved comingling, DOE will develop a policy which will resolve the differences regarding transportation of military and civilian waste.

11) Mitigation/Compensation:

There are two levels of potential mitigation or compensation which are of concern. The first, which is frequently mentioned by city and county officials, regards mitgation for such locally incurred expenses as additional police, maintaining an emergency reponse capability, or other local services. This is an issue which will concern communities all along the transportation corridors.

The second level of mitigation might be more accurately called "compensation." Compensation relates to public perception that the repository, and the transportation of waste, are very dangerous, threatening, unhealthy. The state receiving the repository has to deal with potential socioeconomic effects related to this perception. These perceptions could produce very tangible economic effects, e.g. a reduction in tourist traffic to Nevada, or less measurable effects such as a decline in the residents' "sense of well-being." The problem, of course, is that these effects are based on perceptions. It really doesn't matter if the repository is safe, if people believe it isn't the potential for these effects still exists. But such effects are hard to measure, and very difficult to justify to a hard-hearted procurement officer (let alone a soft-hearted one). As a result, most states believe there must be some compensation which is not directly tied to measurable costs, but addresses these less tangible effects. Others in the states put the issue more baldly, saying, in effect: "If you want us to take your repository, which we don't want, you've got to put something on the table."

DOE certainly plans to address the issue of service demands on local governments, but tends to view this as far off in the distance. But local communities evaluate the project in terms of how it could affect them, and have already started worrying about the costs they could incur, and whether or not they will get compensated. When coupled with the general public perception of the undesirability of the

repository, these concerns simply fuel the opposition. They provide one more argument which can be used against the project.

The communities' concerns about compensation are not just a question of DOE's good will. Compensation of this sort is rigidly regulated by federal procurement rules, so no matter how generous DOE might want to be, the communities fear that when it comes right down to the wire DOE will be so limited by procurement procedures that it will be unable to compensate all the costs that even DOE would agree are reasonable. They also worry whether or not the money will actually be there, when the time comes.

The question of compensation which goes beyond direct measurable effects is one which will be very difficult for DOE to address. The experience with other federal public works projects suggest that it is unlikely that federal procurement laws will permit such compensation. This is certainly one argument which can be made for the AMFM Panel's recommendation of an independent federally-chargered corporation. Such a corporation could be granted greater flexibility in dealing with compensation questions, as part of its charter. So long as DOE is the managing entity, the states are probably wise to begin thinking in terms of a legislative package which includes any such compensation, since DOE's hand are likely to be tied without such legislation.

This issue of compensation can also be overplayed. If the compensation package looks like a "bribe" to get a state to take a repository, state officials could have to deal with bitter charges of "selling out."

On the other hand, it is now very hard to find a constituency in the states which support the repository. Local communities in Washington and Nevada may be supportive, but they represent a small percentage of the population in their states. It is very doubtful whether there is any significant base of local support in Texas. Local residents in Texas see the repository as threatening the local agricultural economy. As they see it, even if there are economic benefits, they won't be for the people who are in the area now, but to commercial interests from the outside. Chances are pretty good they are right.

One explanation for public opposition is that perhaps no benefit exists which would be large enough to balance off against the perceived risk of the repository. But right now, as the public sees it, there is little benefit to a state to be selected as the site for the repository.

One compensation idea which has been discussed is to establish a world-class research facility on-site which would continue to conduct studies related to nuclear waste. Because of the intense international interest in the US program, scientists could come from all over the world to study and participate in research up to, and possibly after, closure. Such a proposal provides clear benefits, without having some of the undesirable "buy out" connotations. It would also address a problem which one DOE staffer described as the project's "blue-collar" image: "A bunch of tough guys in big trucks are going to drive up, pile a lot of crap in a hole, and when the hole is filled, everybody is going to leave." By emphasizing the research nature of the facility, and committing to a facility which would remain for many years, perhaps permanently, a very different image of the project is presented to the public.

The reason for addressing compensation concerns now, rather than later, as DOE has planned, is that public opinion is not infinitely fluid. It may be uncommitted for a period of time, but once it hardens it is much harder to change. The mitigation of service costs incurred by local communities are likely to be so modest compared to the total repository program, that they should not be allowed to be a constant irritant. The problem will only continue to get worse as more and more corridor states become active. While it certainly isn't possible to negotiate directly with communities, since no final site has been picked, it is possible to begin developing policies and procedures -- in consultation with states and representatives of local communities -- to address these issues. Once it is clear how compensation will be handled, and the states and communities have had a voice in these compensation policies and procedures, these issues should be defused. It may not make planning sense to address them now, but it makes lots of political sense.

12) Legislative Participation:

The provisions of NWPA which grant states the right to express disapproval of a site apply to "the Governor OR legislature." <Emphasis added> However, DOE appears to have only one mechanism established which communicates directly with legislators. DOE does have a contract with the National Conference of State Legislatures (NCSL) to establish a communication program among legislators. There appears to have been some reluctance even to fund this program. The NCSL submitted an unsolicited proposal to DOE shortly after the passage of the NWPA, but, despite letters of encouragement from Senators Laxalt and Thurmond, it still took fourteen months before the proposal was funded. The NCSL has scheduled a couple of briefing meetings for state legislators, prepared a summary of issues from these meetings, and will be circulating information to the state legislatures.

Several states have developed their own mechanisms for legislative involvement. In Washington, the legislature passed legislation stressing its co-equal role in reviewing the program and put seven

non-voting legislative members on the State's Nuclear Waste Review Board. Several second repository states have established equivalent nuclear waste boards which include both legislative and executive branch representatives, and oversee their state's participation in the repository program. Nevada has established an Interim Joint Legislative Committee that coordinates closely with the Governor's Office on this issue. Texas does not seem to have established any normal mechanism for legislative involvement.

Given the fact that state legislatures will be actors in the final decisions, and the fact that there seem to be far more potentially supportive legislators around than there are supportive governors, the minimal program which DOE has initiated seems to be inconsistent with its own self-interest. Since there are a number of legislators who have already shown an active interest in the repository program, either through NCSL or state nuclear waste boards, DOE may be able to identify additional mechanisms for communication with legislatures by consulting with those legislators who are already interested.

13) Local Participation:

Several complaints were heard during the interviews that states have not provided adequately for local participation, either of local governments or the public. According to these complaints, states are keeping tight control over all policy questions, and are not doing an adequate job of considering the attitudes of local governments, or of citizens.

There are differences between the first round states in how they address the questions of local participation. In Nevada, local governments received a portion of the DOE grant money in order to participate in the process. The local governments are given the opportunity to review documents, retain their own technical assistance, and advise the state of their positions before formal state positions are developed.

In Washington, local citizens and governmental entities are represented on a Citizens Advisory Board. Membership on this Board is designed to represent all interests within the state, but particular care has been taken to ensure adequate representation from the Tri-Cities area, near the Hanford site. This Advisory Board also conducted public involvement meetings prior to the State's submission of comments on the EAs, to ensure that the State would consider citizen concerns in preparing its submission.

The Consultant did not receive any mention of any comparable formal mechanisms in Texas. There is consultation between the Governor's Office and citizen groups in the area, but the lack of formal mechanisms to consult with local governments and citizens has led to some complaints that the Governor's designated representative may not represent everyone in the state. These comments, some of which have

come publicly from DOE staff, have only served to offend the Governor, who already believes that DOE has been trying to play politics in his state, trying to undercut him.

In the long run, participation will need to extend beyond just the states, to include local government and the public generally. In the first repository program, however, the period during site characterization will probably not be a period of intense general public interest. Once the selection of the three sites for characterization has been made, it is likely that the general public will be quiescent until the selection of a single site approaches. Local governments, particularly in the area of the alternative sites and along transportation routes, will continue to be interested, particularly in the transportation program and mitigation policies and procedures.

The Nevada model seems to be particularly ideal in addressing the concerns of local governments, although there were complaints heard about state officials from the county in which the Yucca Mountain site is located. DOE can't really insist on how the states participate in the program. It is possible, however, that incentives could be created, or that local governments could be informed that grant monies may be available through their state program.

14) "Selling" the Program:

There is a belief among some people in the industry that DOE should take a more active role in selling the repository program. While DOE might be able to develop a more extensive publications program, DOE is very limited in its ability to "sell" the program. First of all, "selling" the program will tend to undermine DOE's credibility in the consultation program. The experience of a number of federal agencies is that they cannot simultaneously advocate a program and ask for others to participate in decisions. Second, DOE is under very strict Congressional oversite in this area. DOE has been soundly criticized by various Congressional committees for publications which were judged to be "propagandistic." Any effort by DOE to go beyond informing the public into advocacy or "selling" the program will probably result in prompt chastisement from Congressional committees. If anyone is going to "sell the program, it will have to be done by industry.

15) Peer Review:

DOE conducts a peer review process on all its scientific work. In addition, at least one of DOE's contractors maintains a peer review process of its own. One DOE contractor estimated that there are now ten people reviewing for every one person actually conducting research.

Despite this, there were numerous comments indicating that DOE's peer review process was not credible to the states and tribes. The

perception is that all the reviewers are in the nuclear business and/or hand-picked to be sure that they "toe the DOE line." This poses a dilemma, of course, because most people who are fully qualified to be a "peer" have had some exposure within the industry. But, based on the number of times this perception was repeated, it would appear that additional visibility needs to be created for this process, and a review made of whether the participants reflect the full range of scientific opinion.

16) Public Hearing Format:

There were comments from several sources indicating dissatisfaction with the hearing format for the EA hearings. The particular complaint was that DOE simply accepted people's comments, without any reaction, so the public had no sense of interaction with DOE.

DOE's attorneys were particularly concerned that the hearing process be identical in all states, so that differences could not serve as the basis for legal action. In response to concerns expressed by the states before the hearings, DOE did conduct pre-hearing briefings in each state, during which the public could ask questions and get responses from DOE staff.

Based on formats used by other federal agencies, DOE's interpretation of the limitations on legal hearings was extremely conservative. In point of fact, the manner in which hearings are usually conducted is the result of time-honored and time-worn custom, rather than regulation. Typically, regulations state that there must be a hearing officer, there must be a complete record, and there must be adequate notification. Within these limits there are considerable variations which can and have been used.

This is one area where training in conducting public meetings might produce immediate benefits.

17) DOE Contractor Credibility:

A number of comments pointed out the inherent self-interest of the DOE contractors in having one of their sites selected. Research on each of the three priority state sites is conducted by a different contractor. Presumably, the contractor for the site which is eventually picked will continue to receive substantial contracts, because of their in-depth knowledge of the site. This does mean, however, that a totally objective scientific study of a particular site might not always be in a contractor's best interests. This makes it hard for the states and tribes to be confident that the studies are being conducted in an objective manner.

SECOND REPOSITORY PROBLEMS AND ISSUES

In general, the states are pleased with the manner in which the second repository program is being run.

Some of the popularity of the second repository program can be attributed, of course, to factors other than the manner in which it is being run. The second repository program is not bound by the rigid schedule set for the first program. The second repository program is still at a very preliminary stage, with the states not feeling threatened by an imminent possibility of a repository. Some states suspect that the politics of siting a first repository program will prove so cumbersome that a second repository will never be built. In fact, some states are hoping that the first repository program will become so embroiled in difficulties that a decision will be made to slow down the second repository program as an unreasonable expenditure of funds until such time as it is clear what will happen with the first repository program. Others suspect that if the first repository program continues on its present course there will be delays of such magnitude that the second repository program will become the repository program. There is also considerable discussion of the need for the MRS as an interim solution if there is any reasonable expectation that the industry can begin delivering waste in 1998.

While it is true that the second repository states do not feel there is an immediate likelihood of their being selected as a repository site, the Consultant believes that this factor alone does not account for the difference in reaction to the two programs. The Consultant believes that the second repository program has approached the states in a far more consultative manner. A clear difference between the two programs, for example, is the participation of the states both in developing the evaluation methodology and in ranking workshops.

Some of the differences between the two programs are that DOE learned some lessons on the first repository program, there was much less historical baggage, and fewer time pressures. But the Consultant believes that a major difference was also the attitude and commitment to consultation with which DOE staff and contractors approached the second repository program.

In fact, it was reported that the esteem given the second repository program is something of an embarrassment to DOE. It was also rumored that DOE has issued a slowdown on the second repository program, for fear that combining the two programs into one would become too attractive an option. There were also reports of DOE treating the second repository program as a "stepchild," with much less interest from DOE HQ in the second repository program. The Consultant did hear numerous comments about "resource constraints" with the second repository

program, a phrase which was never heard in reference to the first repository program.

Although the states are generally pleased, there are disagreements between the states and DOE in the second repository program. But the Consultant also saw evidence that these disagreements were being dealt with using a problem-solving approach, rather than with unilateral decision making.

There were, however, several problems or issues which deserve additional discussion. These include:

1) Public Information Program:

A number of states commented on the lack of DOE publications suitable for general public distribution. These comments apply to both the first and second repository programs, but were heard primarily in the second repository states. DOE has published a number of lengthy reports, but few simple brochures and explanatory pamphlets.

The ONWI Program (first repository - salt sites) has issued a few simple and attractive materials, but these are not widely distributed, and do not appear to be part of an overall strategy or approach to public information.

There was some discussion that DOE feels very constrained in putting out any informational materials because it has been "chastised" so severly in the past by Congressional committees for issuing "propaganda" or "advocacy" documents. It was reported that at one point DOE actually destroyed informational documents in its library, to comply with Congressional concerns.

On the other hand, DOE has not been willing to grant funds to the states to issue information documents. In part this is because of the problem of objectivity in the documents. Just as DOE may have erred in the past in putting out "pro-nuclear" information documents, at least one state has put together a slide show which it calls "informational," but is acknowledged by everybody to be "anti-repository." At least one other second repository state has issued information brochures regarding the program which the Consultant believes to be objective.

DOE has expressed concerns about expending limited resources on public information at a time when so many states are involved. By the end of the year the number of second repository states will be sharply reduced. It seems unreasonable, according to this view, to expend scarce resources in a number of states which will soon be dropped from the program.

The Consultant believes that there is a need for a major effort to develop simple, attractive background materials describing both the

overall repository program, and addressing issues of concern to the public. These documents are needed to support both the first and second repository programs. Although having some sympathy for the idea that it may not be cost efficient to have extensive public information programs while there are a number of states involved, there are numerous general interest publications which could be prepared now which will be just as valid next year as they are at present. For this reason, a current expenditure is justified. In addition, it does not appear there is presently an overall DOE publications plan. The time between now and the screening decision in late 1985 can be taken to develop a publications plan, in consultation with the states and tribes.

One barrier to an effective publications program is a series of highly bureaucratic restrictions which make it virtually impossible to get documents out in a timely manner. The approval process within DOE HQ is so time consuming and cumbersome that it must be held substantially responsible for the weak public information program.

Based on experience with other federal agencies, DOE's constraints on publications are uniquely restrictive. It appears to the Consultant that DOE has taken Congressional complaints about the "propagandistic" quality of previous DOE documents to mean that DOE should not put out public information documents, rather that that DOE should be more objective in the documents it puts out. DOE's own Bonneville Power Administration has established an exemplary publications program in the past two years which enjoys considerable Congressional support, because it combines attractiveness and easy-to-understand writing with substantial objectivity and careful reporting of alternative points of view.

There are several ways DOE can establish an effective publications program which would be above criticism.

The alternative approaches include:

A) DOE could develop an overall publications plan, then contract with an organization which is both acceptable to the states and tribes and recognized for its ability to put out objective publications to produce the actual documents on DOE's behalf. The contract would spell out any review requirements which DOE or the state and tribes would have. Possibilities for such organizations might include the National Conference of State Legislatures, the National Governor's Association, the Western Interstate Energy Council, the Southern State Energy Council, etc.

B) DOE could produce the documents itself, but establish a review process by which a committee representing the states and tribes, or an acceptable organization such as those listed in the first alternative, would review the document for its objectivity.

C) DOE could publish general informational materials using either of the two alternatives above, but could also give grant funds to the states to produce documents of particular interest to citizens of each state. In order to use this approach, DOE would have to negotiate guidelines with the states and tribes, and would probably have to establish a review process in which a committee or "neutral" party reviewed the proposed documents to ensure objectivity.

2) Public Participation Program:

While expressing appreciation for the manner in which the second repository program staff consulted with the states, the states did express the opinion that the second repository program does not have an overall strategy for effective public participation. In addition, the states would like to play an active role in implementing public participation, but have not been given grant monies to conduct such programs.

Essentially the policy of the second repository Program Office has been to respond to any requests for public meetings. The number of public meetings which have been conducted is impressive. But the program office also points out that the resources required to conduct full-blown public participation programs in seventeen states could be very large indeed. As they see it, it makes more sense to respond to expressed interest now, and then offer more public participation opportunities once the number of states involved is smaller.

Providing funds for the states to conduct public participation programs involves both resources limitations and the problem of guaranteeing the objectivity of the states' public participation efforts.

Conducting a full-blown, continuous public participation program in seventeen states would be an extremely expensive proposition. On the other hand, the second repository program is reaching a major decision point at the end of 1985, at which time the number of affected states will be sharply reduced. A "responding-to-requests" approach will be adequate to establish the credibility of that decision. The Program Office might be able to resolve this dilemma now by developing a public involvement plan for that specific decision, with discussion and problem-solving with the states now, to ensure that the program is perceived as adequate. As part of a mutually-agreed-upon plan, it may be possible to provide grant monies to the states to conduct some portion of the program, with clear guidelines on the manner in which the program is to be conducted. Or, some neutral organization could be given a contract to implement portions of the program.

This first decision point, at which the number of states and sites is narrowed, is the most important public review point facing the second

repository program for a number of months, and should be given a fully adequate public review. Once this point is passed, it should be possible to hammer out a public participation approach with the smaller number of states remaining.

The reports the Consultant received suggest that DOE may also need to tailor its meetings more to the requirements of the public involved. There were reports that DOE had a standardized meeting format which was very effective in some situations, and quite ineffective in others. This problem could be resolved by additional consultation with the groups requesting the meeting, to determine what format is suitable.

3) Tribal Participation:

Several people interviewed complained that DOE seemed to be "avoiding" the Indian tribes in the second repository program, limiting tribal participation to a contract with the National Congress of American Indians to keep the tribes informed. At least one person expressed concern that the tribes will "have a steep learning curve" if they are later granted "affected" status.

DOE's position is that they are still in a screening process, and don't even know for sure if any tribes are affected, let alone which ones. As they see it, it makes far more sense to involve tribes after specific sites have been designated for further study.

4) Reasonableness of Grant Requests:

Just as with the first repository program, questions have been raised in the second repository program about the criteria applied as to what is "reasonable" for grant funding. At least one state reported that DOE seemed to be initiating a new "get tough" policy. DOE staff reported no new "get tough" policy, but did acknowledge that there has been a desire to halt the tendency of states to want to fund research earlier in the process than is appropriate. There have been suggestions that these kinds of issues might be amenable to some kind of third-party conflict resolution mechanism.

MRS PROGRAM

There is a growing consensus within DOE in favor of the construction of a Monitored Retrievable Storage (MRS) facility. The MRS facility is not being seen as an alternative to the repository program, or even as an interim program until the repository is built, but rather as an integral part of the repository program. The MRS concept now being considered by DOE sees the MRS as a staging area for transportation of wastes to the repository. Waste shipments from individual reactors would go first to the MRS facility, where they would be consolidated and shipped in unit trains to the repository. Transportation to the

MRS could be by truck, rail, or barge. But transportation to the repository would probably be only by rail. There would be no opening of the cannisters at the repository. The advantage would be that the number of shipments to the repository -- presumably a much longer distance than to the MRS -- would be reduced. Because of the amount of waste being handled at one time, it is feasible to provide higher levels of security than could be justified for individual shipments. Among other things, if desired, the exact location of the unit trains can even be tracked by satellite. A decision might also be made to have an emergency response team actually travel with the train. All these things are seen as improving the safety and security of the transportation system.

The Consultant did hear complaints in several states that "the MRS program is making all the same mistakes as the first repository program." The MRS program was viewed as moving ahead without consultation, and DOE was accused of reverting to "its old style of decision making."

DOE maintains that consultation and coordination is not required on the MRS program prior to submission of a proposal to Congress. The additional problem which DOE faces is that the Congress has not approved the construction of an MRS facility, and several Congressmen have made it very clear that they are dubious about the idea, and will react violently to anything they viewed as DOE "lobbying" on behalf of the MRS facility. Those states which might be affected have been kept informed.

Based on the comments received from the states, the Consultant believes that DOE may need to consider creating some additional forums for discussion of the MRS issue. One inherent problem in limiting consultation on the MRS is that the MRS program will be compared with the standard for consultation established in the other programs. Even if consultation may not be required legally, it may be required politically. Any consultation must, however, be conducted in a manner which does not appear to be lobbying before Congress has an opportunity to make a decision.

ORGANIZATIONAL ISSUES

1) AMFM Panel:

The report of the Alternative Methods of Financing and Management (AMFM) Panel, appointed by the Secretary of Energy, was made public on April 18, 1985.

The AMFM Panel concluded that the present management structure, embedded within DOE -- lacks the stability and continuity for effective program implementation. In particular the Panel is concerned

about the lack of tenure for the Director, the need of the program to compete with other DOE programs for management attention, the need to comply with numerous bureaucratic constraints which could block effective implementation of the program, and the possibility of the program being manipulated for political gains by any Administration. The panel recommends the establishment of a public corporation, chartered by Congress, which will assume the responsibility from DOE for the siting and management of the repository program. In arriving at this recommendation, the panel assumed the willingness of Congress to reopen the Act to establish this corporation. But the panel also made a number of recommendations it felt were necessary, no matter which entity managed the program. These recommendations include:

1) Project milestones need to be reconsidered in light of reality, contingencies planned for, agreement reached on the schedule, then management must ensure that the milestones are met.

2) A blue ribbon advisory committee should be established which will advise DOE on ways to control costs and ensure cost effectiveness.

3) An Advisory Siting Council should be established to provide input to and oversight of the siting process to whatever enitity is charged with the ultimate siting decision.

4) A Scientific Peer Review Board should be established to provide scientific and technical expertise.

5) Negotiations should be conducted with the states to develop binding agreements which set forth the procedures that would enable the states and tribes to carry out their review responsibilities. The panel was supportive of strengthening state and tribal capacity to monitor the program.

6) The managing entity should have wide latitude to negotiate an array of appropriate incentives to communities that are potential hosts.

7) The managing entity should undertake an effective education and public involvement program.

8) A contractor should be hired to provide general technical oversite of the entire program. This contractor should not have any previous contracts under the program, and would be ineligible for future contracts.

9) The managing enitity should retain a counsel whose sole commitment is to this program.

10) The managing entity should retain auditors whose sole commitment is to this program.

11) The Director of the program should be given tenure which is not subject to changes in Administration or agency management. This is not intended to mean that the Director could not be fired for just cause.

12) The managing entity needs flexibility in personnel matters, comparable to that in the private sector.

13) The managing entity should be able to provide monetary rewards for personnel who exhibit outstanding performance. An active program of staff incentives should be developed, including both monetary and non-monetary rewards.

14) Congressional oversight should be simplified and consolidated, to reduce the management time needed to service the twenty three committees or subcommittees which currently have some oversight role.

Within DOE the feeling seems to be that establishing a public corporation would mean another major delay, just when they have finally gotten organized and up and running. DOE staff don't believe that the corporation idea deals with the question of political responsiveness. They are concerned about the notion of an advisory siting council, because their observation about federal advisory groups is that it isn't possible to get the level of commitment from volunteers which is needed, and as a result "no one can talk turkey." DOE would, of course, jump at the opportunity to be relieved from some of the administrative and personnel requirements. Overall, DOE staff believe that if DOE can become more open, there is no need for the major dislocations that would be caused by altering the management structure at this time.

Most of the people interviewed who commented on the Panel's recommendations expressed grave reservations about the federally-chartered corporation. The states and environmental groups, in particular, were concerned that a single-mission corporation would become so mission oriented that the consultation process would be even worse off than they believe it to be presently.

The crucial assumption made by the AMFM Panel was that Congress would be willing to reopen the NWPA to establish the federally-charted corporation and provide the authority needed to implement other recommendations. The Consultant heard no comments which indicate this assumption is valid. Instead, everybody -- except some of the first repository states -- fears that opening up the NWPA would be equivalent to opening up Pandora's Box. There is also a feeling that now that DOE has just gotten organized, the timing is wrong for uprooting what little stability has been established. This means that

it may be more realistic -- ducking the question of whether or not it is more desirable -- to consider implementation of the AMFM Panel's recommendations within DOE.

2) Centralization:

People within the utility industry generally view the field offices as "out of control," little fiefdoms which respond to their own needs rather than the needs of the total program. As they see it, prior to the passage of the NWPA there was a Hanford Program, a Nevada Program, and a Salt Program, but not a National Repository Program. As a result, many people within the industry have been pleased with a tendency towards centralization of the program, an effort to "restore some logic to the program," and "regain control over the field offices."

Utility spokesmen continue to have concerns, however, about DOE's control over its contractors. DOE has historically relied on contractors for much of its work, but budgetary pressures forced a kind of checks-and-balances system which ensured some degree of control. With money coming from the Nuclear Waste Fund these controls no longer exist, and several people interviewed expressed concern that "no one at the field offices even thinks about cost or schedule."

There are trade-offs, however with centralization. In virtually all states the major criticisms of DOE were aimed at Headquarters staff, not Program Office staff. It is easy, of course, to assume that this is because the Program Offices are "giving away the store," and every now and then somebody from Headquarters has to come in and represent the agency's interests. Naturally the DOE HQ person then looks like the bad guy.

But while there is always some of this, the Consultant is more inclined to believe that it has more to do with the fact that Program Offices have much more contact with local publics, and understand how the program is viewed locally. This is particularly true in Nevada and Washington, where DOE staff live in the state and are in constant contact with local publics. Some of the problems in Texas have to do with the lack of an in-the-area continuing presence. In addition, the nature of the criticism was not aimed at the decisions made, but at what was perceived as closed minds and insensitivity. Despite significant personnel changes, some DOE HQ staff are still referred to by other staff and DOE contractors as "embarrassing" when they deal with the states.

3) Role of Office of Policy & Outreach:

The Office of Policy & Outreach was established in mid-1984. This office combines what is usually referred to as "external affairs" with a policy function, precisely because of the perception that the program needed significant improvement in the consultation and public

information area, and could best accomplish it by marrying external affairs and policy.

The Consultant did discover some confusion about the relationship between this office and the HQ program staff. From the perspective of the states, the question was whether or not the Office of Policy and Outreach could "deliver." As they saw it, the Office of Policy and Outreach made significant efforts to work with the states to define what consultation meant, but wasn't able to affect the manner in which the site selection process was conducted, precisely because his office was not a program office.

Program staff see some confusion as well. As they understand it, the Office of Policy & Outreach is involved on national issues and in consultation with national organizations, but they are involved with the states on a day-to-day basis. Some see the Office of Policy and Outreach as "an office in search of a mission."

The Office of Policy & Outreach could serve as the implementing entity for some of the ideas presented elsewhere in this report, including: 1) working with the states and tribes to develop conflict resolution mechanisms; 2) initiating the development of public meeting/public participation training; 3) developing a consultation and cooperation policy; and 4) developing an overall publications plan.

4) Consultation with Other Groups:

Members of environmental groups have expressed frustration with their ability to participate in DOE decision making. As they see it, DOE has done a poor job of consulting with the states, and an even poorer job of consulting with interest groups and the public at large. Part of the frustration comes from the fact that the environmental community was an active part of the coalition which pushed for passage of the NWPA. Now that the Act is passed, they feel excluded from the process.

The Office of Policy & Outreach has initiated periodic meetings with environmental groups in the Washington, D.C. area, although this does not guarantee access to program staff.

The environmental community itself is divided on the repository issue, with some segments of the environmental community opposing a repository as a means of opposing nuclear power. Most of the organized groups in Washington, D.C. are cautiously supportive of a repository, feeling it represents a safer solution than the present storage of reactors, but watching the program very carefully. Although the environmental community may intend to support the overall concept of a repository, the decentralized nature of the environmental movement could still result in so many questions asked in each state that it results in a veto in all states. Environmental groups will play a very significant role in shaping public perceptions of the repository

because of their ability to affect the media and influence legislators.

The meetings conducted by the Office of Policy and Research could be emulated by each of the Program Offices. These meetings should not, however, be limited solely to public information or external affairs staff. The greatest value will come from interaction directly with program staff. Interest groups could also be included in periodic conferences.

SECTION V: POTENTIAL FOR IMPROVEMENTS

In the previous section the following conclusions were stated about DOE's consultation and cooperation program:

> First Repository Program: Representatives of the states -- and to a lesser extent the tribes -- are deeply dissatisfied with the manner in which DOE has conducted the first repository program. Recent efforts of the Office of Policy & Outreach to improve the program have been undercut by the overwhelming skepticism which the states and tribes have towards the Draft Assessments and the methodology used in site selection. The states now talk openly of a protracted legal and political battle with DOE, and believe that DOE has virtually no possibility of completing characterization of three sites within a five-year time period. The resistance of the states has hardened even during the period in which the Consultant conducted interviews, and the states are already under intense pressure from internal constituencies to be more overt in their resistance to the repository.
>
> Second Repository Programs: In general the states are pleased with the manner in which the second repository program is being run. Although the states are generally pleased, there are disagreements between the states and DOE. But the Consultant also saw evidence that these disagreements were being dealt with using a mutual problem-solving approach. There are a number of reasons why the states are more favorable towards the second repository program other than the manner in which DOE is running the program, but these factors alone do not account for the difference in reaction to the two programs. The Consultant believes that DOE has approached the states in a far more consultative manner.

After evaluating both programs, the Consultant believes that the immediate priority must be placed on improving the consultation and cooperation program for the first repository.

This is not to suggest that the second repository's program is flawless, but that the steps which need to be taken to improve that program are modest and well within DOE's power to implement. The

Consultant's major recommendations for the second repository program would include: 1) providing training for DOE and contractor staff in the areas of public participation, meeting facilitation, and negotiation; 2) Developing, in consultation with the states, a public participation plan covering the manner in which the states, tribes, and general public will be consulted in the upcoming decision to reduce the number of states and sites being considered.

The concerns with the first repository program are far more problematic. One of the fundamental prerequisites for a mutual problem-solving approach is to create a climate of reasonable trust, with a minimal amount of political posturing and adversarial relationships. This climate does not presently exist in the first repository program, in fact, the relationship is increasingly adversarial. In addition, the fact that the various parties are in litigation will only exacerbate the situation, since legal counsel will begin to dictate the behavior of the parties. Since the American legal system is adversarial in nature, attorneys will tend to exaggerate differences and make problem solving more difficult.

From DOE's perspective, they have made efforts to comply fully with the law and believe that in many cases they have exceeded the technical requirements of the law. While they acknowledge a need for improvement, they point to the establishment of the Office of Policy & Outreach and its efforts to work with the states and tribes as proof of their commitment to try to make consultation and cooperation work. In fact, after nearly a year of trying to improve the process they are discouraged because the relationship seems only to have grown worse, not better, despite their efforts. They theorize that it is either too late in the process to change the relationship, or consultation and cooperation was doomed from the start when faced with the political realities of siting a nuclear repository. At this point it will take some convincing to get DOE to believe that any changes in approach are really going to produce any change in the relationship with the states and tribes. They suspect that if they respond in one area, they will then be attacked in another, because, as they see it, the states and tribes have a stake in maintaining the adversarial relationship. Also, they feel intense pressure to keep the program on schedule, and are concerned that many of the states' criticisms are delaying tactics, rather than resolvable problems.

As the states see it, in the course of the passage of the NWPA they made a major concession by giving up their insistence on an absolute veto. In return they got the "consultation and cooperation" language which they interpreted to mean a full partnership short of a veto. This interpretation differs among the stake holders in the C & C process. From the states' perspective, DOE's efforts have been unresponsive and inadequate. As they see it, DOE consults with the states after the fact, and not as true partners. They also believe that DOE goes through the motions of consultation but DOE's fundamental attitude is that the states have nothing to contribute. Rather than feeling appreciated for comments they have made which they

believe have improved the program, they feel that DOE has fought them all the way, usually responding only when the states were able to draw in an external source of support such as the NRC. While they believe that efforts to establish a mutual problem-solving climate were what DOE was expected to do in the first place, they are uncertain that efforts to improve the process now have much point. It might have made sense a year ago, but unless something significantly different happens, they're not sure it makes sense now. They also acknowledge that they are under considerable political pressure within their states, and cannot do anything which appears to be an act of complicity with DOE.

Based on these attitudes, the Consultant believes that there is unlikely to be any improvement in the present relationship between DOE and the states without some outside intervention, and that unless something changes, most of the movement will be in the direction of a worsening relationship between DOE and the states.

Both DOE and the states have expressed the belief that the intervention of the utility industry in this situation might play a significant role. Several DOE staff have expressed the opinion that if the industry tells DOE there is a problem, DOE will be far more inclined to listen than if the concerns are expressed by the states. Several representatives of the states expressed the opinion that only if the industry intervenes is the relationship likely to change. Other efforts to date, they believe, have been futile. Their only remaining hopes are the courts and Congressional action.

To date, the utility industry's actions have been designed to hold down costs and keep pressure upon DOE to complete the project as close to the dates in the Act as possible. For the industry to become concerned with the consultation and cooperation process represents both a new initiative, and at least in the short run, some risk of time delays.

DOE's present course of action appears to be to proceed on course, full speed ahead, and cope with legal challenges as and when they arise. The assumption appears to be that DOE will either be able to surmount any legal and political challenges, or that the legal and political challenges would be the same regardless of what actions DOE takes, so there simply comes a time to batten down the hatches and ride out the storm.

The Consultant believes there are two problems with this approach. The first is that it assumes that no DOE action could materially affect attitudes. The Consultant does not believe this to be the case, and believes that many of the present lawsuits could have been avoided. Second, the crucial question is the impact that the present "ride out the storm" strategy has on DOE's future ability to work with the first repository states and tribes. The level of resentment the Consultant heard expressed would seem to foretell a kind of running

guerilla warfare with the states, rather than consultation. It is one thing for a state to engage in a kind of "loyal opposition" challenge of everything DOE does. But instead, the Consultant heard representatives of the states openly discussing employing every available legal and political strategem to block site characterization, and feeling fully justified based on their perception of DOE's actions. In particular, state drilling permits are required in most states, and certainly pose a considerable potential for a "states rights" legal challenge. A state which no longer feels obliged to be "reasonable" can find numerous tools at its disposal to delay and frustrate a project.

As a result, the Consultant believes that the present course of action holds considerable potential for continuing delays and increased costs. A program which keeps on schedule, but is not politically credible, could result in the worst of all cases for the utility industry: the expenditure of five years and several billion dollars for the characterization of three sites, only to discover that no decision can be implemented because the process was not sufficiently credible that Congress would override a state's disapproval. Congress has shown a considerable unwillingness to override state objections in the past -- let alone organize itself for a decision in the time limits specified in the Act if any override is to take place -- and there continues to be strong opposition from powerfully-placed Congressional figures to the whole idea of a repository. If Congress becomes convinced that the states were not fairly treated by DOE, this could provide the kind of ammunition which would make an override difficult. While interim storage programs such as an MRS might make the timing of a repository less crucial, failure to come up with a permanent solution to the waste problem will continue to provide a point of leverage for those who wish to shut down all existing nuclear plants, and provides an insurmountable barrier to any future construction of nuclear plants.

The question, of course, is whether to take the time to stop and deal with the states' problems -- assuming, of course, the problems are genuine, rather than generated for political expedience. One hopes, of course, that any short-term delays which might result from addressing the states' concerns would be offset by reducing future delays resulting from continuation of adversarial relationships. There are no hard and fast guarantees that any actions DOE might take will resolve the current opposition and resentment, although as a matter of personal judgment the Consultant believes that the intervention of the utility industry in the process could result in agreements which would, as a minimum, reduce the number of areas of disagreement and potentially begin to develop a more productive problem-solving climate. The problem is that effective consultation is like a safety program. A good safety program prevents accidents. Because it is effective to the extent that costs are deferred, it is difficult to measure exactly how much has been saved as a result of the program. That rests on some judgment as to what would have happened had the program not been in place. In addition, no safety program ever eliminates all accidents.

In the same way, no consultation program will prevent all controversies with the states and tribes, nor prevent all lawsuits. But on balance, an effective consultation program could reduce delays and opposition which is based on being excluded from decision making, with resultant cost savings.

But it should be recognized that it will not be easy for either party. It is not possible to create a climate of mutual problem-solving unless there is some genuine power sharing. DOE can't just go through the motions of participation, it will have to define areas in which it is willing to offer a meaningful degree of participation. A number of federal agencies have discovered, however, that they have far more power to make things happen by including people in decisions than they did making unilateral decisions which never got implemented.

The states, on the other hand, will have to give something up as well. Until now the states have been in the political position of criticizing DOE for not providing enough participation, then criticizing the decisions themselves. If the states are offered genuine participation, they can't also turn around and criticize the decisions in which they participated, and they can't constantly complain about how they are being abused by DOE. This can raise political problems at home, with opponents of a repository accusing the states of complicity with DOE.

Efforts by DOE and the states and tribes to make a commitment to a mutual problem-solving approach have been unsuccessful to date, and it is because of this that the situation is unlikely to change unless there is some kind of intervention by a third party. The only one who really is in a position to bring both parties to the table is the utility industry. Without such intervention by the industry, the relationship between DOE, the states, and tribes may continue to degenerate, putting the entire repository program at risk.

SECTION VI: PROPOSED PROGRAM

This section outlines an initial course of action by which the utility industry can encourage DOE, the states, and tribes to develop a more effective consultation and cooperation program for the first repository program.

This proposed plan has been discussed with representatives of both DOE and the states -- although not in any official capacity -- and there is reason to believe that both parties would be willing to pursue at least these preliminary steps. There are no guarantees, of course, that willingness to participate in initial discussions means that any of the parties are willing to "deal."

The proposed course of action, including supplemental alternatives, includes:

STEP ONE: The first step is for the utility industry to make a decision that concerns about the consultation program for the first repository program justify action on the part of the industry to try to bring DOE and the states together.

A necessary prerequisite is for the Program & Budget Committee of the Utility Nuclear Waste Management Group to approve the second phase of this program.

It is also recommended that necessary plans and approvals be granted to brief a larger cross-section of the utility industry about the findings of this report. This might include the entire Steering Committee of UNWMG and the CEO membership of the American Committee on Radwaste Disposal (ACORD). The Consultant's interviews suggest that the opinions of the utilities are by no means monolithic, and it may be important to be certain that there is some broader understanding in the industry of why this initiative is needed. Too many mixed messages from the industry to either DOE or the states and tribes could quickly undermine this program.

STEP TWO: Briefings detailing the results of this report would be made separately to DOE and the states and tribes.

The basic idea behind this step is to use this report as the mechanism for generating discussion within DOE, the states and tribes. Since there is already some discouragement on all sides that the Office of Policy & Outreach's efforts over the past year to improve the process have not resulted in a significant change, there is some resistance to reopening the topic. A briefing on this report, on the other hand, opens up the topic without anyone having to make an advance commitment.

This briefing could be given by the Consultant, but senior executives from the utility industry would also be present to directly represent the industry's position.

One question of strategy is whether the governors should also receive this briefing. Although not wanting to undercut the states' staff-level people, the utility industry may want to be satisfied that the governors are fully informed of the industry's concern, and have an opportunity to hear the governor's assessment of the possibility of improving the relationship with DOE.

Other players who may want to be briefed are key legislators in each of the states.

The only commitment which is needed out of these briefings is the willingness of all parties to pursue the topic further directly with the other parties.

STEP THREE: A meeting would then be scheduled between DOE, the states, tribes, and industry to discuss a sequential program for addressing the issues raised in the report. The Consultant could serve as "facilitator" for this meeting.

Before there can be agreement on how to improve the consultation process there must be agreement that it is worth any extra effort. Step Two will have laid the groundwork, since all parties will have been briefed on the findings in this report. The next step is to agree on "the agenda" for subsequent attempts to improve the consultation program.

Careful thought will need to be given to the number of meeting participants if the meeting is to be productive, and yet represent the many stakeholders. It is imperative that there be some sense of progress at this meeting, or it is likely that DOE, the states and tribes will all give up on this effort. The agenda needs to be structured so that there is a "success" at resolving some issue during this first meeting, even if it is a limited success and leaves major issues still to be dealt with. If some trust can be built by a succession of little successes, it may then be possible to deal with the major issues which divide the parties.

Representatives of the states have proposed that the Consultant serve as "facilitator" for this meeting, believing that he can serve as a neutral party between DOE, the states, tribes, and the industry. It is the Consultant's belief, however that this facilitation role will have to be more active than simply leading the meeting, but will also require a role more nearly that of a "conflict conciliator or mediator" in which the Consultant works with all sides to define an agenda which has some chance of success, and a meeting format which encourages problem solving. The Consultant would also work with all sides between meetings to ensure that no communication breakdowns occur, and to identify alternative approaches which may have some potential for acceptance.

There are a number of crucial issues which could be discussed in these meetings, including:

DEFINITION OF CONSULTATION AND COOPERATION: It is clear that there are conflicting interpretations of just what "consultation and cooperation" means, and the legislative history can be used to justify a range of interpretations. Short of the issue being decided by the courts, the only solution is to decide it by mutual agreement.

Although "rationality" would suggest that this issue be resolved first, because it is an abstract issue and has been discussed previously it may be better to get some concrete problems resolved first, then come back to this issue.

USE OF CONFLICT RESOLUTION MECHANISMS: The Act clearly gives DOE the authority to utilize a wide range of conflict resolution mechanisms, including arbitration and negotiation.

Even if it is not possible to develop a more meaningful partnership on all key issues, there are other issues which lend themselves readily to techniques such as third-party mediation or arbitration. The Consultant believes, for example, that the whole issue of which activities should be funded through grants to the states and tribes is quite amenable to this kind of approach.

Identifying those areas where some kind of conflict resolution approach might be successful, and agreeing on mechanisms for these areas, might generate some immediate successes upon which future discussions can build.

PUBLICATIONS PLAN: There is a general recognition that there need to be more publications describing the repository program for the general public. On the other hand, the objectivity of these documents is a matter of great concern, whether the documents are prepared by DOE or by others. There is considerable Congressional oversight in this area as well, to ensure that the publications legitimately inform the public, and are not just "public relations" or "propaganda."

This is an area which the Consultant believes can be readily resolved by setting up a review group or contracting with a third party, defining which entities will take the initiative in developing documents, and establishing guidelines for objectivity.

PUBLIC PARTICIPATION PROGRAM: Another area of continuing disagreement is how much public participation is needed and legitimate. Beyond this, the question is how much responsibility for implementation of the public participation program DOE might be willing to share with others. In any case, the other parties will be concerned about its equity and even-handedness.

Again, this is an area which the Consultant believes can be resolved by discussion and negotiation.

PEER REVIEW PROCESS: There is widespread skepticism about DOE's peer review process, with many people believing that only those people are included who "toe DOE's line." Doe argues that it selects experts who have background in the nuclear field because it is that experience which makes their review worthwhile.

This is another area where mechanisms could be established which give the states and tribes some access into this process, yet ensures the genuine expertise of the participants in the peer review.

SITE SELECTION/ADEQUACY OF THE ENVIRONMENTAL ASSESSMENTS: This is an extremely emotional and difficult issue, and it certainly should not be addressed first if there is any chance of getting off to a successful start. On the other hand, until there is some satisfaction with the site selection and EA process, it is unlikely that the consultation process will ever become completely satisfactory.

SITE CHARACTERIZATION PLANS: The potential may exist for making a consultation success out of the site characterization plans, because they can be approached fresh, with fewer precommitments than on the site selection/EA process. However, it is not likely that there will be a willingness to work cooperatively on the site characterization plans unless many of the other issues above have been resolved to some extent.

The purpose of the joint meeting including DOE, the states, tribes, and industry would be to define an approach to these issues -- or other issues which might be identified by the parties -- and develop a plan of action for resolving them. In effect, this meeting would be designed to plan the program after Step Three (Meeting of Stakeholders), and the plan would have to be mutually supported by all parties.

APPENDIX I: LIST OF PEOPLE INTERVIEWED

Sixty-seven interviews were conducted. Regretably, several interviews which were originally planned had to be cancelled when travel plans conflicted. Most notably, appointments were originally scheduled with Mr. Ben Rushe, Director, Office of Civilian Radioactive Waste Management Program, and Mr. Bill Purcell, Associate Director, Geologic Repositories, that had to be dropped when travel schedules did not coincide.

The complete list of people interviewed is as follows:

TRIBAL GOVERNMENTS

Nez Perce Indian Tribe

Mr. Alan Slickpoo

Umatilla Federated Tribes

Ms. Catherine Wilson

Yakima Indian Nation

Mr. R. R. Jim, Tribal Coordinator
Mr. Mel Sampson, Vice Chairman, Yakima Nation Tribal Council
Mr. Jim Hovis, Attorney

FIRST REPOSITORY STATES:

Nevada

Mr. Robert Loux, Department of Minerals, Governor's Office
Mr. Dennis Bechtel, Clark County Comprehensive Planning Dept.
Mr. Jack Thomason, Director, Economic Development, City of Las Vegas
Ms. Jane Paulos, City of North Las Vegas
Mr. Mike Boughman, Consultant, Lincoln County
Mr. Fred Weldon, Legislative Council Bureau, Nevada State Legislature
Senator Thomas J. Hickey, Chairman, Legislative Commission Subcommittee to Study Disposal of High-Level Radioactive Waste in Nevada

Texas

Mr. Steve Frishman, Director, Nuclear Waste Programs, Governor's Office
Mr. Delbert Devin, STAND, (citizen group)
Ms. Tanya Klueskens, POWER, (citizen group)
Mr. Don Hancock, (technical consultant), SW Resource & Information, Albuquerque

Washington

Mr. David Stevens, Program Manager, High-Level Waste Repository Program, Department of Ecology
Mr. Nick Lewis, Director, Energy Facilities Siting Council
Dr. Kai Lee, University of Washington (on Northwest Regional Power Council and also on Battelle's Peer Review Group)
Ms. Anita Monoian, head of a subworking group on public involvement of the State's Advisory Council
Mr. Gerald Pollet, Washington Public Interest Group, (citizen/ student group)

SECOND REPOSITORY STATES

Minnesota

Mr. Greg Larson, Director of High-Level Nuclear Waste Disposal, Minnesota Environemntal Quality Board
Ms. Barbara J. Johnson, Attorney, Minnesota Public Interest Research Foundation

New Hampshire

Mr. David Scott, State Planning Officer, State of New Hampshire
Mr. Arnie Wight, Chairman, Committee on Science & Technology, New Hampshire House of Representatives, (AMFM Panel Member)
Ms. Phoebe Chardon, Assistant Majority Leader, New Hampshire House of Representatives

NATIONAL ORGANIZATIONS

Environmental Policy Institute

Mr. Dave Berick (repository program)
Mr. Fred Millar, (transportation)

National Council of State Legislatures

Ms. Julie Jordan, Staff Director.

National Governor's Association

Mr. Holmes Brown, Staff Director

Natural Resources Defense Council

Ms. Barbara Finamore, Attorney

Western Interstate Energy Board

Mr. Douglas C. Larson, Executive Director
Ms. Ellen Livingston-Behen, Attorney

DEPARTMENT OF ENERGY

Mr. Roger Hilley, Assoc. Dir., Offfice of Storage & Trans.
Mr. Roger Gale, Director, Office of Policy Integration & Outreach
Mr. Ben Easterling, Policy Division, Office of Policy Integration & Outreach
Mr. Barry Gale, Office of Siting
Mr. Mike Lawrence, Manager, Richland Operations Office
Mr. John Antonin, Asst. Manager, Richland Operations Office
Mr. Lee Olsen, Project Manager, Hanford
Ms. Judith Tokarz, Public Information Officer, Richland Operations Office
Mr. Tom Clark, Manager, Las Vegas Operations Office
Dr. Don Vieth, Project Manager, Las Vegas
Mr. Mitchell Kunich, Assistant Project Manager, Las Vegas
Mr. Jeff Neff, ONWI Program Manager, Columbus
Dr. Sally Mann, OCRD Program Manager, Chicago

DEPARTMENT OF ENERGY CONTRACTORS

Battelle Memorial Institute

Dr. Ben Maiden, Deputy Director, OCRD, Columbus
Mr. Tom McClain, Institutional Relations, Chicago
Dr. Harry Smail, Environmental Project Manager, ONWI, Columbus
Ms. Helen Latham, Governmental Liason & Public Outreach Manager, ONWI, Columbus

Rockwell International

Mr. Ed Ash, Manager, Rockwell International, Hanford

OTHER GOVERNMENTAL AGENCIES

Environmental Protection Agency

Mr. Dan Egan, Project Leader, High-Level Waste Project

Nuclear Regulatory Commission

Mr. Bob Browning, Director, Division of Waste Management
Mr. Hubert J. Miller, Chief, Repository Program
Mr. Joseph O. Bunting, Chief, Policy & Program
Ms. Donna Mattson, Section Leader, Program Control & Analysis
Ms. Cathy Russell, State/Tribal Coordinator

U.S. Geological Survey

Mr. James R. Rollo, Deputy Assistant Director for Engineering Geology
Mr. Eugene H. Roseboom, Chief, Office of Regional Geology, Geologic Division
Mr. George A. Dinwiddie, Acting Coordinator, Nuclear Waste Program, Water Resource Division

UTILITY INDUSTRY

Mr. Ed Davis, American Nuclear Energy Council
Dr. Max DeLong, Northern States Power Company, Minneapolis
Dr. E. P. Linn Draper, Gulf States Utilities
Mr. Loring Mills, Edison Electric Institute
Mr. Jim Hall, Director, Utility Nuclear Waste Management Group
Mr. Russ Stanford, (retired) formerly Program Manager, Utility Nuclear Waste Management Group
Mr. William Harris, Committee for Energy Awareness