

Nye County Statements
To the

Department of Energy

Blue Ribbon Commission on America's Nuclear Future

Disposal Sub Committee

July 7, 2010

Chairmen Hagel and Lash, members of the disposal subcommittee. I appreciate being invited to present our Nye County perspective on disposal issues. I will briefly outline Nye County's participation in the nation's quest for a geologic repository, a bit of the history, and where we now find ourselves. As is the purpose of this subcommittee I will try to identify some of the strengths and short comings of the efforts to date from our perspective, I will also provide our perspectives on what alternatives exist and comments on how the overall process could be improved.

Officially, Nye County is neither for nor against the repository. There have been site characterization activities for over thirty years in Nye County. We have had an oversight and independent science program since the early 1990's. When Yucca Mountain was designated as the nation's geologic disposal site in July 2002 the Nye County Board of County Commissioners resolved to "actively and constructively" engage the Department of Energy's Office of Civilian Radioactive Waste Management (OCRWM). We revised our Nye County Community Protection Plan, a copy of which I will leave for the record, to reflect our priorities. Simply stated, our objectives were: to preserve the health, safety and economic well being of the County, its citizens and its environment; to see the repository was designed, built and operated as safely and successfully as possible; and ensure that transportation systems that were put in place provided the potential for the County's economic development. These three strategic objectives guided our "active and constructive" engagement. We believe that any community designated to host a geologic repository would have similar priorities.

The Nuclear Waste Policy Act as amended provided authority for Nye County oversight of the program, first as an affected unit of local government (AULG) in accordance with Section 116 of the Act, and subsequent to the July 2002 designation, as the "site county" in accordance with Section 117 of the Act. Congress appropriated funds accordingly. In addition to the Section 116 and 117 funds, Nye County negotiated with OCRWM and received Cooperative Agreement funds for specific activities, the most notable being Nye County's Independent Scientific Investigations Program (ISIP) and to a slightly lesser extent, a Public Safety and Related Services Agreement. Both programs contributed to OCRWM's successful pursuit of the License Application and to the County's independent assessment of OCRWM's technical work. In our opinion this was one of the best parts of the NWPA and was necessary to overcome DOE's reluctance to involve the local government.

This local involvement is important and should be endorsed as essential in any future repository program. The nation's experience with the NWPA and Yucca Mountain in particular, coupled with the failures of previous repository or storage development attempts, remind us how difficult this problem is. No state or tribe has expressed willingness to host either a repository site or a storage facility that in all likelihood would become permanent. The importance of education, outreach, trust and other "soft" issues cannot be underestimated. Other countries understand the importance of dealing with attitudes and acceptance issues and have budgeted large amounts of funds to deal with this. Many people thought that the July 2002 congressional designation of Yucca Mountain as the repository site would have put an end to the controversy, but it did not. This controversy is political; what makes us believe that we can ever find a better solution, or site for that matter, than Yucca Mountain?

As a result of our engagement in the repository program we were able to conclude that Yucca Mountain can be a technically successful repository with the potential for very significant economic development for the County and the State. We understand that the Yucca Mountain program is essentially dead, the people are gone and the site is closed. Any future possibilities for Yucca Mountain will be part of a new repository process. However, for any repository there are five basic steps: 1) finalize the fuel cycle and define the waste stream that will need disposal in a repository; 2) finalize the regulatory basis for the program; 3) site selection; 4) repository design, licensing and construction; and 5) transportation and repository operations. These activities have to be integrated with any local community and state planning for a program to be successful. One of our efforts to achieve that integration are reflected in a local planning document; Yucca Mountain Project Gateway Area Concept Plan, I have also submitted this for the record.

We have developed a list of ideas, submitted separately for the record, that we think are essential to making a repository program more attractive to a host community and state. We believe the need to find meaningful compensation for the community that is asked or named to host a geologic repository is paramount. This compensation has to be negotiated and based on rational "tax revenue" expectations of the project. There must be lasting commitments, responsibilities, and trust to result in a successful program.

Although Nye County has not officially supported Yucca Mountain, we believe that the level of acceptance for hosting the repository is as good as you are likely to find. The Governor, State Officials and the Congressional delegation, all acknowledged, understood and accepted Nye County's pragmatic approach to the repository program once the site was designated in 2002. However, the Nevada opposition made everything outside of the things that the County could control extremely difficult and in some cases impossible.

From a lessons learned perspective, to have a successful repository program, both state and local governments have to be at least neutral. The only way that can happen is if sufficient numbers of the general public are sufficiently well informed and trust what the developer is saying and doing. What is being said must then be reflected in the actions

of the people responsible for execution of the program. The question remains: is this an achievable reality? At some level, the national program, while acceptable to a small local community, may simply have to be “imposed” on the rest of the state, given the broader range of opinions and special interests to which a state is subject. Based on the WIPP experience, and nuclear power plants across the nation, continuous safe and secure operations build acceptance. That acceptance will only last as long as operations are safe and secure. Not everyone can have a veto and while many stakeholders have a right to be heard, at some point we need to move forward and stop the endless delays. If you accept the premise that we as a nation will ultimately need a geologic repository we have to accept the reality that there is risk involved, albeit one that is vanishingly small compared to other risks in an advanced, technological society.

To the more specific first question from the Sub Committee’s invitation: *“Is a disposal facility (or facilities) needed under all foreseeable scenarios?”* we believe the answer to be yes. This simple response is based on our acceptance of a similar conclusion by the National Academies of Science and other nuclear countries. However, due to the success of dry cask storage, the existing inventory of Spent Nuclear Fuel and Defense High-Level Waste can be stored for 20 to 100 years. But ultimately all processes have a waste stream and it will eventually need to be disposed in a geologic repository. The choice of a retrievable repository at least deals with the potential of new technologies in the future, under the Yucca Mountain design we can pull the Spent Nuclear Fuel out for reprocessing. Most experts do not expect that High Level Waste would ever need to be retrieved.

With regard to the second question: *“If so, what are our alternative approaches for disposal?”* we observe that on a short term basis, alternatives are already happening and fall into three (3) general categories.

- Operating nuclear generation sites are storing Spent Nuclear Fuel in pools and above ground dry cask storage. Once it was obvious that the NWPA deadline of January 31, 1998 was not going to happen, the nuclear industry “engineered” a means to continue to operate. It has been safe and there is confidence that it can be safely maintained for a hundred or more years.
- Stranded waste, i.e., that material at “closed or abandoned” sites is generally in the same category as that at operating sites, but is a stand alone liability with none of the advantages of an operating site. A solution to move this material to a central or intermediate site is imperative.
- Defense waste has been processed for disposal and there are questions about its safety unless it is vitrified. Naval spent fuel is safe and secure as it sits. Unlike spent nuclear fuel, though, there is no reasonable immediate future for these wastes other than geologic disposal

Longer term, spent nuclear fuel can be dealt with through many different fuel cycle options. The GNEP Programmatic EIS did a fairly comprehensive analysis of the options from reprocessing, reprocessing with fast reactors to once through with higher burn up designs. All of the options included a waste stream that needed disposal and from a

practical perspective, the GNEP program assumed that we would not reprocess the existing stockpile of Spent Nuclear Fuel.

If you accept the Academies of Science's conclusion that geologic disposal is our best means of ultimate disposal of these materials in whatever form they ultimately become, the nation still needs a geologic repository. Absent some unimagined technological breakthrough, while there are interim alternative approaches for waste management, a permanent solution requires a geological repository.

The third question: "*What should the process to develop a US disposal system look like?*" has already been answered. The NWPA of 1982 and its amendments laid out a process. Regardless of whether you are for or against Yucca Mountain, the process, albeit painful, has worked. We are not sure that a different disposal process will work any better. The problems with the current process were well documented by a former Director of OCRWM; primarily continuity of management, access to the nuclear waste trust fund and removal from the annual congressional budget appropriations process. Each of these problems can be fixed with amendments to the existing NWPA. In that regard it is hard to believe that the nation has much stomach to go through another siting process when it is yet to be determined what, if anything is wrong or unsafe with Yucca Mountain.

Whatever we do, we have a responsibility to our children and future generations to deal with the nuclear waste problem now! Thank you for your time and consideration.

Darrell Lacy, Director
Nye County Nuclear Waste Repository Project Office

Attachments: Nye County Community Protection Plan August 2006
YM Project Gateway Area Concept Plan June 2007
Concepts for a (Name your State)/Responsible Entity Agreement