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Regulatory Information Conference**

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“Nevada, NRC and Yucca Mountain”

**Presented by:
Martin G. Malsch**

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Good afternoon. I want to express my appreciation to NRC for inviting me today. It's a pleasure to be here, and to see so many of my friends and former colleagues in NRC and in the nuclear field. I'm here to tell you something about the State of Nevada's plans for participation in an NRC licensing proceeding for the Yucca Mountain geologic repository. Also, I'm afraid I'll need to shoot a few darts at DOE and NRC.

If the NRC docket DOE's application, Nevada plans to participate fully as a party in the NRC licensing review and hearing. This participation is supported fully by Governor Kenny Guinn and Attorney General Brian Sandoval. It also enjoys strong bi-partisan support in the Nevada legislature. So Nevada is here to stay; it's in for the long haul. With the possible exception of the contested hearings in the 1960s on the proposed Malibu nuclear power plant, I expect this participation will be unprecedented in terms of the breadth and depth of expertise that Nevada will bring to bear. For those of you who are not nuclear regulatory historians, and maybe none of you are, let me note that Malibu was even before my time at the NRC. It involved intervenors who tapped into the remarkable scientific resources of Cal Tech. They defeated a construction permit application that was supported strongly by the AEC regulatory staff, the U.S. Geologic Survey, and the Los Angeles Department of Water and Power. The old AEC was surely no opponent of nuclear power but, in the end, even it was forced to concede the technical merits of intervenors' case. So nuclear applications can be defeated.

Nevada also has experts with degrees from Cal Tech. But our team also includes experts with advanced degrees from other leading U.S. universities such, as U.C. Berkeley, Brown, Purdue, Stanford, and the University of Nevada. It also includes experts from renowned institutions of higher learning located abroad, such as Oxford and Cambridge. Many of our experts have extensive experience in the nuclear field, and have participated in other national repository programs. So our technical team is world-class.

We don't oppose nuclear power. I'm certainly not anti-nuclear—I've devoted almost my entire professional life to what most would call pro-nuclear causes like design certification and power plant license renewal, and so have many

of our experts. We're not in this for delay, and we won't raise dumb issues. We just want to assure that any repository is safe. Our emphasis will be on sound science: we will use it and we will insist that DOE use it as well.

Beginning a few years ago, Nevada began to step up its efforts to prepare for a possible NRC hearing by taking a hard and careful look at NRC's substantive standards for Yucca Mountain in Part 63. Part 63 is the most unusual NRC regulation I've ever seen. It applies only to one application, and it appears to depart from bedrock NRC safety principles such as reasonable assurance, defense in depth, and skepticism about reliance on a single PRA. It even departs from the recommendations of the National Academy of Sciences. Our examination led to Nevada's challenge to Part 63 in Federal Court. I won't go into the details of our challenge.

However, if all of our arguments are accepted, essential elements of Part 63 will need to be scrapped. Even if we are only partially successful, there will need to be at least one and more likely two new Yucca rulemaking proceedings, one each from NRC and EPA. If new rulemakings are required, filing of an application in December will be difficult at best. However, again, our objective here is not delay. We simply wanted a regulatory framework that complied with the law. Oral argument in our case (and related cases) was held this January 14 before a packed courtroom of the U.S. Court of Appeals for the District of Columbia Circuit. There should be a decision in several months.

As I indicated, Nevada has a world-class team of technical experts. We plan to file numerous, well supported contentions for litigation in the NRC hearing. We also plan to conduct extensive discovery and cross-examination of repository proponents and opposing experts. We have done our own research on such critical issues as waste package corrosion, and we may even present our own performance assessment as part of an affirmative case against Yucca. There is already a substantial body of opinion that we can draw upon, including NWTRB reports. We also have a very devoted but small group of Nevada people like Bob Loux who have been involved in Yucca from the very beginning. I suspect we know as much as anyone about missed opportunities to do sound science and the various twists and turns in DOE's ever-changing safety case.

We also hope to participate in the NRC Staff's safety evaluation. This may be counter to the usual litigation strategy, where litigants hold back their best argument so as to catch opponents by surprise. But we feel strongly that we should view this proceeding as something more than a litigation game to be enjoyed by

lawyers. We want this to be a fair, scientific enquiry, and we will make every reasonable effort to advise NRC Staff and others of our concerns early, so that they can take account of them.

So far results have been mixed. We've had some good interactions with NRC Staff and ACNW on performance assessment and climatology. But we've been unsuccessful in trying to arrange a meeting between our hydrology experts and NRC Staff. And there is a disturbing trend of NRC secrecy. Recently, NRC staff insisted on meeting in secret with DOE to discuss DOE documents that will support the license application. NRC's Chairman candidly advised Nevada that the meetings in question couldn't be public, because the Staff evaluation "could be substantively hampered if the evaluations had to be conducted in such a venue." This approach will only undermine public confidence in NRC. Also, perhaps it was forgotten that participants in private meetings could be subpoenaed and deposed and forced to testify about what went on.

So, despite various NRC openness initiatives, it appears to Nevada that NRC's position is that it cannot speak candidly to DOE except in private. This certainly doesn't bode well for the upcoming licensing hearing, where DOE and NRC Staff will be called upon to speak truthfully and candidly and to defend their positions in a very public setting.

I know many of you are looking forward to DOE filing its application later this year, as the culmination of many years and many billions of dollars of effort. From almost the beginning of the nuclear era, the Federal Government promised the nuclear industry that disposal of high level radioactive waste would be the responsibility of the Federal Government. You would say, and I would agree, the Government cannot now just sit back and say "guess what, we lied."

But the scientific investigations of Yucca Mountain have not turned out as many expected. Essential research was never conducted. Scientific developments forced both DOE and NRC to change their regulations dramatically. Decades of NRC precedent were tossed aside so that, in NRC's own words, the NRC regulation would be "implementable." We say this only illustrates the fragility and ever-changing nature of the DOE safety case.

At best, and giving Yucca Mountain proponents the benefit of reasonable doubts, we submit that Yucca will never be anything more than a marginal proposal. Heroic efforts will be needed for DOE to certify the availability of its

documents on the LSN by June, and more heroic efforts will be needed for DOE to file a complete application by December.

If the application is docketed, even greater heroic efforts will be required to prosecute the application successfully in the hearing. But, more likely than not, DOE is not capable of heroic efforts; it's a difficult and marginal applicant at best, and it's probably not qualified to be an NRC licensee at all. Like any agency, it has some very dedicated and capable people. But at DOE the whole has always been much less than the separate sum of the parts. Institutional capability and culture are critical to an institutional applicant. But, despite years of effort, DOE hasn't even been able get its act sufficiently together to hire outside counsel to assist it in NRC licensing. And I suspect that, even now, some three months before the June Licensing Support Network certification deadline, DOE still has no firm idea of the number of DOE and contractor documents that are must be certified.

So I want to leave you with this advice: Yucca supporters need a strong dose of realism. DOE is still living in a fantasyland: a fantasyland where an unlawful Monitored Retrievable Storage Facility at Yucca Mountain is easily disguised as an "aging facility" to escape a Congressional prohibition; a fantasyland where some key technical issues in the application needn't be resolved but may only be "addressed"; a fantasyland where critical defects in an application can be cured simply by later amendments, and major changes are easily made after issuance of the construction authorization; and a fantasyland where licensing hearings will be completed in a mere three months, even though they involve an incomplete application, novel issues, and a capable opponent determined to weed out and expose unsupported assumptions.

So Yucca supporters need to read or re-read some NWTRB technical reports, step back, take a deep breath, and begin to think about alternatives if (Nevada would say when) Yucca fails.

And for my many friends at NRC, Nevada asks only that NRC now position itself so that someday, when all the Yucca proceedings are finished, it can reflect on what it did, and be able to say it was, in truth, the champion of fair and independent regulation and sound science. I hope this will not turn out to be impossible.