

**EUREKA COUNTY, NEVADA  
COMMENTS ON  
BLUE RIBBON COMMISSION  
ON AMERICA’S NUCLEAR FUTURE  
DRAFT REPORT TO THE SECRETARY OF ENERGY**

**SUMMARY**

The Draft Commission Report contains many useful recommendations for improving the management of nuclear wastes in a post-Yucca Mountain environment. From a local government viewpoint, the key factor in successful siting of nuclear waste storage or disposal facilities is the maintenance of public trust. Confidence in the goals and actions of the implementing agency and in its capacity to ensure public safety build and sustain that trust. The Blue Ribbon Commission has recognized the essential role of public trust and has made a conscious effort to address this issue in its recommendations. We believe that the key recommendations are:

- To adopt a new approach to siting of nuclear waste facilities that is consent based, transparent, phased, adaptive and science-based.
- To recognize the key roles, responsibilities and authorities of local, state and tribal governments, including the delegation of direct authority over aspects of regulation, permitting and operation of nuclear waste facilities.
- To replace the Department of Energy (DOE) with a single-purpose federal corporation that can seek to re-establish public trust and confidence in the nuclear waste management program.
- To retain the Nuclear Waste Technical Review Board as a source of independent review.

Eureka County offers the unique perspective of being a local unit of government that was potentially affected by transportation of spent nuclear fuel to the proposed repository at Yucca Mountain. The Carlin Route, one of the alternative rail lines proposed by DOE, crosses through Eureka County in the Crescent Valley. Thus, construction of this rail line would have directly impacted current and future residents, agricultural operations, mining, and other businesses in Eureka County. The County is also at the end of the “transportation funnel” for the proposed repository. Thus, even if the Carlin Route were not selected, many shipments would have passed through the County on Interstate 80 and the Union Pacific main line. The County covers a large geographical area with a very low population. It is a challenge for the County to address existing emergency response needs. It would have been impossible for the County to address the emergency response needs created by shipments through the area without additional assistance. The County is very concerned that under the existing system, such needed direct assistance would have been difficult to obtain.

Under the “consent based” approach proposed by the Commission, it is not clear whether

or not a local unit of government affected by transportation would be included in the consent process under the Commission's proposed approach. The Commission should clarify its recommendation to ensure that local units of government that will be directly impacted by a proposal by a neighboring local unit of government are included in the consent process.

The Commission has significantly underestimated the challenges of creating a successful transportation program for a shipping campaign as large as the one needed for an interim storage site or a repository. In an integrated systems approach advocated by the Commission, transportation is a critical component. There are significant differences between a large shipping program necessary for an interim storage site or a repository and all shipments of spent fuel to date. Although the WIPP transportation program provides an example of how a large shipping program may work, its direct application to shipments of spent nuclear fuel has limited applicability.

Eureka County recommends that the Commission take a more critical look at the transportation issues, and expand its recommendations to include changes that are necessary to address the issues, many of which we address in the detailed comments to follow.

The Commission could have strengthened its report by detailing the ways in which Congress and the U.S. Department of Energy failed to generate trust and confidence in the framework and the management of the Yucca Mountain program. We recommend that the Commission compare and contrast the WIPP experience with the Yucca Mountain experience to determine why one succeeded in maintaining local trust and the other did not.

The report has overlooked the important role of state, local and tribal assessments of the social, economic and environmental impacts associated with repository development. In our view, and in that of the Nuclear Waste Policy Acts of 1982 and 1987, the ability of affected governments to carry out impact assessments and monitor subsequent performance is central to the establishment of public trust in nuclear waste siting processes.

It is critically important to identify the meaning of "consent-based siting." The Draft Report acknowledges that consent did not exist in Nevada, but stops short of explicitly endorsing the concept of either local or state veto over a facility. The Commission must address the possibility of irreconcilable differences between affected parties and the implementing agency. It should be understood that in such cases, the siting effort has failed and the site must be abandoned. The term "consent-based" sounds remarkably like the earlier concept of "consultation and concurrence," which informed the pre-Nuclear Waste Policy Act (NWPA) discussion of state and tribal participation in the repository siting program.

The Commission lists its Key Recommendations in the Executive Summary. It then lists "Additional Findings and Recommendations." One of these "additional

recommendations” is that:

The roles, responsibilities, and authorities of local, state, and tribal governments (with respect to facility siting and other aspects of nuclear waste disposal) must be an element of the negotiation between the federal government and the other affected units of government in establishing a disposal facility. All affected levels of government (i.e., local, state, tribal, etc.) must have, at a minimum, a meaningful consultative role in important decisions; additionally, states and tribes should retain—or where appropriate, be delegated—direct authority over aspects of regulation, permitting, and operations where oversight below the federal level can be exercised effectively and in a way that is helpful in protecting the interests and gaining the confidence of affected communities and citizens. At the same time, local, state, and tribal governments have responsibilities to work productively with the federal government to help advance the national interest. (pp. xv-xvi)

The ability of states and local units of government to have direct authority over appropriate aspects of a proposed facility is critical to the success of the consent based process proposed by the Commission. This should be a “Key Recommendation,” not just an additional thought. The Commission should also elaborate on the principle changes needed to federal laws and regulations that are required to make this work. Given the lengthy history of the Courts finding that states and local governments are almost entirely preempted from regulating spent nuclear fuel by the Atomic Energy Act, it is not likely that the new management authority could negotiate away this preemption without changes to the Act.

The Draft Report should address the critically important role of the National Environmental Policy Act (NEPA) as the basis for evaluating environmental impacts and providing for their mitigation. In our view, Congress did a disservice to the siting process by requiring the Nuclear Regulatory Commission (NRC) to adopt, to the extent practicable, the Environmental Impact Statement (EIS) developed by the Department of Energy. The functions of license applicant and EIS progenitor should be separate, with DOE submitting a license application and NRC producing an EIS to satisfy NEPA requirements. This separation of functions would avoid confusion about procedures for redress of public concerns - whether the public should challenge the DOE EIS through the courts or through costly and cumbersome participation in the NRC licensing proceeding.

The Commission’s endorsement of independent technical review by the Nuclear Waste Technical Review Board (NWTRB) is essential, but it does not go far enough. Independent review should include review of the institutional features of repository siting, which demonstrably have been at least as important at Yucca Mountain as the technical features. The NWTRB’s mandate and membership should be expanded to embrace non-technical issues and expertise, or a separate Board should be created to address social and institutional issues.

## **DETAILED COMMENTS AND RECOMMENDATIONS**

### **Chapter 3. Technical and Historical Background**

#### **Section 3.4 The History of Nuclear Waste Management Policy in the United States**

The Commission's history of nuclear waste management from the 1940s to the current day hits the high spots in regard to WIPP and Yucca Mountain, but fails to clearly evaluate why one succeeded in maintaining local support and obtaining the consent of the host state, while the other failed to engender support at the state level or in nearby Clark County, the largest population center in the state. Both sites shared a degree of continuing support from local communities in the host counties, primarily due to their need for economic development and monetary compensation. Both Carlsbad and Nye County considered safety concerns to be manageable and emphasized the economic development potential of the respective sites. As Tuler and Kasperson have noted, "when people like an activity or technology they tend to view it as having high benefit and low risk. On the other hand, if they dislike it, they see benefits as low and risk as high"(1). When local populations have a favorable predisposition to nuclear activities, their concerns about safety may be more muted and their confidence in the capabilities of the implementing agency greater than in communities that doubt the safety of the project or the competence of the managers.

In contrast to Carlsbad, the State of New Mexico needed more than twenty years of negotiation to reach an accommodation with the Department of Energy allowing the facility to open. This period extended for ten years beyond the actual completion of WIPP construction in 1989. The State of Nevada's opposition has been consistent and implacable, largely because of the decision by Congress in 1987 to limit site characterization to Yucca Mountain while eliminating sites at Hanford, Washington and Deaf Smith County, Texas on political grounds. Clark County, Nevada also maintained a consistent position of opposition to Yucca Mountain because of concerns about potentially adverse impacts on its visitor-based economy. Once again, as Tuler and Kasperson pointed out, the social conditions that characterize a siting effort may differ from one site to another, with dramatically different outcomes. The task of the Commission should be to identify the reasons for different outcomes in New Mexico and Nevada and provide recommendations for future siting criteria.

A significant issue for Yucca Mountain remains the lack of rail transportation to the site. DOE spent years and significant effort attempting to site a new rail line to the Yucca Mountain location. This raised significant concerns along the proposed routes for communities potentially affected by the proposed rail line. These concerns included not only the lack of emergency response capabilities in the largely rural areas crossed by the proposed rail line, but also the physical impact of the proposed rail line on existing communities, ranches and mining projects. The Commission should at least

acknowledge the problems associated with the need for very long new rail lines to reach proposed sites.

### **Section 3.5 Private Utility Initiatives**

Although the discussion here mentions the PFS problems in obtaining railroad rights-of-way to access the site, the Commission fails to note the importance of adequate transportation access in the site selection process. The lack of rail access to the PFS site is a significant problem for this proposal.

The PFS proposal also raised significant problems for states when addressing transportation issues. DOE determined that funding for training of emergency responders under Section 180(c) of the NWPA would not be available to states for the PFS shipments since the transportation was not going to be conducted by the Secretary of Energy. Thus, local governments would have to rely on PFS to provide training of emergency responders along their routes. There is no guarantee that this training would be conducted, or if conducted, that it would be completed satisfactorily. Although states typically have a good working relationship with DOE on developing transportation safety programs for DOE shipments and DOE policy directives require DOE to follow certain safety procedures developed jointly with states, there is no requirement for utilities making shipments to private sites to develop and follow similar safety programs for their shipments. Since the development of private sites may be part of the interim storage solution in the future, the Commission should investigate these issues, and develop recommendations on ways to address these problems in the future.

## **Chapter 4. The Need for Geologic Disposal**

### **Section 4.3: Options for Permanent Disposal**

Deep borehole disposal is experiencing a resurgence of interest as a waste disposal form for defense wastes, or for small quantities of waste from countries that cannot justify development of a national repository. The Commission outlines a number of advantages of deep borehole disposal but leaves the reader with the suggestion that the only disadvantage is the difficulty and cost of retrieval “if retrievability is desired” (p.34). The Nuclear Waste Technical Review Board (NWTRB) fact sheet on borehole disposal also notes that “retrieval is likely to be very problematic and deep borehole disposal of spent nuclear fuel is not desirable if retrieval is foreseen”(2). Both comments suggest that the main reason for retrievability is the possible reuse of waste as a future resource for reprocessing. There is no mention of retrievability in this context “to ensure that emplaced waste can be removed if the repository is not behaving as anticipated” (p.35). The discussion of deep borehole disposal should acknowledge the safety issues associated with retrievability.

## **Chapter 5. Storage and Transport as a Part of an Integrated Waste Management Strategy**

Although this section addresses transport as a part of an integrated waste management strategy, there are no recommendations pertaining to transportation in the introduction. As discussed below, transportation is a critical component of the system, and should receive more attention from the Commission in their recommendations.

### **Section 5.6 Transportation Issues**

The Transportation and Storage Subcommittee recognized the critical importance of transportation planning in their draft report. One of their recommendations was:

The Subcommittee believes that state, tribal and local officials should be extensively involved in transportation planning and should be given the resources necessary to discharge their roles and obligations in this arena. Accordingly, DOE should (1) finalize procedures and regulations for providing technical assistance and funds for training to local governments and tribes pursuant to Section 180(c) of the NWPA and (2) begin to provide such funding, independent from progress on facility siting. (Blue Ribbon Commission on America's Nuclear Future, Transportation and Storage Subcommittee Report to the Full Commission, May 2011, p. vii)

This important recommendation was not carried forward fully into the Full Commission report. The Commission only recommends that “DOE or another organization complete the development of procedures and regulations for providing technical assistance and funds for (pursuant to section 180 (c) of the NWPA) training local and tribal officials in areas traversed by spent fuel shipments” (p. 54). It is important to note that the Transportation and Storage Subcommittee recognized the importance of involving states and local governments in transportation planning. Apparently, their hope was that by providing funds early under Section 180 (c), there would be state and local participation in transportation planning. Unfortunately, Section 180 (c) has been very narrowly interpreted to apply only to training for emergency response, and not for transportation planning. Funding for states and local governments to participate in transportation planning for DOE shipments in the past has been problematic, with funding only provided for specific shipment programs. Therefore, the Commission should include a recommendation on how best to include states and local governments in the transportation planning process ensuring that adequate funding is available to meet these needs.

In addition, Section 180 (c), as currently worded, will not provide the funds that states and local governments need to adequately equip emergency responders to respond to a transportation incident. The Commission should address the need to ensure that state and local responders will have adequate resources when response to a transportation incident is necessary.

The success of Section 180 (c) in meeting the training needs of emergency responders is dependent upon adequate funding. With shipments originating from many sites around the country, many local jurisdictions will require emergency response training to be prepared to respond to an incident involving spent nuclear fuel. As discussed below in our comments on Section 6.1, current routing regulations for spent nuclear fuel require that the shortest route between the origin and destination be used. This will limit the ability to combine routes to optimize the use of 180 (c) funds as was done for WIPP shipments. Thus, without the assurance that significant funds will be available for this critical training need, many responders may not receive the training that they need. If this occurs, public trust and confidence in the shipping program would be significantly affected, and could undermine confidence in the entire program. Therefore, the Commission should take a critical look at the 180 (c) program, and include a recommendation regarding making sure that adequate funding for training is available in a timely manner.

As discussed in the comments on Chapter 3, rail access has been a significant issue in past attempts to site nuclear waste facilities at both the proposed Yucca Mountain repository and the PFS interim storage site. Since any new facility is highly dependent upon adequate rail access to the site, the Commission should include a recommendation that adequate access to existing railroad infrastructure be a key factor in any site selection process.

As demonstrated by the WIPP transportation program, states do have the capability of addressing many of the concerns associated with transportation of radiological materials by truck. The same cannot be said about rail transportation where they have little or no control over railroads. This problem starts with the preemption of state laws and regulations over the siting and construction of new rail lines that are considered to involve interstate commerce.

It should also be noted that the railroad system is a private system, which creates problems for state and local governments when attempting to deal with transportation issues. Many of the protocols developed for the WIPP transportation system will be difficult to apply to rail transportation due to the private nature of the system. For example, for truck shipments, state personnel have access to inspect the trucks and cargo on state highways. However for rail, inspections by state personnel can only be completed if railroads agree to provide access to state personnel to their private rights-of-way. Since railroad rights-of-way are private property, local emergency responders may have a difficult time reaching the site of an incident involving a rail shipment, and may have to rely on the railroad to transport responders and their equipment to the site. These are just a few of the many examples.

The Federal Railroad Administration has developed the *Safety Compliance Oversight Plan for Rail Transportation of High-Level Radioactive Waste and Spent Nuclear Fuel* (SCOP) to enhance the rail safety of shipments of spent nuclear fuel through an inspection program for track, equipment, and operators. Although they believe that the SCOP will work well for the current low volume of shipments of spent nuclear fuel, they have stated

that for a large shipping campaign such as to an interim storage site or a repository, FRA will not have the resources to conduct the activities outlined in the SCOP. This is a critical issue for future shipments that should be addressed in the Commission's report.

Since rail transportation will be the dominant mode for spent nuclear fuel shipments, the Commission should address these issues, and provide recommendations on how the system may be improved.

Lack of adequate and consistent funding on cask system development has prevented DOE from developing the next generation of casks and canisters for spent nuclear fuel. This has resulted in the private development of canisters, which may create significant problems in the future when it comes time to transfer fuel in dry storage to transportation casks and disposal canisters at a repository. Although DOE initiated various design efforts in the past (the Multiple Purpose Cask, or MPC and the Transportation and Disposal system, or TAD), none of these efforts were completed. The Commission should recognize the importance of developing a standardized system, and provide a recommendation that DOE complete development of the standardized system.

The new generation of rail transportation casks proposed by DOE IS significantly larger than current rail casks. The Association of American Railroads (AAR) recognized that new cask railcars should be developed to transport these casks. A significant design criteria in AAR's proposed new cask cars is that the cars be designed to take advantage of the best available technology, such as electronic braking systems. Although the AAR began the development and testing of these new cask cars, their work has been delayed. The Commission's report should address this important component of future transportation by rail, and provide recommendations on the development of new cask cars.

The draft Commission report recommends that implementation of the National Academies recommendations to improve transportation safety "should be revisited and addressed as appropriate" (p. 53). This recommendation is too vague to ensure that the National Academies recommendations are implemented. Who is going to determine if the recommendations are appropriate? And what are the criteria for determining what is appropriate? The Commission should take a closer look at the National Academies recommendations, and provide specific recommendations on which recommendations the Commission believes should be addressed. This would provide much greater assurance that the important recommendations receive the attention that they warrant.

## **Chapter 6. A Consent-Based Approach to Siting and Developing Future Facilities for Nuclear Waste Management and Disposal**

We are particularly gratified to see that the Commission has rejected "Decide, Announce, Defend" as the basis for facility siting, in favor of a consent-based, negotiated and adaptable approach to affected governments and citizens. The core issue in this section is the definition of "consent-based," as opposed to a veto. The Commission quite rightly acknowledges that communities want a voice in decisions that affect them, especially

when those decisions could impact the health, safety and welfare of their citizens. The Commission distinguishes the transparent, flexible, adaptive approach to achieving community consent from the NWPA approach giving a state the right to veto the facility after DOE has recommended it, and giving the Congress an opportunity to override that veto.

The Commission states that a consent-based approach would “obviate the need for a state level veto” (p 67). It is certainly true that an approach that is designed to achieve consent at each step along the way is better than an approach that proceeds without regard to the views of host communities, and is subject to a veto that can be overridden by Congress. However, the Commission does not specifically acknowledge the central implication of a consent-based approach – that a failure to achieve state or local consent means that the site will be abandoned. If the Commission is recommending such an approach, then effectively the state or local government has a veto over the site. This should be made abundantly clear when presenting the new approach. Most of this section is devoted to the mechanics of “getting to yes,” which is important, but begs the question of potential non-consent by state or local governments.

Even under a consent based approach, the State and local governments’ current lack of authority to regulate a facility should be addressed by the Commission. As envisioned by the Commission, the consent based approach is either a yes or a no by a state. This does not give the affected state the ability to say “yes, but with the following conditions.” We strongly urge the Commission to recommend that the Atomic Energy Act be amended to specifically provide authority of the states to regulate aspects of the siting, design and construction of both central storage facilities and repositories. This would not only allow states the ability to provide corrective actions that they believe are necessary without the threat of a political override as happened with the State of Nevada’s veto, but would also help build trust and confidence by citizens of the area that their concerns are being addressed.

## **Section 6.1 Lessons Learned from U.S. Experience in Siting Nuclear Waste Facilities**

This section emphasizes what went right at WIPP, but is weak in addressing what went wrong at Yucca Mountain. The report should reveal the failings of DOE and Congress at Yucca Mountain, and lay the groundwork for recommendations to correct these failings. The Draft Report hardly does justice to the reasons for the State of Nevada’s implacable hostility to the repository. The Commission cites “short-circuiting of the initial site selection process, overly prescriptive requirements and rigid deadlines, and inconsistent program leadership and execution” as particular problems. It does not provide the more succinct formulation offered by Tuler and Kasperson, who explained the erosion of trust and confidence in Nevada as follows:

“Reasons include Congressional scrapping of a site selection in the Eastern half of the US, Congressional scrapping of technical integrity and equity provisions in the Nuclear Waste Policy Amendments, attempts to coerce Nevada rather than negotiate, failure to clearly define regulatory

criteria in advance and then adapt them to fit existing conditions, attempts to renegotiate or circumvent compliance with cleanup agreements related to HLW at DOE sites, and treating the public as if their concerns were irrational”(3).

The Commission states that “The crucial difference in the WIPP case was the presence of a supportive community and of a state government that was willing to remain engaged”(p.57). This statement is certainly true, but the question is *why* the Department of Energy was able to succeed at WIPP and not at Yucca Mountain.

The Commission should recognize that the WIPP experience has limited application to addressing the problems associated with siting a facility for spent nuclear fuel. Even the most radioactive of the transuranic waste disposed at the WIPP is much, much less radioactive than spent nuclear fuel. In fact, the vast majority of the waste is “contact handled,” which means all of the radiation is shielded by the 55 gallon drums that contain it. All of the shipments to WIPP are by truck, a system which states are familiar with, and more importantly, can regulate effectively. In contrast, the bulk of the shipments of spent nuclear fuel will be by rail, a system over which states have little or no control. Thus, for the WIPP facility, states are able to effectively communicate to the public that they are confident that the shipments can be made safely. All of the waste destined for WIPP is defense generated waste. The general public has a strong sense of commitment to the Nation’s defense, as well as addressing problems that have arisen from defense programs. Additionally, there are defense sites in New Mexico which can be cleaned up due to the WIPP facility. Therefore, people in New Mexico perceive a benefit from the WIPP facility.

The significant difference with the WIPP facility compared to past attempts to site facilities for spent nuclear fuel is that it is not regulated by NRC and is regulated by EPA and the State of New Mexico. This is a critical difference that should be noted by the Commission.

The text box on page 59 of the Commission’s draft report describes the “WIPP Transportation System.” There are some significant problems with this succinct summary. The first paragraph states that the transportation “system was designed by DOE . . .” This is incorrect. As stated in the final paragraph, “WIPP shipment protocols and routes were developed through cooperative efforts between states, tribal governments and DOE.” The Commission should recognize the Western Governors’ Association, in cooperation with DOE, developed the *WIPP Transportation Safety Program Implementation Guide*, which DOE then implemented through its *WIPP Transportation Plan*. This then served as a model for WIPP transportation protocols in other regions. The significant issue is that the Secretary of Energy specifically directed his department to work with the Western Governors’ Association. This secretarial commitment combined with effective collaboration with affected states was critical to the successful development of the program.

The text box also notes that WIPP routes were developed through cooperative efforts between the states and DOE. This is a significant difference to the routing for spent nuclear fuel. Very few, if any, of the WIPP shipments are “Highway Route Controlled Quantities” (HRCQ) as defined by U.S. Department of Transportation regulations. Therefore, they are not required to use the interstate system. DOE very early on made the commitment to states that they would use only interstate highways for WIPP shipments. As they gained experience with training along routes, DOE recognized that they could optimize training if they consolidated routes from different facilities. For HRCQ, this is not an option since the current rules require shipments to follow the shortest route.

Thus, although the WIPP facility does demonstrate a successful repository project, the lessons learned should be key to the Commission’s findings and recommendations. That is, state regulation of a facility is critical to gaining acceptance of a project and current U.S. Department of Transportation regulations limit the applicability of the WIPP transportation program to spent nuclear fuel shipments.

## **Section 6.2 Experience with Nuclear Waste Facility Siting in Other Countries**

The Commission’s Disposal Subcommittee in an earlier draft report cites repository programs in Finland, Sweden, France and Canada that have adopted “a transparent, consent-based approach that is built on a solid understanding of societal values”(4). Yet the Draft Report contains no mention of the need to ascertain societal values in America as part of the “new approach.” The Subcommittee recommended “meaningful” consultation, transparency and a clear definition of “the roles, responsibilities and authorities of local, state and tribal governments” (5). Although other countries have sought to determine underlying societal values, the Commission seems reluctant to adopt this element in its own approach to facility siting. We recommend that it do so.

The Commission also notes several elements that these countries considered to be critical in establishing a foundation of trust. One of these is the availability of financing for local governments to address nuclear waste issues through vehicles such as “socioeconomic studies and evaluations of impacts to local businesses” (p.62). As stated above, the Commission should include this important element in its “new approach” to facility siting.

Another important element is “a clear and understandable legal framework” (p.62). The Commission has limited its comments in this regard to the regulatory framework established by EPA and NRC for developing standards and regulations. It has completely overlooked the National Environmental Policy Act in the legal framework, and the procedures that apply to interveners in the licensing proceeding. A separate section is needed for this purpose, either within Section 6 (A Consent-Based Approach) or in Section 9 (Regulatory Issues). This new section should be titled “Public Participation in Environmental Review and the Licensing Process.”

Congress provided in the NWPA of 1982 for the Department of Energy to produce an Environmental Impact Statement for Yucca Mountain and for the Nuclear Regulatory Commission to “adopt, to the extent practicable” the DOE EIS, rather than preparing a

separate EIS of its own as part of the licensing process (6). This may have seemed to the authors of the NWPA as an efficient way to proceed without duplication of effort, but it completely confused both the agencies and the public regarding the appropriate avenues for redress of public concerns. The normal recourse would have been to comment on the draft EIS and, after a final agency action in the form of a Record of Decision(ROD), to seek redress in the courts if necessary. The DOE EIS never resulted in a ROD, but rather served as supporting documentation for a congressionally mandated site recommendation to the President, followed by an opportunity for state veto and a congressional override. The congressional override resolution effectively became the ROD, but was not the final agency action because DOE had to submit a license application based on the EIS to NRC for approval.

DOE suggested that recourse for unresolved public concerns be obtained through intervention in the licensing proceeding, while NRC suggested that concerns with the DOE EIS should be taken up in court. This confusion was resolved in practice by NRC agreeing to consider a wide range of contentions from interveners in the licensing proceeding. In the future, the responsibility for developing an EIS should not be placed in a waste management organization that is also an applicant for a license to construct a facility. That responsibility should lie exclusively with the NRC, as the agency responsible for a final decision on repository construction.

The new section on public participation should address this issue of the legal framework, which local officials in Sweden and Finland cited as a critical element in establishing a foundation for trust. In addition to clarifying the NEPA responsibilities of NRC and DOE, the section should address the need for adequate funding for states, tribes and local governments to participate in the licensing proceeding and to seek redress in the courts for unresolved concerns after final approval of a license.

The new section should also address the need for ready access to information through the Worldwide Web to support not only the discovery process in a licensing proceeding but also the needs of interveners for a centralized and comprehensive source of information about all aspects of the project. Finally, the licensing proceedings should be web-streamed for the benefit of rural communities and citizens who cannot reasonably attend all hearings on the license application.

### **6.3 Key Elements of a Phased, Adaptive Approach to Siting and Developing Facilities**

We certainly concur with the Commission view that “without political buy-in and trust, progress toward a resolution of the nation’s waste management challenges cannot be sustained.” We also believe that the Commission is right to recommend adaptive staging and proceeding in a flexible and stepwise manner. Adopting rigid milestones - including fixed dates of completion - only encourages short cuts and makes program managers more entrenched in their determination to move ahead on schedule, sometimes without resolving public concerns. The Commission appears to be of two minds about milestones,

however, seeing the need for them to guide progress and provide accountability, while at the same time not wanting them to become too rigid (See Section 6.4 below).

#### **6.4 Specific Steps in an Adaptive, Staged Facility Siting and Development Process**

In this section, the Commission reinstates most features of a rigid system of milestones, suggesting “that the implementing organization establish reasonable time horizons for the major stages of the program” (p.65). The Commission specifically recommends “a stage of, say, 15 to 20 years to accomplish site identification and characterization and to conduct the licensing process” (p.65). This suggestion is not consistent with phased, adaptive staging. The Yucca Mountain site identification process began in 1975 and still has not completed the licensing stage 35 years later. The Commission appears to have re-introduced “overly prescriptive requirements and rigid deadlines,” which it acknowledges are inconsistent with a phased, adaptive, flexible approach. We recommend a truly phased program in which each stage is completed successfully before milestones are set for the subsequent stage.

We fully support the recommendation that “Prior to launching a consent-based siting process, the implementing organization should develop a set of basic initial siting criteria” (p.64). These siting criteria should be developed in consultation with potential stakeholders in the siting process.

It is unrealistic to suggest that the site can be selected solely on the basis of state and local approval, without ultimate Congressional approval (p.64). Legislation will be needed to withdraw land, to define benefits, and to otherwise identify conditions for moving ahead with construction of a facility. Passing such legislation explicitly provides Congressional approval for the project.

#### **Section 6.5 Support for Participation**

Adaptive staging and flexibility is helpful to creating trust, but it is not the only way to achieve this goal. Trust is also engendered through forthcoming attitudes and behaviors on the part of the siting agency, a willingness to listen to community concerns and make changes to accommodate them, and a willingness to provide financial support to allow communities to undertake independent studies of both technical and societal issues of concern. We agree that “in order to gain trust and confidence in the decisions taken by the waste management organization, states and affected communities must be empowered to meaningfully participate in the decision-making process” (p.66). The Disposal Subcommittee went part way towards this goal in recommending funding “for independent monitoring and testing on the candidate repository site” (7). The Draft Report deletes this recommendation, and does not mention the need for funding state and local governments’ ability to monitor the siting process, comment on siting activities, conduct public outreach, and identify potential impacts, including:

- Impacts on public safety agencies
- Land use conflicts

- Employment and incomes
- Stigma induced property value impacts
- Baselines for monitoring programs
- Community health assessments
- Risk perception effects on visitor economies
- Environmental impacts

As noted above, affected governments must have the authority and the resources to study potential impacts, and we recommend that the Commission address this issue in its final report.

The Commission asserts that states and affected communities “. . . must be empowered to participate meaningfully in the decision-making process” (p. 66). Yet, the Commission makes no specific recommendations on how this meaningful participation can be provided given the current total preemption of states and affected communities by the Atomic Energy Act and the various laws governing construction and operation of railroads. The Commission should provide specific recommendations on how the Atomic Energy Act should be amended to provide states and affected communities with specific powers to regulate facilities. The Commission should also address how states and affected communities can be empowered to participate in the selection of any transportation corridors necessary to access a site and to regulate the construction and operation of those transportation facilities.

## **6.6 Role of States, Tribes and Local Communities in an Adaptive, Consent-Based Siting Process**

This section appears to define “consent-based” in narrower terms involving “meaningful” consultation rather than full consent. The Commission concludes that:

“all affected levels of government (e.g. local, state, tribal, etc.) must have, at a minimum, a meaningful consultative role in important decisions; additionally, states and tribes should retain – or where appropriate, be delegated – authority over aspects of regulation, permitting, and operations . . . in a way that is helpful in protecting the interests and gaining the confidence of affected communities and citizens” (p.68).

The problem with this formulation, as noted elsewhere, is that it envisages getting to a positive outcome. It skirts entirely the possibility of a negative outcome and what that entails for the siting process.

In addition, the Commission notes that “. . . it will be important to define the roles, responsibilities and authorities of local, state and tribal governments. . .” (P. 67). The Commission then states in a footnote to this sentence that:

The Commission recognizes that more than one community, state, or tribe might be affected by a proposed repository. The waste management

organization should therefore be directed to consult with any state, affected unit of local government, or Indian tribe **that it determines** may be so affected and to include any reasonable and appropriate provisions relating to their interests in negotiated agreements, as the Nuclear Waste Negotiator was directed and empowered to do under Section 403 (b) of the NWPA.” (pp. 144-145, Footnote 121) (emphasis added)

This is an extremely important point to local governments who may be affected by a proposed project, and should be made part of the body of the Commission’s report, not delegated to a footnote. The Commission should also be more specific regarding what it considers to be an affected unit of local government. This has been controversial in the past, particularly for Counties potentially impacted by transportation at the end of the “transportation funnel.” Relying on the waste management agency to determine which local governments are affected could lead to disenfranchising local units of government who will be impacted. The Commission recommendation should also be expanded to include interim storage facilities, and not be limited only to those affected by a proposed repository.

The Commission recommends that states “should retain – or where appropriate, be delegated – direct authority over aspects of regulation, permitting and operations where oversight below the federal level can be exercised effectively and in a way that is helpful in protecting the interests and gaining the confidence of the affected communities and citizens” (p. 68). Although the Commission recognizes that this is not straightforward, it does not provide any specific examples of where the Commission believes this would be appropriate. Since this aspect of the Commission’s recommendations is critical to the success of a consent based process, the final Commission report should provide more detail on ways that the Commission believes authority can be delegated to states.

## **6.7 Benefits to Host States, Tribes and Communities**

Benefits should certainly be included as part of a negotiated agreement with host states, tribes and communities. It is important, however, not to overstep the boundaries of environmental justice by selecting sites in poverty stricken minority communities. The principal flaw in the Nuclear Waste Negotiator process established in the 1987 Amendments Act was its focus on just such economically deprived Indian reservations, whose tribal sovereignty eliminated the need for state government approval. In such cases, the offer of benefits could be seen to be a payoff or bribe to gain community acceptance. The appropriate role for benefits is to provide an offset to host communities for accepting the long term risks of hosting a nuclear waste facility.

## **Chapter 7. A New Organization to Lead the Nation’s Waste Management Program**

### **Section 7.1 The Rationale for a New Waste Management Organization**

We agree that nuclear waste management should be removed from the U.S. Department of Energy, which has demonstrated its inability to maintain trust and confidence in its

management of Yucca Mountain. We also agree that “it will never be possible *or even desirable* to fully separate future waste management decisions from politics” (p.73). Citizens and their local governments must be able to access the political process if the waste management agency fails to take into account their concerns. The Commission acknowledges that “Congress would play a central role in ensuring the accountability of a new waste management organization” and “would define – through enabling legislation – the mission, structure, responsibilities, and powers of the new organization” (p.77). The problem is that Congress did that in 1982, and then proceeded to undermine the Nuclear Waste Policy Act through amendments that removed (or threatened to remove) critical protections for state and local governments. Aside from canceling the second repository and selecting Yucca Mountain on political grounds, Congress intervened to require EPA to promulgate a Yucca Mountain specific exposure standard when the repository could not meet the EPA’s generic standard. Multiple bills in Congress (some sponsored by the Administration) sought to expedite progress on the repository by eliminating or changing state or local regulatory authorities.

The Commission must come to grips with the fundamental problem of Congress interfering in the siting and development of a repository. Affected governments want to retain access to the political process, but at the same time have been abused by that process and are leery of Congressional oversight. There may be no answer to this conundrum, other than to hope for Congress to set the parameters of the program, create a mandate for consent-based siting, and let the waste management agency get on with its work.

## **Section 7.2 Options for Structuring a New Waste Management Organization**

The key attributes of a new waste management organization (p.74) include “Empowerment” through the granting of “sufficient authority and independence from political micromanagement to be able to implement the mission”. Yet in the text (p75), the Commission seems unclear about the degree of independence that the new waste management organization should enjoy. The Commission states that:

“the performance of the organization as a whole, would, of course, be subject to policy, safety, security, technical, and financial review by appropriate government agencies and Congress.”

We would hope that “policy review by appropriate government agencies” would not suggest placement of the new organization within, or under the direction of, an existing cabinet department. We support the concept of an independent organization that is accountable to Congress and is directed on a day-to-day basis by a board appointed by the President and confirmed by the Senate.

## **Section 7.4. Governance/Oversight Recommendations for a New Organization**

In discussing the need for congressional oversight, the Commission recognizes that “some mechanism for facilitating later adjustments or course corrections (after the initial

policy direction is specified in law) may be desirable” (p.77). It suggests that a Mission Plan could be submitted every 3-5 years to Congress *and to DOE*. It does not elaborate on the relationship between the waste management organization and the Department of Energy, but it is our view that the organization should be directly accountable to Congress and not to DOE as an intermediate policy body. We recognize that the Secretary of Energy has greater clout on the Hill than the new waste management organization is likely to exercise, but believe that the independence of the organization is a key factor in developing a new basis for public trust in its activities.

#### **Section 7.4.4 Scientific and Technical Oversight**

We agree with the Commission’s recommendation that the new waste management organization should be subject to “broad independent technical oversight” and that the Nuclear Waste Technical Review Board “would be an appropriate organization for providing this type of wide-ranging technical oversight on an ongoing basis” (p.78). However, it should be clearly stated that such independence relies on separate funding from Congress. Any independent review activities – such as peer review – that are funded by the waste management organization should not include the independent technical review function.

We also strongly concur with the recommendation made by Tuler and Kasperson that the NWTRB mandate should be expanded, or a parallel review board created, to:

“provide advice and evaluation on issues related to institutional design and performance, collaborative decision-making and public involvement, procedures for voluntary consent and reversibility, public outreach and communication, etc.” (8).

The Commission has acknowledged that non-technical issues have been critical to the success or failure of waste management projects at WIPP and Yucca Mountain. The Commission should act on this acknowledgement by recommending an independent review body for social and institutional issues as a complement to the technical review panel.

#### **Section 7.5 Stakeholder Participation**

We agree with the Disposal Subcommittee that there is a need for enabling legislation that provides “clear direction to the waste management organization that stakeholder involvement is to be regarded as one of its core responsibilities” (9). Unfortunately, the Commission has deleted this fundamental commitment to the central role of stakeholder involvement and has substituted in its draft report a reference to the need for enabling legislation to ensure that “extensive stakeholder participation...is an authorized use of the Nuclear Waste Fund” (p.79). We recommend that the final report restore the Disposal Subcommittee language regarding stakeholder involvement as a core responsibility of the waste management organization.

We do, however, agree that the waste management organization must have access to adequate resources to support stakeholder involvement. Inconsistency on the part of DOE and the Congressional Appropriations Committees with regard to authorizing such resources interfered with the continuity of state and local government oversight programs in Nevada. A new waste management organization must not only be authorized to provide financial support for stakeholder involvement, but must also accept the need for such involvement on a continuous basis throughout the siting and development of waste facilities.

We support the concept of a Stakeholder Advisory Committee, including a subcommittee focused on the siting process. The Disposal Subcommittee specified that such a subcommittee should include social scientists among its members (10). We agree with this Subcommittee recommendation, and with the key finding of the Subcommittee that “societal confidence and acceptance of the siting process can be bolstered” (11) through the creation of such a subcommittee. We recommend that the Commission adopt the Subcommittee language and specifically include social scientists among those with “relevant experience” (p.80).

### **Section 7.6 Interactions with Affected States, Tribes, and Local Governments**

The Commission suggests that interactions with potential community, state and tribal hosts be addressed in the context of consultation and cooperation agreements, as authorized in the NWPA. The Commission incorrectly attributes this requirement to Section 116 of the NWPA, when in fact it is in Section 117(c). The Commission proceeds to identify “areas of mutual concern” that are specified in Section 117(c), but leaves the impression that these concerns can only be addressed through formal agreements (p.81). In fact, Section 116(c) provides for financial assistance for

“determining any potential socioeconomic, social, public health and safety, and environmental impacts of a repository, developing a request for impact assistance, engaging in any monitoring, testing, or evaluation activities, providing information to Nevada residents, and making comments and recommendations to the Secretary regarding any activities with respect to the site.”

It should be noted that none of these activities require a consultation and cooperation agreement. In Nevada, as noted below, the State declined to enter a formal agreement and was able nonetheless to undertake the activities specified in Section 116(c) and receive financial assistance for that purpose.

Notably, Section 116(c) of the NWPA includes provision for studies of environmental and socio-economic impacts of the repository. The Commission fails to address this important requirement anywhere else in this section or in Section 5, and does not include socioeconomic studies in any of its recommendations. We believe that the ability of state, tribal and local governments to carry out independent reviews of the potential social, economic and environmental impacts of a facility is a key condition for public acceptance

of the facility, as it enhances confidence in the likelihood that the waste management organization will mitigate any adverse impacts of the facility.

The Commission endorses the concept of consultation and cooperation agreements with affected governments, and even recommends that such agreements be extended to include local host governments (p.82). The Draft Report should have recounted the history of such agreements in Nevada, where the State of Nevada completely rejected the concept because it would have “implied consent” to the development of a repository. The Commission recommends that agreements be made with local governments without addressing the delicate relationship between such agreements and an overall agreement with the state. It also sidesteps the sensitive issue of which should come first, as there may be legal impediments to a subsidiary government entering agreements that have not been approved by the state.

Finally, the Commission recommendation does not specify which local host governments would qualify for agreements, whether these would include counties, cities, towns, villages, parishes or other subsets of local government. Since there are multiple overlaps in responsibilities – e.g. emergency response – among local governments, we believe that such agreements should be limited to the county level. We note that the first legislation introduced in 2011 to implement the BRC Commission recommendations (S.1520) provides for agreements with every level of local government down to the very smallest units. Such legislation could precipitate divisions between local levels of government and should not be encouraged by the Commission.

### **Section 7.7 Transfer of Contracts and Liability to a New Organization**

This section should include examination of various “Take Title” proposals in Congress that would provide for DOE ownership of wastes at reactor sites, rather than continuing to compensate nuclear utilities for its failure to accept wastes in January 1998.

### **Chapter 8. Funding the Waste Management Program**

This section focuses exclusively on “off budget” issues and how to ensure access for the waste management organization to the Nuclear Waste Fund. The key funding issue for affected governments is an assurance of access to sufficient and continuous funding for independent oversight, assessment of impacts, and outreach to citizens, as provided in the NWPA of 1982 and 1987. There has been constant tension between affected governments, DOE and Congressional authorities regarding the sufficiency of funding and the conditions under which it can be expended. Among other actions, Congress failed to fund the oversight programs in Fiscal Years 1996 and 1997, DOE tried unsuccessfully to withhold a portion of appropriated funds for affected local governments in FY 2000, and DOE recommended a zero budget in FY 2004. The prohibition on using funds for litigation was interpreted by DOE as disallowing the use of oversight funds for participation in NRC licensing proceedings, which would have closed this avenue for redress of local government concerns. Congress eventually clarified that funds could indeed be used for this purpose, but there was much confusion about what was, or was

not permitted. This chapter should include a discussion of funding issues for state, tribal and local governments.

## **Chapter 9. Regulatory Issues**

We concur with the Commission findings that “generic standards and regulatory requirements should be applicable to all potential sites” and that “safety and other performance standards and regulations should be finalized prior to the site selection process.” Confidence in the Yucca Mountain regulatory process suffered from a mid-stream decision by DOE to seek a Yucca Mountain specific standard, when it became apparent that the repository site could not meet the EPA generic standard. Implementation of the Commission’s recommendations would go far to restore trust in the integrity of the regulatory process.

### **Section 9.1 Issues and Challenges in Regulating Interim Storage Facilities and Transport**

The final paragraph of this section concludes:

The current regulatory system for assuring the safety and security of nuclear waste shipments, meanwhile, has functioned well to date. As discussed in chapter 5 of this report, however, the challenge will be to ensure that the current system can keep up in terms of managing health and safety risks and providing adequate physical security if the quantity and volume of waste shipments – including shipments of higher-burnup fuels – increases substantially in the future. A separate NRC rulemaking is currently underway to codify further transportation security requirements for future nuclear waste shipments (p. 97).

Although here the Commission finally recognizes the challenge in significantly ramping up transportation to a massive shipping campaign, their only comment regards NRC rulemaking on security. As discussed previously, there are other regulatory issues related to transportation that should be addressed before embarking on such a significant increase in the number of shipments. As a side note, this paragraph should probably be moved to the introduction to this chapter, since the same transportation issues are applicable to disposal facilities as well.

## **Chapter 12. Near-Term Actions**

The Commission only lists two near term actions related to transportation that should be taken in the near future. As reflected in the comments of Eureka County and others, there are other significant steps that should be taken in the near term. One critical aspect that the Commission should address as a near-term action is the provision of adequate funding for states and local units of government to continue to participate in the transportation planning process. Additional activities could include, but are not limited to, cask development and testing, cask rail car development, and routing studies.

## NOTES

1. Seth P. Tuler and Roger E Kasperson, Social Distrust: Implications and Recommendations for Spent Nuclear Fuel and High-Level Radioactive Waste Management, Technical Report prepared for the Blue Ribbon Commission on America's Nuclear Future, January 29, 2010, p.6
2. Nuclear Waste Technical Review Board Fact Sheet, Deep Borehole Disposal of Spent Nuclear Fuel and High-Level Waste, p.2 ([www.nwtrb.gov](http://www.nwtrb.gov))
3. Op. cit. Tuler and Kasperson, p.2
4. Blue Ribbon Commission on America's Nuclear Future, Disposal Subcommittee Report to the Full Commission, June 1, 2011, p.55
5. Ibid, p.63
6. Nuclear Waste Policy Act, Section 114(f)(4)
7. Ibid, p.62
8. Op.cit. Tuler and Kasperson, p.17
9. Op.cit. Disposal Subcommittee Report, p.37
10. Ibid. p.39
11. Ibid. p.42

For more information, contact the Eureka County, Nevada Public Works Department, P.O. Box 714, Eureka, NV 89316 775/237-5372. Eureka County's Lessons Learned Report and Lessons Learned Video Project can be accessed and referenced at our website: [www.yuccamountain.org](http://www.yuccamountain.org).