

Blue Ribbon Commission on America's Nuclear Future  
Disposal Subcommittee  
Presentation by Mike L. Baughman, Ph.D., CEcD  
Representing Lincoln County, Nevada  
July 7, 2010

On behalf of Chairman Paul Mathews of the Board of Lincoln County Commissioners, thank you for inviting Lincoln County, Nevada to share with you observations of the County regarding its 26 years of experience with and involvement in the Yucca Mountain project. I have served as a consultant to the County regarding Yucca Mountain matters since 1984.

Lincoln County is an area of approximately 10,600 sq. miles located in southeastern Nevada. Approximately 98 percent of the land area of the County is federally administered. While the Bureau of Land Management is responsible for management of the majority of land in the County, the Department of Defense and Department of Energy also administer significant areas of land within Lincoln County. Portions of the Nevada Test Site are located in Lincoln County. Over the years, many Lincoln County residents have been employed at the Nevada Test Site. The County is located immediately down-wind from locations on the Nevada Test Site at which atmospheric detonation of nuclear weapons occurred over several years. As a consequence, residents of Lincoln County who were present during testing and have contracted certain cancers are eligible for compensation from the federal government.

The Union Pacific mainline railroad traverses Lincoln County, bisecting downtown Caliente; Lincoln County's only incorporated City. U.S. Hwy 93 also crosses Lincoln County and passes through downtown Caliente. In recent years, UPRR has transported in excess of 25,000 carloads of every imaginable hazardous material through Lincoln County and the City of Caliente. The Department of Energy has transported low-level radioactive waste through Lincoln County in route to disposal locations on the Nevada Test Site. The State of Nevada and Clark County have consistently sought to minimize the number of Yucca Mountain related potential shipments of spent nuclear fuel and other high-level radioactive waste through the Las Vegas metropolitan area preferring instead to see said shipments routed through rural areas of Nevada such as Lincoln County. The Department of Energy identified rail as its preferred mode of transport.

Although longer and more expensive to construct than other alternatives originating the Las Vegas Valley, DOE selected the Caliente Rail Alignment as its preferred route for rail shipments through Nevada to the Yucca Mountain site. The Caliente route crosses Lincoln County for over 150 miles and would enable the majority of spent nuclear fuel and other high-level radioactive waste shipments to avoid the Las Vegas metropolitan area.

In 1984, the State of Nevada provided Lincoln County with \$5,000 to enable the County to monitor DOE's Yucca Mountain activities. In response, the County and the City of Caliente entered into a Memorandum of Agreement establishing the Joint City/County Impact Alleviation Committee or JCCIAC as it has come to be known. The JCCIAC was tasked with advising the County Commission and City Council regarding the design and implementation of an effective Yucca Mountain repository system oversight, independent impact assessment, mitigation planning and public information initiative. The JCCIAC is comprised of four members appointed by the Board of Lincoln County Commissioners and four members appointed by the Caliente City Council. The chairmanship of the JCCIAC rotates annually between the Chairman of the Board of Lincoln County Commissioners and the Mayor of Caliente. As described below, since 1987, funding for design and implementation of JCCIAC recommended initiatives has been derived from annual congressional appropriations.

Recognizing the potential for development and operation of the Yucca Mountain project to impact Lincoln County, the Secretary of Energy, pursuant to Section 2(31) of the Nuclear Waste Policy Act, designated Lincoln County in 1987 as one of three "affected units of local government". In response to a lawsuit, the Secretary subsequently designated another 6 Nevada and one California county as "affected units of local government". Pursuant to Section 116(c)(1) of the Act, Lincoln County and the other nine affected units of local government or "AULGs", have sought, and the Congress has annually appropriated, funding through DOE to enable the development and implementation of effective independent Yucca Mountain oversight, impact assessment, impact alleviation planning and public information programs.<sup>1</sup> In addition, as a consequence of annual language included in more recent Congressional appropriations bills

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<sup>1</sup> Due to concerns over misuse of previously appropriated funding by the State of Nevada, Congress withheld funding for a full year for Section 116 (c) oversight activities to the State or affected units of local government during.

concerning Yucca Mountain, affected units of local government have also undertaken assessment of Yucca Mountain related transportation impacts and are participating in Yucca Mountain related licensing proceedings before the Nuclear Regulatory Commission. Use of Section 116 (c) (1) funding for lobbying or litigation has been prohibited by language in annual appropriations bills.

For the past 26 years, Lincoln County and the City of Caliente have conducted a joint repository oversight and impact alleviation planning program. During this period, the eight-member JCCIAC Committee has diligently sought to provide guidance to local repository programs. The Committee, representing both geographic and disciplinary diversity, has met no less than 120 times and its members have contributed nearly 3,000 hours of volunteer time to understand the implications of the Nation's nuclear waste management program to the residents of, visitors to and institutions within Lincoln County and the City of Caliente. Members of the JCCIAC represent an informed conduit of information regarding the Yucca Mountain repository system to their friends and neighbors throughout Lincoln County.

Lincoln County has sponsored over 85 Yucca Mountain related impact and mitigation planning studies covering a diverse range of topics including economic and fiscal impacts; demographic impacts; transportation safety; risk management and risk perception; community development; impacts to tourism; and impacts to local institutions; and opportunities for mitigating impacts and maximizing repository system economic benefits. The numerous studies sponsored by the County and City of Caliente were conducted by teams of highly trained and competent researchers representing both academic and private entities. In addition, over the years, Lincoln County has provided extensive written and oral testimony and comments on Yucca Mountain repository system matters. I have provided each of you with a bibliography of Yucca Mountain research sponsored by Lincoln County. These documents may be accessed through the Lincoln County Repository Oversight Program website at: [www.lcnop.com](http://www.lcnop.com) or hard copies requested from the Lincoln County Repository Oversight Program office.<sup>2</sup>

The extensive information base represented by these various studies has been used by Lincoln County and the City of Caliente to inform comments offered to the DOE on the scope and

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<sup>2</sup> Please contact Ms. Connie Simkins, Coordinator, Lincoln County Repository Oversight Program, P.O. Box 1068, Caliente, Nevada 89008; (775) 726-3511; [jcciac@co.lincoln.nv.us](mailto:jcciac@co.lincoln.nv.us)

content of various Yucca Mountain related planning documents and environmental impact statements. All of the documents have been available for use by DOE. The County and City have been deeply disappointed that despite exhaustive efforts to respond to DOE requests for information and to provide comprehensive comments on the scope and content of DOE studies, little, if any, of the information has found its way into DOE's plans and assessments of impact. DOE elected to largely ignore most, if not all, of the issues raised by Lincoln County and the City of Caliente during scoping for the various NEPA documents prepared by the Department. DOE has failed to base little, if any, of its descriptions of existing conditions and evaluations of impacts upon the extensive base of information provided by Lincoln County and the City of Caliente. As a consequence, DOE's Yucca Mountain documents have been largely non-responsive to the issues of most concern to the County and City.

Neither the Board of Lincoln County Commissioners nor the Caliente City Council has ever taken a formal position in opposition to or in support of the Yucca Mountain project. Rather the County and City have designed and implemented a repository oversight program which accomplishes the following three goals:

1. to understand and minimize risks;
2. to understand and minimize impacts; and
3. to understand and maximize potential benefits associated with Department of Energy radioactive waste management activities in Nevada.

The Commission believes it has a fiduciary responsibility to undertake independent impact assessment and mitigation planning activities as a means to protect the public health, safety and welfare of residents and visitors to the County in the event that the State of Nevada is unsuccessful in its efforts to prevent construction and operation the of the Yucca Mountain project.

The pragmatic approach to the Yucca Mountain repository system taken by Lincoln County has at times not been well received by the State of Nevada. Given DOE and the State of Nevada's seeming preference for using rail and the State of Nevada's desire to keep most shipments out of

the Las Vegas Valley, the Board of Lincoln County Commissioners in XXXX adopted a resolution encouraging DOE to locate a rail to truck intermodal and related temporary waste staging area along the UPRR mainline in the County several miles south of Caliente. By this action, Lincoln County sought to locate rail-to-truck transportation activities, which would entail short-term storage of nuclear waste, at a location away from the populated Caliente area. The County also sought to establish a terminus of Yucca Mountain-related transportation activity within the County in an attempt to garner DOE-funded emergency first response capabilities capable of responding to accidents involving nuclear waste as well as enhancing local first responders' capabilities in responding to UPRR shipments of hazardous materials through Lincoln County. In response to the County Commission's action Nevada's Attorney General filed a lawsuit seeking to remove 2 of 3 Lincoln County Commissioners and all five Caliente City Councilmen from office for conspiring with DOE to violate Nevada State law (which prohibits storage of spent nuclear fuel and other high-level radioactive waste in Nevada) and related charges of malfeasance. In the end, Nevada's Attorney General did not prevail and her seeming heavy-handed actions led to her being censored by the Nevada Legislature.

With this background and the nearly three decades of experience that Lincoln County has with the Yucca Mountain project, let me now turn to a variety of observations and recommendations for consideration by the Subcommittee.

#### Independent Local Oversight, Impact Assessment and Mitigation Planning

1. In the case of Lincoln County, locally developed information made available to DOE has the potential to inform design and implementation of disposal system plans, including transportation, which seek to avoid or minimize adverse impacts and maximize potential benefits. The failure by DOE to consider and utilize locally derived information erodes public trust and confidence in the safety, feasibility and fairness of disposal system designs. *The Subcommittee should consider mechanisms for ensuring that locally derived information is considered in disposal, facility development, operations and closure planning, and in design of measures to avoid or minimize impacts. A process for ensuring that unanticipated impacts can be timely mitigated is needed.*

2. The independent oversight, impact assessment and mitigation planning authority granted to affected units of local government found in Section 116 (c)(1) of the NWPA has been an important vehicle for empowering certain local governments in Nevada to design and implement programs which seek to protect the public health, safety and welfare of their residents. Without funding provided authorized by Section 116 (c) (1) rural local government such as Lincoln County would be unable to participate effectively in nuclear waste disposal matters. *Consideration should be given by the Subcommittee to requiring that affected units of local government be adequately funded to enable independent oversight, impact assessment and mitigation planning.*
3. Uncertainty in the amounts and timing of annual Congressional appropriations to fund independent oversight, impact assessment and mitigation planning make program design and implementation difficult. Until mitigated by restrictive appropriations language, provision of oversight funding through DOE did result in a situation where the fox was guarding the coup (i.e. DOE oversight of the use of AULG independent oversight funds). *In recommending the provision of funding to enable local oversight, impact assessment and mitigation planning the Subcommittee should seek to ensure that the entity vested with disposal responsibility is not also given authority to oversee the manner in which local governments expend funding provided for independent local oversight.*

#### Affected Unit of Local Government Participation in Transportation Planning and Licensing

1. The NWPA is silent as to the authority of a state or AULGs to utilize funding authorized by Section 116 (c) (1) to provide oversight and independent impact assessment of Yucca Mountain related transportation systems. Nor does the Act specifically authorize the state or AULGs to utilize Section 116 (c) (1) funding to participate in the Yucca Mountain licensing proceeding before the Nuclear Regulatory Commission. The authority for the State of Nevada and AULGs to use Section 116 (c) (1) monies for these purposes has been annually inserted into appropriations bills passed by the Congress. *In addition to disposal related independent oversight, impact assessment and mitigation planning, when recommending funding for a host state and affected units of local government the Subcommittee should specifically include as allowable uses of such funds participation in*

*disposal related transportation planning and impact assessment and participation in any local, state or federal project-related licensing or permitting proceeding.*

### Program Management and Politics

1. Despite calls from politicians within and outside of Nevada that decisions regarding Yucca Mountain be made on the basis of sound science not politics, and despite billions of dollars worth of science having been conducted by DOE and its contractors; the State of Nevada and its contractors; AULG's and their contractors and independent groups such as the Nuclear Waste Technical Review Board, decisions regarding whether or not to proceed with the Yucca Mountain project and its various components such as transportation appear always to be based in the end upon politics often with utter disregard to available science. Political solutions to complex technical issues do not garner public trust and confidence. The unstable and unpredictable nature of politics does not lend itself to the design and implementation of a solution to America's nuclear waste management problems. *The Subcommittee is encouraged to seek avenues for de-politicizing the disposal of nuclear waste in the United States. In addition, a stable program management i.e. some form of quasi-governmental organization that doesn't change management frequently and isn't tied to any one administration is needed.*
2. Due to the need to obtain, and limitations in, annual congressional appropriations, the Department of Energy, is unable as an institution to enter into long-term commitments with affected stakeholders to design and implement effective strategies to mitigate the risks and impacts and maximize potential local economic benefits of nuclear waste management. The inability of DOE to make such commitments results in unacceptable levels of uncertainty as to whether risk and impacts will be minimized or benefits realized. *The Subcommittee is encouraged to recommend a structure for management of nuclear waste disposal which is not dependent upon annual appropriations by the Congress.*
3. The proposal to develop a geologic repository at Yucca Mountain and related rail transportation system across Lincoln County, has resulted in political divisiveness within the County and the State of Nevada. The Board of Lincoln County Commissioners have had to devote countless hours over the years to deal with the often contentious issues

regarding how best to protect the health, safety and welfare of County residents and visitors in the face of potential Yucca Mountain related impacts. Local elected officials have incurred out of pocket expenses for legal defense and have been forced to allocate a disproportionate amount of their limited time to nuclear waste disposal related issues. Political divisiveness in Lincoln County and within the State of Nevada has been a largely unanticipated and completely unmitigated impact. *The Subcommittee should recognize the potential for siting of nuclear waste disposal facilities to induce political divisiveness and should identify mechanisms to ensure that such impacts are both anticipated and mitigated.*

4. The Yucca Mountain program has seemingly been driven by legislatively mandated dates and DOE's efforts to comply with dates has limited public trust and confidence in the process. *The Subcommittee should consider a program design not be driven by prescriptive dates, but one that encourages that program move at a quicker pace than this program has -- thus minimizing the adverse impact of going through multiple political eras during the pre-construction, construction, operation and closure stages.*

#### Impact Avoidance and Mitigation

1. The extensive body of research sponsored by Lincoln County and others has documented numerous ways in which the development and operation of the Yucca Mountain repository system, including transportation may result in adverse impacts within the County. Topics addressed by Lincoln County in various impact studies include: economic/demographic; fiscal; transportation; emergency management; ethnography; risk management/perception; community development; tourism; institutional; and impact assessment. Among numerous studies, Lincoln County sponsored a 2004 comprehensive assessment of the potential impacts of the Yucca Mountain repository system within the County<sup>3</sup> and a 2007 detailed assessment of the impacts of the DOE proposed Caliente rail

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<sup>3</sup> Intertech Services Corporation, *In Search of Equity: A Preliminary Assessment of Impacts of the Yucca Mountain Repository System In Lincoln County, Nevada*, October 2004.

alignment on the areas range livestock industry and other private land owners.<sup>4</sup> Some of the key findings of these studies and related recommendations for Subcommittee consideration follow:

#### Economic/Demographic

1. While impacts associated with the Yucca Mountain repository system, including transportation, would be concentrated in Nye, Esmeralda, Lincoln, and White Pine counties, the majority of economic benefits associated with the project would accrue to Clark County. This would result largely because of DOE's proposal to locate most if not all Yucca Mountain development, operations and management staff in the Las Vegas area. The Las Vegas area would benefit from DOE and contractor staff payrolls while at the same time being spared any significant radiological risks as rail and or highway shipments of nuclear waste would be re-routed away from the Las Vegas metropolitan area and through neighboring rural counties. A decision by DOE to locate all Yucca Mountain repository system development, operations and management staff in Nye, Esmeralda, Lincoln, and White Pine counties would mitigate this situation.

The addition of even relatively small numbers of workers to a rural population can however strain the ability of local government to provide needed public services. The increment of capacity of existing public services and facilities required to serve any influx of disposal system related population should be mitigated by the project responsible entity. The capacity of existing public services and facilities allocated to an unwanted source of demand (for example the disposal of nuclear waste) results in a reduced capacity of said services and facilities being available for allocation to the needs of the employees of a desired project. *In devising a process for siting nuclear waste disposal facilities the Subcommittee should consider the necessity of achieving*

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<sup>4</sup> Robison /Seidler, Resource Concepts, Inc. and L&H Consulting, *Proposed DOE Caliente Rail Corridor Lincoln County, Nevada: Analysis of Impacts and Alternatives with Recommended Mitigation*, Volumes I and II, November 30, 2007.

*an equitable distribution of project related beneficial and adverse economic and demographic impacts.*

2. As a federal activity, the disposal of spent nuclear fuel and other high-level radioactive waste is an industrial activity largely exempt from state and local taxation. Section 116 (c)(3) of the NWPA requires the Secretary of Energy to grant to the State of Nevada and any affected unit of local government an amount equal to the taxes each year said jurisdiction would have received had it been able to tax the repository system. In a manner similar to how property taxes are used to fund public services and facilities, this “Payment Equal to Taxes” (PETT) provision of the Act is one important avenue for local governments such as Lincoln County to secure revenues needed to mitigate adverse impacts of the repository. Given the location of DOE’s exploratory studies facility at Yucca Mountain, Nye County has been the recipient of significant PETT funding. If the Caliente rail alignment were to be constructed across Lincoln County, it is estimated that the County would accrue several million dollars per year in PETT funding. Unfortunately, the availability of PETT monies each year has been subject to annual congressional appropriations and so represents a very uncertain source of funding. This is stark contrast to property taxes levied by local government which represent a very stable and predictable source of revenues. *In devising recommendations for any disposal program, the Subcommittee should include a process for payment to affected local governments by the project responsible entity of payments equal to taxes. Said process should seek to minimize the annual uncertainty associated with the process authorized by Section 116 (c) 3of the NWPA.*
3. Construction of the Caliente rail alignment would cross numerous public land grazing allotments administered by the Bureau of Land Management (BLM). Each of these allotments represents a key component of a range livestock ranching operation. The loss of forage associated with both the direct loss of acreage to the rail line and associated roads, pipelines, and other ancillary facilities and the indirect impact of impaired access by livestock to forage and water sources may pose significant impacts to numerous ranching operations in Lincoln County. Because the BLM considers livestock grazing on public lands a revocable privilege obtained by permit

both the BLM and DOE are loath to mitigate public land grazing permittees for impacts to their ranching enterprises. While DOE may be persuaded to consider mitigation of public land grazing impacts, funding for said mitigation would be subject to annual congressional appropriations. The potential for unmitigated impacts accruing to public land ranching operations in Lincoln County is great. Because ranching is a very important component of the economy and custom and culture to Lincoln County, unmitigated repository system related impacts to this sector are simply unacceptable. *Because much of the western United States is comprised of land administered by the Bureau of Land Management and the U.S. Forest Service and is used for grazing, the Subcommittee should consider mechanisms for ensuring that siting of disposal facilities does not result in unanticipated and/or unmitigated impacts to range livestock ranching operations.*

4. Construction of the Caliente rail alignment would cross numerous parcels of private land in Lincoln County. DOE has only committed to acquiring at fair market value only that amount of land or an easement across said lands it requires to construct the rail road and related facilities. DOE has been unwilling to consider the impact that construction and operation of the rail alignment would have on the balance of private parcels across which the Caliente rail alignment crosses. Examples of impacts which may result include disruption of irrigation systems; loss of access; and stigma induced reductions in property value. *The Subcommittee should seek to recommend that any disposal process require that full mitigation of direct and indirect impacts to private land parcels a portion of which have been acquired by the responsible project entity or across which an easement for project facilities has been acquired.*

#### Transportation

1. While transportation of spent nuclear fuel by rail is safer than transport by truck, the impacts to existing private and public land uses in Lincoln County from development and operation of approximately 150 miles of new rail line would be significant. In preparing its Final EIS for the Caliente Rail Alignment, DOE committed to working with Lincoln County to identify and plan the implementation of measures to mitigate many of said impacts. However, early negotiations with DOE (which ended with

Secretary Chu's decision to withdraw the license application) over a process to prioritize and implement mitigation planning initiatives demonstrated the inability of DOE to make the intermediate to long-term , absent specific Congressional authorization and appropriations, necessary to effectively advance the mitigation planning process. *The Subcommittee should consider the need for mitigation planning and implementation to be an integral part of early disposal option development and budgeting.*

2. Given the adverse nature of the impacts of constructing and operating a new rail line across Lincoln County and the great uncertainty associated with whether DOE would agree to and seek funding required to mitigate said impacts, Lincoln County considers establishment of a rail-to-truck intermodal capability along the UPRR and transport of nuclear waste across Lincoln County by legal-weight truck to be a viable option. However, DOE's decision to utilize a rail-based transportation, aging and disposal canister system (TADS) for emplacement of waste in Yucca Mountain all but precludes the use of a rail-to-truck legal weight transport system for the majority of waste to be transported. *The Subcommittee should encourage the consideration of nuclear waste transportation systems and options concurrent with identification of disposal options that consider impacts of said systems in host areas.*

#### Emergency Management

1. The ability to effectively manage radiological risk, particularly resulting from transportation accidents, is largely dependent upon the nature of accidents, the travel time for emergency first responders and the training and equipment available to said first responders. Emergency first responders in Lincoln County are all volunteers. Training obtained by said volunteers occurs at the expense of unpaid time away from families, often on weekends. Limitations in funding greatly affect the availability of equipment available to rural emergency first responders. Section 180 (c) of the NWPA authorizes DOE to provide funding to states and Indian Tribes for emergency first responder training necessary to respond to accidents involving nuclear waste. Funding for affected local governments would pass through the states. Lincoln County is quite concerned that under Section 180 (c) the distribution of funding

through states to local governments may be inefficient and may not be equitable and no funding is available for equipment. As a consequence an inadequate amount of funding may be available for training and marginally trained volunteers may be expected to respond to accidents involving nuclear waste without proper equipment. *The Subcommittee should insist that any program for disposal of nuclear waste include Section 180 (c) like provisions enhanced by direct funding to local governments and the availability of funding for appropriate emergency first response equipment and training.*

### Tourism

1. A reflection of the diverse natural beauty which characterizes the area, Lincoln County contains five Nevada state parks. Several of these parks are immediately proximate to the UPRR mainline along which DOE would propose to transport nuclear waste destined for Yucca Mountain. A 1993 study sponsored by Lincoln County determined that an accident along the UPRR mainline proximate to State parks in the County would result in economic impacts exceeding \$1,000,000 as a result of reduced visitation at these sites.<sup>5</sup> The study suggested that an extensive media promotional campaign would be required to shorten the duration and extent of reduced visitation and economic impacts. As a consequence of the potential for the news media to amplify risk associated with things nuclear, the study further recommended that DOE be required to establish an escrow account containing sufficient funding to enable the rapid deployment of such a media promotional campaign in the event of an accident involving a rail shipment of nuclear waste, regardless of whether a breach of containment occurred. *The Subcommittee is encouraged to recommend that escrow or similar dedicated accounts be utilized as a means to set aside and guarantee the availability of funding to be used to rapidly implement plans for mitigating various potential impacts of a nuclear disposal system. Such a process might serve to mitigate the uncertainty and temporal delays associated with seeking congressional appropriations to design and implement*

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<sup>5</sup> Intertech Services Corporation, *Tourism Impacts of Three Mile Island Other Adverse Events: Implications for Lincoln County and Other Rural Counties Bisected by Radioactive Wastes Intended for Yucca Mountain*, October 1993

*appropriate measures to mitigate impacts.* The recent example of BP agreeing, over the course of a week or two, to establish a reported \$20 billion in an escrow account for mitigation of Gulf oil spill impacts is instructive.

### Equity and Compensation

1. In proposing to develop the Yucca Mountain repository system, the federal government would transfer any risk associated with long-term storage of spent nuclear fuel and other high-level radioactive waste from 33 states to just one, Nevada. Accordingly, 33 states would accrue significant risk reduction benefits. Beyond obvious public health and safety benefits, the transfer of nuclear waste may also remove stigma induced diminution of local property values and risk perception-based barriers to local economic development. Alternatively, the transfer of nuclear waste from existing generator sites to Nevada will shift risks to public health and safety and risk perception-based property value diminution and economic development barriers to locals in Nevada. This redistribution of risk and benefit is inherently unfair to Nevada.

If the United States intends to eliminate the risks of nuclear waste management within several states and concentrate said risks within a single state, one within which no generation of spent nuclear fuel or other high-level radioactive waste currently occurs, the Nation must be prepared to compensate said state for the service it will provide to the Nation and individual benefiting states. The Nuclear Waste Policy Act, as amended, nor any other law or policy of the federal government has adequately recognized the inequitable distribution of risk and benefit associated with central disposal of nuclear waste. Subtitle F of the Nuclear Waste Policy Act appears to cap annual benefit payments to the State of Nevada at \$20 million (with one-third required to be distributed by the state to affected units of local government). Pursuant to Section 171(b)(2) of the Act, the State of Nevada would have had to agree to waive its right to disapprove the recommendation of a site for a repository. Both the amount of the annual benefit payment and conditions for receipt of payments contained within Section 171 (b)(2) of the NWPA do not reflect the service to the Nation to be provided by a state in which centralized nuclear waste disposal is located. The Act does not appear to offer any benefit payments

to states and/or local jurisdictions which have no waste generation within them yet through which shipments of nuclear waste destined to a disposal site would occur. The modest annual payment schedule and conditions for acceptance of benefit payments contained within the Act have not encouraged any substantive discourse in Nevada regarding the benefits of hosting a geologic repository system. For many years, regardless of the progress made to advance siting and licensing of the Yucca Mountain repository system, annual expenditures by DOE were in the \$350-\$450 million dollar range. Since the original anticipated 1998 opening of the Yucca Mountain , DOE has expended \$350-\$450 annually seeking to advance the project, an estimated expenditure of \$3.5 to \$4.5 billion. If the Congress had offered Nevada \$3.5 to \$4.5 billion dollars in 1998 for hosting the repository (the avoided cost of having to spend the next 10 years seeking to advance the repository), an enlivened discussion among Nevada's political leadership and residents may have ensued, quite possibly leading to the consent of the State to locate the project at Yucca Mountain. Instead, any mention by parties in Nevada regarding the possible benefits which might flow from hosting the project are met with well-founded statements from Nevada's political leaders that know such benefits exist. *For the service rendered to the Nation, the Subcommittee should consider embracing a process for ensuring that significant benefit sharing and compensation is paid to a state and any affected unit of local government hosting a disposal facility and/or through which for spent nuclear fuel or high-level radioactive waste is transported.*