
An Interview with

RICHARD

BRYAN

*An Oral History produced by
Robert D. McCracken*

Yucca Mountain Series

Nye County Town History Project
Nye County, Nevada

Tonopah
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PREFACE

The Nye County Town History Project (NCTHP) engages in interviewing people who can provide firsthand descriptions of the individuals, events, and places that give history its substance. The products of this research are the recordings of the interviews and their transcriptions.

In themselves, oral history interviews are *not* history. However, they often contain valuable primary source material, as useful in the process of historiography as the written sources to which historians have customarily turned. Verifying the accuracy of all of the statements made in the course of an interview would require more time and money than the NCTHP's operating budget permits. The program can vouch that the statements were made, but it cannot attest that they are free of error. Accordingly, oral histories should be read with the same prudence that the reader exercises when consulting government records, newspaper accounts, diaries, and other sources of historical information.

It is the policy of the NCTHP to produce transcripts that are as close to verbatim as possible, but some alteration of the text is generally both unavoidable and desirable. When human speech is captured in print the result can be a morass of tangled syntax, false starts, and incomplete sentences, sometimes verging on incoherence. The type font contains no symbols for the physical gestures and the diverse vocal modulations that are integral parts of communication through speech. Experience shows that totally verbatim transcripts are often largely unreadable and therefore a waste of the resources expended in their production.

While keeping alterations to a minimum the NCTHP will, in preparing a text:

- a. generally delete false starts, redundancies and the *uhs*, *ahs* and other noises with which speech is often sprinkled;

- b. occasionally compress language that would be confusing to the reader in unaltered form;
- c. rarely shift a portion of a transcript to place it in its proper context;
- d. enclose in [brackets] explanatory information or words that were not uttered but have been added to render the text intelligible; and
- e. make every effort to correctly spell the names of all individuals and places, recognizing that an occasional word may be misspelled because no authoritative source on its correct spelling was found.

ACKNOWLEDGMENTS

As project director, I would like to express my deep appreciation to those who participated in the Nye County Town History Project (NCTHP). It was an honor and a privilege to have the opportunity to obtain oral histories from so many wonderful individuals. I was welcomed into many homes—in many cases as a stranger—and was allowed to share in the recollection of local history. In a number of cases I had the opportunity to interview Nye County residents whom I have long known and admired; these experiences were especially gratifying. I thank the residents throughout Nye County and Nevada—too numerous to mention by name—who provided assistance, information, and photographs. They helped make the successful completion of this project possible.

Appreciation goes to Chairman Joe S. Garcia, Jr., Robert N. “Bobby” Revert, and Patricia S. Mankins, the Nye County commissioners who initiated this project in 1987. Subsequently, Commissioners Richard L. Carver, Dave Hannigan, and Barbara J. Raper provided support. In this current round of interviews, Nye County Commissioners Butch Borasky, Lorinda A. Wichman, Joni Eastley, Gary Hollis, Fely Quitevis, and Dan Schinhofen provided unyielding support. Stephen T. Bradhurst, Jr., planning consultant for Nye County, gave enthusiastic support and advocacy of the program within Nye County in its first years. More recently, Darrell Lacy, Director, Nye County Nuclear Waste Repository Project Office, gave his strong support. The United States Department of Energy, through Mr. Lacy’s office, provided funds for subsequent rounds of interviews. Thanks are extended to Commissioners Eastley and Hollis and to Mr. Lacy for their input regarding the conduct of this research and for serving as a sounding board when methodological problems were

worked out. These interviews would never have become a reality without the enthusiastic support of the Nye County commissioners and Mr. Lacy.

Jean Charney served as editor and administrative assistant throughout the project; her services have been indispensable. Valerie Brown, Jean Charney, Robert B. Clark, Anna Lee Halsig, Debra Ann MacEachen, Lynn E. Riedesel, and Marcella Wilkinson transcribed a number of interviews, as did the staff of Pioneer Transcription Services in Penn Valley, California. Julie Lancaster and Suzy McCoy provided project coordination. Proofreading, editing, and indexing were provided at various times by Marilyn Anderson, Joni Eastley, Michael Haldeman, Julie Lancaster, Teri Jurgens Lefever, and Darlene Morse. Joni Eastley proofed most the manuscripts and often double-checked, as accurately as possible, the spelling of people's names and the names of their children and other relatives. Jeanne Sharp Howerton provided digital services and consultation. Much-deserved thanks are extended to all these persons.

All material for the NCTHP was prepared with the support of the Nye County Nuclear Waste Repository Office, funded by the U.S. Department of Energy. However, any opinions, findings, conclusions, or recommendations expressed herein are those of the author and the interviewees and do not necessarily reflect the views of Nye County or the U.S. DOE.

—Robert D. McCracken
2013

INTRODUCTION

Historians generally consider the year 1890 as the close of the American frontier. By then, most of the western United States had been settled, ranches and farms developed, communities established, and roads and railroads constructed. The mining boomtowns, based on the lure of overnight riches from newly discovered mineral deposits, were but a memory.

Nevada was granted statehood in 1864. But examination of any map of the state from the late 1800s shows that, although most of the state had been mapped and its geographical features named, a vast region—stretching from Belmont south to the Las Vegas meadows, comprising most of Nye County—remained largely unsettled and unmapped. In 1890, most of southcentral Nevada remained very much a frontier, and it continued to be so for at least another twenty years.

The spectacular mining booms at Tonopah (1900), Goldfield (1902), Rhyolite (1904), Manhattan (1905), and Round Mountain (1906) represent the last major flowering of what might be called the Old West in the United States. Consequently, southcentral Nevada, notably Nye County, remains close to the American frontier; closer, perhaps, than any other region of the American West. In a real sense, a significant part of the frontier can still be found in southcentral Nevada. It exists in the attitudes, values, lifestyles, and memories of area residents. The frontier-like character of the area also is visible in the relatively undisturbed quality of the natural environment.

Aware of Nye County's close ties to our nation's frontier past, and recognizing that few written sources on local history are available, especially after about 1920, the Nye County Commissioners initiated the Nye County Town History Project (NCTHP) in

1987. The NCTHP represents an effort to systematically collect and preserve information on the history of Nye County. The centerpiece of the NCTHP is a large set of interviews conducted with individuals who had knowledge of local history. Each interview was recorded, transcribed, and then edited lightly to preserve the language and speech patterns of those interviewed. All oral history interviews have been printed on acid-free paper and bound and archived in Nye County libraries, Special Collections in the Lied Library at the University of Nevada at Las Vegas, and at other archival sites located throughout Nevada. The interviews vary in length and detail, but together they form a never-before-available composite picture of each community's life and development. The collection of interviews for each community can be compared to a bouquet: Each flower in the bouquet is unique—some are large, others are small—yet each adds to the total image. In sum, the interviews provide a composite view of community and county history, revealing the flow of life and events for a part of Nevada that has heretofore been largely neglected by historians.

Collection of the oral histories has been accompanied by the assembling of a set of photographs depicting each community's history. These pictures have been obtained from participants in the oral history interviews and other present and past Nye County residents. In all, more than 700 photos have been collected and carefully identified. Complete sets of the photographs have been archived along with the oral histories.

On the basis of the oral histories as well as existing written sources, histories have been prepared for the major communities in Nye County. These histories have been published by Nye County Press, the county's publishing department. All the oral histories, as well as the community histories, are available on the Internet.

The Nye County Board of County Commissioners, while motivated by the study of history for history's sake, initiated the NCTHP in 1987 principally to collect information on the origin, history, traditions and quality of life of Nye County communities that would be impacted should the nation's first high-level nuclear waste repository be constructed deep inside Yucca Mountain on federal land in southcentral Nye County. Understanding such impacts would aid in their mitigation. Moreover, if the repository were built, it would remain a source of public interest for a very long time and future generations would likely want to know more about the people who once resided in the area. If the site should be found unsuitable and the repository never constructed, then materials compiled by the NCTHP would nevertheless be available for the use and enjoyment of future generations.

In 2010 the Nye County Commissioners and Darrell Lacy, Director, Nye County Nuclear Waste Repository Office, approved funding for collection of a round of oral histories from individuals who had played important roles in the U.S. Department of Energy's effort to assess the suitability of Yucca Mountain as a site for permanent storage of the nation's high-level nuclear waste. (The term high-level nuclear "waste" is very much a misnomer. The vast majority of the energy originally present in the nuclear fuel remains when the spent fuel—i.e., waste—is removed from the reactor. The spent fuel needs only to be reprocessed in order to make the remaining energy available for reuse. The proper term is thus not nuclear waste, but "spent nuclear fuel.")

The search for a permanent storage site for spent nuclear fuel was authorized by the Nuclear Waste Policy Act passed by Congress in 1982, as amended in 1987. Initially,

several potential sites for construction of a permanent repository were considered; the 1987 legislation narrowed the suitability search to one site, Yucca Mountain.

Over the years, several thousand scientists and engineers participated in the study of Yucca Mountain's suitability for permanent storage of spent nuclear fuel, with several billion dollars expended on the effort. In all that research, nothing was found that would disqualify Yucca Mountain as a safe permanent storage site. Then, in 2008, in a step prescribed by the 1982 and 1987 legislation and based on the research findings, the U.S. Department of Energy applied to the Nuclear Regulatory Commission (NRC) for authorization to begin construction and move forward with development of a permanent repository at Yucca Mountain. The NRC was then required by law to evaluate the DOE's application and vote up or down on it—build it or forget it. That was and remains the law!

Beginning in 1983, the issue of possible construction of a permanent repository at Yucca Mountain gradually became controversial among many in Nevada. A number of high-profile politicians expressed strong opposition to the idea of storing spent fuel at Yucca Mountain from the beginning, regardless of the site's technical suitability. Several increased their political power through their outspoken opposition, essentially doing everything legally possible to block the effort. Public opinion in Las Vegas about Yucca Mountain, which was rather mild and mixed in the beginning, gradually became somewhat negative over the years, especially after 1987, when Yucca Mountain was singled out as the only candidate. Yet at the same time, public opinion in rural Nevada began and remained accepting of the program, especially in counties located closer to Yucca Mountain itself.

Nevada Congressman Harry Reid rode his strong outspoken opposition to Yucca Mountain to election to three terms in the U.S. Senate. In January 2007, he was chosen Senate Majority Leader by the majority Democrats. Newly elected President Barack Obama was highly dependent on Senator Reid for passage of his own legislative agenda. In order to mollify Senator Reid, all funding for any further work on Yucca Mountain was killed and the Nuclear Regulatory Commission (NRC), under Chairman Gregory Jaczko's maneuvering, was prevented from voting up or down on the Department of Energy's application to move forward with development of the repository. Many believe that a vote by the NRC was prevented because approval by the NRC staff was likely. Thus, one man—in this case, Senator Reid—in effect played a pivotal role in overriding the legal process prescribed by law. The findings of more than two decades of carefully conducted research costing several billion dollars were casually set aside.

In the meantime, spent nuclear fuel continues to accumulate at temporary storage facilities located near nuclear reactors at more than 45 locations around the country, some near very large cities, including Chicago.

About the Yucca Mountain Interviews

Dr. Michael Voegele held numerous positions with DOE contractors in assessing Yucca Mountain's suitability for permanent storage of spent nuclear fuel from 1981 to 2009, and continued after that as a consultant to Nye County. Perhaps more than anyone, he has a comprehensive view of the more than three decades of research about the safety of Yucca Mountain. He personally knew many of the scientists and engineers involved in the effort, including what their work consisted of and how it all came together. Given

such expertise, he played a key role in selecting the majority of individuals we interviewed on Yucca Mountain history. Dr. Voegelé assisted in many of the interviews and was also interviewed by me at length. Together, these interviews provide a boots-on-the-ground perspective of the assessment process in evaluating Yucca Mountain's suitability as a permanent repository site. Individuals interviewed were Drs. Thomas Cotton, Russ Dyer, Ned Elkins, Don Vieth, Jean Younker, and Michael Voegelé.

Two Nye County officials who played significant roles in the Yucca Mountain effort for Nye County over the years were interviewed. Steve Bradhurst was the first director of the county's nuclear waste office, serving from 1983 through 1993. He was interviewed twice, in 1991 and again in 2010. Gary Hollis served as a Nye County Commissioner from 2005 to 2012 and in effect functioned as the commission's point man on the Yucca Mountain project during his time in office. He also was employed on drilling efforts associated with the assessment at Yucca Mountain prior to being elected a commissioner.

As noted, the idea of permanently storing spent nuclear fuel at Yucca Mountain became a heated political topic in Nevada beginning in 1983. To be fair and to give as broad a perspective as possible, we also conducted oral histories with politically focused individuals who represented differing viewpoints on Yucca Mountain. Former Nevada U.S. Senator Chic Hecht was a strong supporter of Yucca Mountain from the outset; he was interviewed in 2004. Former Nevada Governor, subsequently U.S. Senator, Richard Bryan, a strong and vigorous opponent of Yucca Mountain from the beginning, was also interviewed. At the conclusion of that interview in 2011, although by then I was a strong proponent of Yucca Mountain, Senator Bryan told me I "had been very fair." As a

professional anthropologist, I take a lot of pride in his compliment. Bob Loux from almost the outset of the Yucca Mountain effort in 1983 functioned as the state of Nevada's anti-Yucca Mountain point man in his position as director of the state of Nevada Agency for Nuclear Projects. His job, as he acknowledged in his oral history, was to do anything legally possible to prevent a Yucca Mountain repository from ever becoming a reality. As with Senator Bryan, the interview with Mr. Loux went well. Unfortunately, U.S. Senator Harry Reid, despite repeated requests, did not make himself available for an interview.

Three additional interviews were conducted outside this Yucca Mountain interviewing effort, though still using Yucca Mountain funds. These individuals played important roles in the Yucca Mountain assessment effort. Troy Wade previously worked for the Department of Energy; he was Assistant Secretary of Energy for Defense Programs in 1987–1988. He was interviewed as part of the NCTHP. Carl Gertz was Yucca Mountain Director from 1987 to 1993 and earlier worked for the DOE at the Idaho National Engineering Laboratory. Ed Mueller worked for a U.S. Department of Energy contractor as a liaison between the Yucca Mountain project office and counties impacted by Yucca Mountain located in Nevada and California. Both Mr. Gertz and Mr. Mueller were interviewed under the Esmeralda County History Project.

Together, these interviews comprise a body of valuable information obtained from individuals representing a variety of perspectives on this important effort in our nation's energy history. A credible history of Yucca Mountain cannot be written without incorporation of such variable knowledge and perspectives. If development of a permanent repository at Yucca Mountain moves forward, such information on how the

site was evaluated and on the enormous amount of work involved in demonstrating its suitability will prove invaluable once construction begins. The same applies for selection of a second or third repository site, and for the efforts of other nations to construct repositories as well. If the Yucca Mountain effort never moves forward, these interviews still will be helpful in understanding the great effort that went into the evaluation of Yucca Mountain as a site for permanent storage of spent nuclear fuel. It unfortunately also tells how a good part of the more than \$11 billion spent in evaluation was in large measure wasted, not for technical faults, but for political expediency.

Opinions expressed in this introduction and in the oral history interviews do not necessarily reflect the views of Nye or Esmeralda County officials.

These interviews have been organized into four volumes and published by Nye County Press, publishing imprint owned by Nye County, Nevada. A master index covering all four volumes is included.

—RDM
2013

INTRODUCTION BY MICHAEL VOEGELE

This series of interviews with Dr. Robert McCracken, undertaken as a part of the Nye County Town History Project, focused on the Yucca Mountain project. The Yucca Mountain project oral histories were developed as part of Nye County's efforts to record information related to the project as an ancillary part of the Yucca Mountain history exhibits in the Pahrump Valley Museum. The Nye County Commissioners believed that it was important to capture this historical information, as the Department of Energy had made every effort to disassemble the project and its records when the Obama Administration made the decision that the project was unworkable, and created the Blue Ribbon Commission on America's Nuclear Future to undertake a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste.

I worked with Dr. McCracken on the selection of the interviewees, and on several occasions participated as an interviewer. We consciously tried to identify interviewees who had been involved at the heart of the technical story of Yucca Mountain. Because funds were not unlimited, we needed to select carefully a relatively small number of interviewees. There were potential interviewees that we were not able to talk to because they had moved on to other venues following the Department of Energy's termination efforts and we simply were not able to accommodate schedule problems. We also tried to ensure a balance of perspectives on the project. Readers will find that the interviews tend to focus on a portion of the project's history or a major technical element of the project. In recognition of this, we decided that there ought to be an interview that attempted to

encompass as much of the project's history as possible, bearing in mind that the relevant history covers nearly 70 years.

The interview Dr. McCracken conducted with me is that document. While my tenure on the program was longer than most, I certainly do not have firsthand knowledge of the earlier parts of the program. I have, however, long studied the origins and early history of the project. My time on the high-level waste disposal program dates from the mid-1970s to the present, and I did not necessarily have significant involvement in everything talked about in that document. I am particularly indebted to Dr. Donald Vieth for the many discussions we had on the earlier parts of the program and found it fascinating how together we helped each other remember so much of the program's early history.

I felt it was important to offer the caveat that it would not surprise me to find that a reader remembered things differently than I did, or believed that I was mistaken in my recollections. I accept responsibility for any such errors; I can only say it has been a long time. It is also important to acknowledge the time so graciously accorded us by the interviewees. I suspect that some of them wish, as I do, that there had been references available to check some of our memories. I can only say thank you for trying to help us collect some important information.

I'd like to particularly thank Nye County Commissioners Gary Hollis and Joni Eastley for their enthusiastic and unwavering support for the interview project and the museum displays, and Dr. McCracken for his skill as an interviewer.

Michael D. Voegele
2013

This is Robert McCracken talking to Senator Richard Bryan at his office in Las Vegas, Nevada, November 16, 2010.

CHAPTER ONE

RM: Senator, can we do a brief bio on you, an overview of your background?

RB: You bet. My name is Richard Bryan, and I have lived in southern Nevada since 1942. My father came to Las Vegas in 1926 as a senior in high school, to live with his sister. From that point on, he made Las Vegas his home. He went to the University of Nevada in Reno and graduated in '32, during the depth of the Depression.

He was active in politics, worked on Congressman Scrugham's campaign. In a system that was known as congressional patronage, in January of 1936, he was given the opportunity to go to D.C. to be a purchasing agent for the Department of Agriculture, and to go to law school at night. He came from a family of modest means, as many did in that era. He'd always dreamed about being a lawyer. Met my mother, who was working for the federal government in Washington. I was born in D.C. the following year, in 1937.

Fast forward: My father finishes law school and we come back as a family, in January of '42, literally right after Pearl Harbor. I began grade school at the historic Fifth Street Grammar School, part of which has been restored as part of the City of Las Vegas Project. A proud graduate of Las Vegas High School, which sits within three blocks of where this interview is being conducted; when I enrolled it was the only high school in Las Vegas.

Went to the University of Nevada, graduated from there in '59. On to the army, commissioned as a second lieutenant, ROTC program. Then on to law school—the University of California, Hastings College of Law. Returned, was a Clark County Deputy

D.A., appointed the first public defender when the enabling legislation was passed. That appointment was in 1966.

Elected to the Nevada State Assembly in '68, reelected in '70, elected to the state senate in '72, reelected in '76. Elected attorney general in '78, governor in '82, reelected in '86. Left mid-term to run for the United States Senate in '88. Elected in '88, reelected in 1994, and then left the senate. Announced that I was not going to run for reelection, and have been a partner with the law firm of Lionel, Sawyer & Collins since that time.

RM: That's a wonderful summary. Of course, the focus of this interview is Yucca Mountain, but let's start at the beginning—your first recollection of nuclear power.

RB: I was a youngster in World War II, but was absolutely fascinated by the war—the newsreels in the movie theaters—and by Nellis, which was then the Las Vegas Army Air Corps Base. As a youngster of seven or eight I knew all of the military ranks. I followed that only as a youngster can. (I'm not suggesting any insight in terms of the magnitude of what was involved in the war.)

In August of 1945, my mother and I and my brother, who was one, went to Harlan, Iowa, where my mother's sister, my aunt, was expecting a delivery that might be complicated. Her husband was in the army in the Philippines so we kind of watched the situation in the Pacific pretty closely because everybody knew that the next major event was going to be a landing of some kind in Japan.

In those days, in the evenings, before air conditioning, on those warm Iowa nights people would gather on their lawn and the neighbors would come and talk and, as little kids, we'd listen. When the first atomic bomb was dropped in Hiroshima, everybody was saying, "This may end the war. This atomic bomb may end the war."

That's the first thing that I recall about the atomic bomb, this new mega-weapon that ended the war. Fast forward: as a youngster, we used to get, in school, what was called a *Weekly Reader*. It was designed for young people and had little articles about topical events. There was this infatuation, if you will, with things nuclear. They would be highlighted by the extraordinary tests that were occurring in the Pacific—the Bikini test in 1946 or thereabouts. These little articles would talk about the future, and nuclear power was frequently mentioned. We would have, in the future, cars and airplanes powered by nuclear energy. There'd be a nuclear reactor for each home, and this was going to change the world.

By the time I was in the eighth grade, the atmospheric testing problem at the Nevada Test Site began. And that was a big thing. Initially they were dropping atomic bombs from airplanes, before the days of these huge, steel towers. The entire community was just mesmerized by it. There was a mystique about things atomic—it was the wave of the future, and “Wow.”

We in Las Vegas—at the time, a town of about 25,000 people—were going to be part of this new era. And, of course, the Cold War and all of what was involved with that was going on. As an eighth grader, I would get up early in the morning as part of a little school assignment to watch the nuclear flash. Although math was certainly not a subject, either then or now, that I have grasped, we were taught that you could calculate how far you were from ground zero. The light illuminating the atomic detonation traveled at the speed of light but sound, traveling at something like 760 miles an hour, took much longer. You could calculate roughly how far you were from ground zero by measuring the time after you saw the flash on the horizon before the seismic boom.

And of course, the Test Site grew to be something big and very important in the community. In 1960, when I got out of the army, I was looking for a job. I couldn't find anything, and finally I was hired by REECo, Reynolds Electrical and Engineering, which had the maintenance contract at the Test Site. I was, in effect, a glorified housing clerk. There was a distinct pecking order. The scientific laboratories (Los Alamos Scientific Laboratory, Livermore Radiation Laboratory), top-level Department of Defense people, and so forth had individual assignments for trailers.

RM: This was at Mercury?

RB: This was at Mercury, the base camp. I worked the graveyard shift and my job was to, in effect, assign housing. Somebody would come in, and their badge would indicate, for example, they worked at Fenix and Scisson, and those people were put over here. At the bottom were the REECo folks, who did the maintenance work. They staffed the mess hall, the recreational area, and were all placed in dormitories much like you were in the army.

RM: Did you have anything to do with Area 12 housing? My dad lived there almost 20 years.

RB: I did not. By the time I was there, there was a moratorium that was voluntarily entered into with respect to the atmospheric testing program. Then fast forward three years—during the Kennedy Administration, the Atmospheric Testing Ban was put into effect. And many years later, being involved in politics, I was out at the Nevada Test Site a number of times and would go into the forward areas for various things.

RM: How did you view testing at the Test Site over the period when they were doing

both underground and atmospheric tests?

RB: I think it's safe to say that we were very excited about it. It was a period of time in which most of us were very naive. The scientific community—and this will be on point in terms of things that we may talk about later—was assuring us all that there was really no risk, no danger. In fact, there was an old AEC, Atomic Energy Commission, public relations type of film that advised you that as that nuclear cloud passed over, bring the kiddies inside, and after it passes, wash off the car. It was a color film; I recall seeing it.

At Las Vegas High School, by the time I was a sophomore, our yearbook, which was an award-winning yearbook, had an atomic theme. The cover was a mushroom cloud with a brilliant fireball and inside it talked about the future; it was very well done. That gives you some idea of how we reacted. In the community, a number of retail establishments either changed their name, or when they opened up they had “atomic” in it. The one that I recall, that may be there yet today, was on Fremont Street, Atomic Liquors. That was there long after the days of the atmospheric program.

There were some classic photos that were taken by the Las Vegas News Bureau with Vegas Vic, which was kind of a tourism symbol of downtown Las Vegas—”Howdy Pardner”—that actually had the nuclear cloud in the background. So the community was very much aware of the testing. There was a, “Hey look, we're part of something that's very important and something that's part of a new age,” if you will.

RM: And it was so awesome.

RB: It was awesome.

RM: We were living in Reveille Valley, north of the Test Site, and we would get up and watch them.

RB: We were constantly exposed to what was happening up there in an unclassified sense. In the '50s, when they had Camp Desert Rock near Mercury, they actually brought army troops to the Test Site and placed them at certain distances from ground zero. I can recall walking from my home at 1141 Maryland Parkway across Charleston to the high school and seeing these trucks (they called them "deuce and a halves" when I was in the army) with soldiers in the back heading up to the Desert Rock. And there was the newsreel footage of the impact of the nuclear explosion on certain types of buildings. They built a model city up there, as you may recall.

In the early years of the atmospheric testing, there was quite a bit of a seismic impact so there was some damage done. Some structures in Las Vegas . . . the windows would rattle.

Something that really brought it home—in downtown Las Vegas, Ronzone's Department Store on Fremont Street had a display with the mannequins from some of those buildings, and you could see the burns on some of them.

RM: Would you say that, over the years, your feelings or attitudes on nuclear weapons and nuclear power and so forth evolved or changed?

RB: It's fair to say that they have evolved. First, we became much more aware of the dangers of radiation. Let me cite another example. When I was a youngster and I would go down to Ronzone's as a child and get a new pair of shoes, they used a fluoroscope. As a kid, you could actually see the bones in your feet. The shoe salesman would say to my mother, "Mrs. Bryan, you'll take a look, and you'll see that there's enough room for Richard." My point is, we were so naive about radiation and what the effects would be—no one recognized the potential health risk involved. We became much more

sophisticated later on, and that was part of my evolving attitude.

RM: When you were in the state legislature, the legislature passed Resolution 15, I believe, supporting a repository. What's your take on what happened there?

RB: Let me just say that I voted for that. There were a relatively small number of resolutions to say, "Come and locate here in Nevada." I must say that, above all the votes that I cast in the state legislature, this is one that I came to regret. But I did vote for it.

RM: What was the thinking in the legislature at that time?

RB: There wasn't much thinking; it was jobs. The labor people were thinking, "This is a big jobs bill. It would be a big help to us to do that." There wasn't any real discussion and debate that I recall. I remember that a legislator who expressed serious reservations about the resolution was Sue Wagner, who was then a Washoe County Assemblywoman. I was in the state senate by then, and I supported it. But it wasn't a contentious piece of legislation, it was a sense of the legislature. Resolutions, then and now, are somewhat perfunctory. They don't do a whole lot.

Then in 1982 the Nuclear Waste Policy Act was enacted, signed into law by President Reagan in '83. The concept, at the time, seemed to be fairly reasonable—that we'd search all over the country and find the best geological formations to store nuclear waste. That three of the sites studied—I think they used the term "characterized"—would go to the president and he would make a selection.

What occurred almost immediately after that, which heightened my cynicism, is all of a sudden they took the Northeast, with its granite formations, politically off the table because the people in the East didn't want it. And then, I think in the '84 election, they told the folks in the Southeast, where the salt dome formations were located, that

they would take those formations off the list. So it narrowed down, essentially, to three sites, as I recall. There was Yucca Mountain; Hanford, Washington; and Deaf Smith County, Texas.

In the meantime, Three Mile Island had occurred. All of a sudden, boy oh boy, the gravity of what could possibly happen . . . Now, Yucca Mountain was not going to have a reactor—I understood the difference. But all of a sudden, the potential danger of this became much more of a concern for me—I think with the public as well. There became a heightened level of awareness about things nuclear. The public, in general, and I in particular, became, “Wow.”

RM: Now, you were elected governor in ‘82 and sworn in in January of ‘83?

RB: That’s correct.

RM: I remember in the spring of ‘83, DOE held the first meeting at UNLV about Yucca Mountain and you were the first speaker there.

RB: That’s right. And I opposed it.

RM: Yes. I was impressed by the statement—you said you were unalterably opposed. So your position was fairly hard at that time, right?

RB: Yes, that’s correct.

RM: Do you want to say any more about how you came to that hard position?

RB: It seemed to me that what was happening was that, clearly, nobody else wanted a repository. As I said, there was all kinds of maneuvering to get the other places that were being considered off the table. And about that same time, the legislation indicated that states that were being studied would have access to money to allow them to monitor and evaluate the siting of a repository, a process that continued for many years thereafter.

As governor, I had to go back and testify before the senate because Nevada wasn't getting any of the money to do an evaluation. So there was a combination of things: "Wait a minute, if this is such a good thing, why is everybody else saying, 'Wow. I don't want to be involved in this?'"

Secondly, I clearly was getting the message that, to use a vernacular of the street, the fix was in. And at about this same time, I started hearing this sort of thing: "Wait a minute. If you all in Nevada would just agree to this, all kinds of good things could happen to you."

And I thought that DOE, in a most disingenuous way, was kind of hanging out there saying, "Look, if you continue your strong opposition of this at the state level, you may not get your full allocation for Colorado River water." Nobody ever said that directly to me, but the small group of people that were supportive of Yucca Mountain began saying, "Look, we wouldn't get that."

In roughly this timeframe, certainly in the '80s, when I was governor, the big project that everybody coveted was the superconductor/supercollider. Every state was eager for that. And it was suggested, "If you folks in Nevada would simply lay back, you could probably get that."

RM: What did you think about these big prizes they were offering?

RB: I was greatly offended by that. My view, whether it was Colorado River or whatever, was that those were issues that ought to stand on their merits. And we ought to be able to compete for them without this kind of pressure. I want to be very clear. No Department of Energy official ever said, "If you'll do this, you'll get that." But clearly, in the meetings I was having the Department of Energy was kind of spreading the word.

“Your governor is really hurting your ability to get all kinds of good things for the state.”

Of course, I became very offended by that.

RM: In other words, the whole way they were doing it was offensive?

RB: The way they were doing it. And in addition, the fact that I had become better educated in terms of what the long-term risks were. We’re looking at something that would last for thousands and thousands of years. To say that I was sophisticated would overstate the knowledge base, but all of a sudden, I became, “Wait a minute. This isn’t like dropping a bomb on Hiroshima or Nagasaki, in which those cities were rebuilt within a relatively short period of time. We’re talking about long-term stuff that has real danger.”

And of course, there was a growing level of opposition to this from a whole host of folks who were beginning to express concerns about water and tourism and some public health and safety issues.

RM: Were you aware of an offer that Energy Secretary Herrington made to Senator Hecht at the time? Troy Wade confirmed that he was there and the offer was made—that if Nevada would take the repository, the government would build a huge medical research facility associated with UNLV.

RB: This is the first time I’ve ever heard of it.

RM: Herrington said UNLV would have more Nobel Prize winners in a few years than any other institution. Chic told me that he took the offer to Bob Maxim, who was president of UNLV. Maxim said, “If I signed on to that, I’d be out of a job tomorrow.” So as far as Chic was concerned, it was dead on arrival.

RB: I have never heard about that, directly or indirectly. As you know, Senator Laxalt

was very close to Ronald Reagan. Legitimately close. I clearly had the impression that Laxalt had tacitly accepted the site. When he would come back to speak at a joint session of the legislature, the message was—and you can look at his remarks—not that we ought to be enthusiastic and get behind this, it was a more nuanced than that—along the lines that this was about national security.

And increasingly, Vucanovich would kind of beat up on us at the state level. So I got the sense that, in effect, they had, at least sub rosa, bought in on the repository. Do I have any proof of it? No. What you've said about this medical research center comes as a first to me.

But when I came to the senate, Bennett Johnston did indicate to me that Senator Hecht had been really supportive of Yucca Mountain. Johnson became our great adversary, when I later came to the Senate and when I was governor. I'll defer to your scholarship, but I don't recall that Senator Hecht ever made any public statements about that offer. Now, Troy Wade is a person I have the highest regard for.

RM: I don't know that Senator Hecht did, on that offer. But the secretary did offer it. Another thing: Steve Bradhurst, who became the Nye County consultant on Yucca Mountain, had earlier been the man who oversaw the MX missile project for the state, and he reported to Governor List. He told me that List took kind of a, "Well, let's take a look at MX" perspective. In retrospect, it was a bad idea—to turn over a third of the state to the federal government to keep a bunch of missiles moving around.

RB: Let me just say that List and Senator Cannon were very publicly ambivalent about it. The person that took the strong opposition was my old debate partner, Jim Santini, who strongly opposed it. There were a lot of people, businesspeople, in Las Vegas who

were speculating on the MX program. There were a couple buildings that we used to call MX buildings. And of course, a lot of stuff out in Nye County . . . Frank Scott and others bought property in Tonopah—the Mizpah Hotel.

RM: Is that why Scott bought the Mizpah? It makes sense.

RB: I think a lot of people thought that MX would provide business opportunities. Do I have any categorical proof of that? No. But there were a lot of people in the business community who thought the MX was going to be just a great economic boon. Santini strongly opposed MX and I believe it's fair to say that Laxalt opposed it as well.

Ultimately, my recollection is that Reagan pulled the plug on it.

RM: Because of his relationship with Laxalt, perhaps? Interesting. Well, in any event, some people think that List got beat up a little bit for his ambivalent position on MX. Did his ambivalence have anything to do with your opposition to Yucca Mountain? In other words, "I'm not going to get caught holding the kind of position he did."

RB: No. Those were two entirely separate issues. In my recollection, MX had died before I became governor. I think I was attorney general at the time.

RM: That's right. Now, Steve Bradhurst told me that just as you became governor, he prepared a report on Yucca Mountain for you. He said he didn't know whether you ever saw it.

RB: I'm not sure. I always had the impression that Steve was a big advocate of Yucca.

RM: I think he was fairly neutral.

RB: Is that right? When I'm saying this to you, Bob, I'm not saying it based upon a conversation, I'm talking about perceptions. My impression is that Steve was always a big advocate.

RM: I knew Steve pretty well in the years that he worked for Nye County, and my impression was that he felt, “Let’s see how it works out.”

RB: I always felt that was code. In other words, let’s see how it works out, let’s not get . . . My impression of the advocates, in other words, was that nobody was prepared to say, “This would be the most wondrous thing in the world for us.” Rather, it was, “Let’s think about what kind of benefits there might be.” I’ll use a metaphor: “Let’s keep our powder dry.” That’s kind of the message that I was getting from Laxalt and the delegation in Washington, except Reid. Reid was strongly opposed.

RM: Yes. He sent a surrogate to that first meeting at UNLV that you attended.

RB: That’s exactly right. I believe it was at the student union.

RM: You have a good memory.

RB: I had talked to Ray Martinez, I believe, and I said, “Look, Congressman Reid needs to be involved in this.”

RM: And I wondered why he wasn’t there.

RB: And at that meeting I said, “Look, this thing is something that I think has great danger for the state.” What you’re saying is fair—I was probably at the time, good, bad, or indifferent, the most out-front opponent of Yucca Mountain.

CHAPTER TWO

RM: So you entered into the whole Yucca Mountain issue with a hard, basically nonnegotiable position.

RB: By then, yes. I used to say that I would not be prepared to compromise what I thought was the health and safety of Nevadans for Yucca.

RM: Let me get your feeling about the competence and the scientific legitimacy of DOE, as well as all the scientists and engineers and everybody working out there.

RB: That's why it's relevant to go back to my experience in the 1950s. Now we're talking about the '80s. These folks' predecessors in the old AEC had told us not to worry about anything. There was scientific arrogance that was involved. It was, "Wait a minute, you folks are not technical. Just let us scientists take . . ." But by now, we had the experience. Nobody today, who would be worthy of calling himself or herself a scientist, would tell the public, "Look, we can drop an atom bomb from an airplane 60 miles from a community, and there's no risk involved." So the experiences from the 1950s form part of the DNA in this, from my perspective.

There was a great deal of exuberance. They were very anxious to do the science. I always thought that kind of clouded their judgment. And there were scientists who raised some concerns.

First of all, let me get into what clearly was the political cynicism. The "Screw Nevada" bill in 1987 had absolutely nothing to do with science.

RM: That's right—the 1987 amendment to the Nuclear Waste Policy Act.

RB: It was about saving costs. And the nuclear power industry, in what I called a kind

of unholy alliance, a revolving door, was pushing this whole program. In one administration, an executive of the nuclear power industry would be in the Department of Energy; in the next administration, he'd be back with the nuclear power industry. It was a revolving door with Democrat and Republican administrations alike—I'm not being partisan here.

And again, the cynicism—"We're going to only study Yucca Mountain." As you looked at this thing and the studies continued, ostensibly, Yucca Mountain was being proposed because of geological formations that would constitute a natural engineering barrier. Once they got in there, they found that the rock was much more porous. Over the intervening years, they had what I would call Rube Goldberg contraptions—"We'll do titanium drip shields," a host of things.

RM: To go back a moment, what was your take on the '87 amendment?

RB: That was another outrage. And another thing that occurred was the nuclear power industry lobbying effort, which was then called, if I remember, the American Nuclear Energy Council, ANEC, which was later reformatted as the Nuclear Energy Institute, NEI. They engaged in a massive public relations campaign that engaged many Nevada consultants. In effect, what they prepared was like a strategic battle plan. It was almost framed in the language of a military operation. I got a copy of that.

The strategy was to engage some people of prominence in the community in public relations. One that I recall was a radio announcer by the name of Ron Vitto, who did an ad that kind of showed that what they were talking about were these spent fuel rods with these little pellets. The ad gave the impression that you put one of those pellets in your coffee in the morning, and you're jazzed up for the day. That backfired, and he

was derided as “Ron Ditto.”

But there was a full-scale attack. They identified people—they strongly identified me, which was fair. But, in effect, the plan revealed what their strategy was—to break down Nevada’s opposition. Once I got a copy of that, I made it fully available to the media. It was, in effect, a game plan. “How we can get Nevadans to buy into this?” And my recollection was that it said, “We’ll never be able to persuade them that it’s really a good thing. Let’s talk about the benefits. Let’s talk about all the wondrous things that could happen to Nevada.”

In other words, I think they reached the conclusion, “We’re never going to persuade people it will be a wonderful thing to have this nuclear dump. But there are all kinds of good and wonderful things that can happen to Nevada.” That’s my recollection. Now remember, Bob, this goes back 20 years, and I have not prepped on it. I would have to look at the details.

RM: I would say you’re doing an incredible job of remembering.

RB: I’m trying to recall it as best I can. I spent a lot of time on this issue.

RM: And clearly, you have a good memory. Was there anything that the federal government or the nuclear industry could have done that would have changed or softened your position?

RB: The answer to that is no. Not if you have crossed the Rubicon, and believe that there are serious public health and safety issues. Not if you believe that all of the assurances that are given fall far short of the kind of assurances that make you comfortable. And if you think of the consequences if I am right and they are wrong, then, in my view, this is a nonnegotiable issue. That was the position that I took.

RM: What do you think should be done with spent fuel? Let's say they shut down all the reactors today; there's still all this spent fuel, or waste, out there. What should be done with that as a national problem?

RB: This is another thing that kind of hardens you. I went out to look at the nuclear facility outside Baltimore, Calvert Cliffs. By now, I'm in the senate. They had some dry cask storage and they were making the argument, "But we need Yucca Mountain."

I said, "Why not just have an additional dry cask storage?"

They said, "That would be very difficult for us, politically. We'd have to persuade the people in Maryland and the political establishment that there was no risk."

I said, "So you who are operating the facility are unprepared to make the argument in the state where it's located, to the people who benefit from it, that, in effect, this is safe to do. But you're asking us, in Nevada, 2500 miles away, to accept the risk."

The message was almost like, "You folks are really kind of expendable living out there. There's nothing out there. Nobody's going to . . ."

RM: Yes, but with 50 storage sites or so around the country, isn't that a greater hazard for the nation than having it in one place?

RB: That was another point I thought was disingenuous. So long as there is an active nuclear reactor, there will be nuclear storage. Once the spent fuel rods are removed, nuclear waste will be onsite for a period of time. So the notion that all nuclear waste will be in one site is not true. That was, I thought, also disingenuous, in terms of, "Wait a minute. You're not telling the folks that there will still be nuclear waste in these ponds where the spent fuel rods are placed to cool off for a period of time."

RM: That brings up another question for me—are you opposed to nuclear power in

general?

RB: I'm not, per se, opposed to nuclear power. I've never taken that position. I think there are certain risks that are involved. Obviously, we had Chernobyl. And from time to time, even as recently as a couple weeks ago, there was an accident. There were no radiation leaks, but there was a news story that there was some kind of an issue with respect to a nuclear event.

I guess my point is, if this is all so safe . . . I hear people say, "Keep the government out of our lives. Let the private sector handle things." We have subsidized nuclear power heavily. We, in effect, have legislation that limits the industry's liability. This isn't just a private, entrepreneurial effort. You in the nuclear power industry are coming to the government asking for a limitation of liability. At the same time, you're telling us it's so safe, and ought to be compared with other forms of energy. And you're saying, "Without that limitation of liability, we could never get the financing necessary to build."

What you're telling me, as a layman, is that from a financial, analytical point of view, this is a high-risk, dangerous enterprise. This isn't just a Nevada governor or senator, or just scientists, or just people who are living in the area who might take a parochial view—these are financial experts who are analyzing the risk. So we are talking about a very high-risk project by those who, in effect, evaluate risk.

RM: Yes. My counterargument to that would be to consider all the coal they are burning. I don't know how you feel about global warming, but the planet is at risk.

RB: Sure.

RM: That's a huge liability. My son-in-law just got back from a business trip to China,

and I heard the other day that China is building G-3 reactors now. Our G-3 program still hasn't been approved by the Nuclear Regulatory Commission. Do you worry about the U.S. becoming less progressive and more stagnant technologically and economically?

RB: I worry very much about that, but not with respect to the nuclear issue. I think China is an enormous challenge. For example, with respect to solar technology, I think they are ahead of us. In terms of our competitive position in the world, the Chinese are spending billions of dollars on high-speed rail and generally improving their infrastructure and we are not. I am very much worried about that. I'm not worried that they may have a new-generation reactor that may be better than what we have here. That does not, at this point, concern me.

RM: Another question I have—if you look at the positions pro/con nuclear power, Democrats tend to be anti-nuclear, and Republicans tend to be pro-nuclear. How did that happen, and what's your take on that?

RB: I think, in part, it may be due to the environmental community, although there are some fissures within the environmental community today. If you go back several decades, you had some strong Republicans. Go back to Theodore Roosevelt, and Gifford Pinchot. Those folks were magnificent environmentalists, conservationists.

But as the Republican Party moved to the right, they were prepared to say, "Look, we would favor industry over the environment." They would tend to favor less regulation rather than more. And you saw that consistently, not just in the nuclear field but across the board, in terms of reducing emissions in the air when you're talking about coal or anything like that. The Republican Party tended to be very much pro-industry in all these things. And the Democrats tended to be much more sensitive to environmental concerns.

RM: I did an informal interview over lunch with Chic Hecht in 2004, not too long before he died. He felt that you used the Yucca Mountain issue on him in the 1988 senate race. What is your thinking on that?

RB: Chic Hecht was a wonderful person. He and I served in the state senate. In fact, we drove back and forth to the legislative sessions in Reno. I liked Chic Hecht, personally. But I think his statement is exactly right. I left the governor's office because of the nuclear issue. That was the driving force. I was convinced that Chic Hecht was not doing what I expected a United States Senator from Nevada to do. Reid was a freshman, a first-year senator, when the "Screw Nevada" bill came to the floor, and I felt that Senator Hecht was not supportive of Nevada. I ran for the United States Senate because of my concern about that. I'd wanted to be governor from the time I was a small boy, but that issue was the driving force for me.

When I came to the senate, Senator Reid had not yet ascended to the top leadership ranks. I visited with every senator when I first got to Washington to tell them that this was the paramount issue for me. I can recall the Connecticut delegation, Senator Dodd and Senator Lieberman. They said, "Well, look, we have a big issue." They were interested in a nuclear submarine. I said, "This is a matter that, personally, is the most important issue for me. I'm not saying that there are not other issues."

RM: So your position on Yucca Mountain was deeply held.

RB: Deeply held. And obviously, fair criticism, I accept that folks have disagreed with that. But when I came to the Senate, I took the lead in fighting efforts to establish Yucca Mountain. And again, the nuclear crowd was always trying to reduce the health and safety standards. Remember, this is gradual. They can't get it on, so let's reduce the

standards.

RM: How were they reducing the standards?

RB: There was actually an amendment on the floor to reduce the health and safety standards for Yucca Mountain that we got President Clinton to veto.

RM: The standards that the nuclear industry had to comply with?

RB: Yes, for Yucca Mountain.

RM: And Clinton vetoed it?

RB: Clinton vetoed it. We sustained it by just, I think, a vote or two in the Senate. The motion to override the President's veto was very close. As I recall, Senator Durbin was the key vote for us. This issue was a major battle that I had during my time in the Senate. It was not the only issue that I was involved with, but it was a very big issue.

RM: Sure. It was very dear to your heart.

RB: Yes, it was. That's a fair statement.

RM: What would be your feeling about any nuclear reactors in Nevada, down the road?

RB: I would want to be very careful about that. Here is what was used as a temptation. (I've been around the block a few times, and, you know, sometimes in recent years . . .) "We'll just ship it here, and see if we can't do reprocessing." Let me tell you, once it's here, Bob, it's not going anywhere else. If you accept it for one purpose . . . it's like being a little bit pregnant. You can't talk to me about the health and safety issue—you've already crossed the Rubicon on that argument. So I was always very skeptical of ideas like that.

With respect to reprocessing, I am all for funding technology and research. Dr. Hechanova, I believe, heads up the nuclear program at UNLV, and he tells me that it's

going to take a 20- or 30-year period of time to see whether or not you can actually do the reprocessing.

RM: I think you can reprocess now—do transmutation and that kind of thing.

RB: Yes, but we're talking about huge quantities. The cost is enormous and the nuclear power industry is not for it because they can, in effect, buy raw ore much cheaper. Reprocessing may be something that could be viable in the future, but at the volume we're talking about, it's by no means clear that that is economically feasible.

RM: Would you be for an experimental program on the Test Site for transmutation and that kind of thing?

RB: I would have to understand the parameters of that. I was always able to reconcile the Nevada Test Site in terms of the underground detonation program. I was supportive of that because we're not talking about a permanent repository.

RM: Well, it is a small permanent repository. I mean, those radionuclides are underground.

RB: That's right. But you're not talking about storing a lot for time immemorial. There's no question there are contamination issues out there.

RM: One of the things I've spent a certain amount of my time thinking about is economic development. My roots are in Nye County, and how do we get some significant economic development going in rural Nevada? If people don't have jobs, they can't live in rural Nevada unless they're retirees.

RB: I understand that. Nye and Lincoln counties have always, to be very candid, undermined our efforts. Lincoln County is a county that is historically underdeveloped and very depressed. At one point, they were prepared to buy into a program—not

nuclear—to have all of the waste from Southern California shipped to Lincoln County, and giant incinerators would burn it.

RM: I remember that.

RB: I understand the need for jobs but I was unalterably opposed to that as governor.

RM: I was opposed to it, too.

RB: I'm not unsympathetic that the attraction at Yucca Mountain is jobs; and they're prepared to accept risks that, I think, are intolerably high. There are people now in Louisiana a few months after the Deepwater Horizon oil spill that would say, with these off-shore platforms. "Hey, let's get that drilling going right away, before we know what went on, because this is a jobs issue." My point is that jobs can trump health and safety, and historically, have. Right now, the oil and gas industry are doing what they're calling fracking.

RM: Yes, I'm really opposed to that.

RB: But those are big jobs for those communities, many of which are in a rough spell in the upper Appalachia, even though there's a lot of evidence that it's contaminating water and that sort of thing. Those folks say, "Those are jobs. Don't talk to us." And I understand that.

RM: Sure; there are tradeoffs. One of the things that worries me is the CO₂ the fracking produces.

RB: I think that's a legitimate issue. But if you're from West Virginia, you don't want to hear about that. So the view from Nye County is somewhat akin to the coal fields in West Virginia. This is important, either now or prospectively, in terms of the economy. I understand that, and I don't want to cast aspersions on that point. These are good people

that have a very different perspective.

RM: Are there any other highlights in your U.S. Senate career that we should include to help understand the history of Yucca Mountain and the nuclear waste repository vis-à-vis Nevada?

RB: The health and safety standards issue was viewed, by the Yucca Mountain proponents, as an obstacle. This was even in the days when you had the Bush White House and Admiral Watkins pushing hard for the program. The big push was always to, somehow, circumvent, bypass, reduce the standards. In other words, anything that was a barrier or an obstacle to moving forward became, immediately, the subject of, “How do we get around it? How do we overcome it?”

That overlay was there for most of the time that I was in the Senate. The driving force was the nuclear power industry, supported by communities like Nye County that felt that this was a jobs potential. I’m not saying that there were not some other people who believed it. I’m not saying that the scientific community didn’t think that they could do all this. But this was the same crowd, in a previous generation, that thought they could just drop those little babies (atomic bombs) out of the air and tell the folks downwind to rinse the car off, bring your kids in the house. People today don’t believe that.

RM: I know it’s true. We were quite excited about it. At our place south of Warm Springs in Reveille Valley, there was a little boomlet—everybody was out there with their Geiger counters and scintillators because they thought, “Hey, this is another Moab, Utah, with all the uranium.” And it was fallout. [Laughs]

RB: Exactly. Bob, we’ve got another 10 or 15 minutes or so. I don’t want to rush you, but I want to make sure you get a chance to fully ask your questions.

RM: Thanks. What's your take on the Nuclear Regulatory Commission? Are they capable of regulating things?

RB: I thought, and continue to believe, that it is kind of an unholy alliance. These are not bad people, but, in effect, you get the nuclear crowd. They're regulators one day, they're industry advocates the next. I was never really comfortable with the NRC. Most of them had a background in the industry and were supportive of Yucca Mountain.

So that was not the comfort level. These are the people that say, "You guys just really don't have any concerns. We've got this thing under control." Frankly, I think if you gave them a shot of truth serum, they'd have to acknowledge that a lot of the things they were saying about Yucca 20 years ago were simply not true—that there are a lot more complicated issues out there; that the premise upon which this was sold, scientifically, is no longer the case. And you've got serious issues in terms of containment and how to deal with that.

Now, they would say, "We think we can do it." But the idea that, hundreds of years after the site is closed, to open it up and put in these drip shields at the cost of hundreds of millions or billions of dollars—that's not real. I don't think that would ever happen.

RM: So you're basically suspicious of the science of the whole thing?

RB: Yes. I don't want to say that it's bogus science. What I'm saying is that these are the people that believe they can do everything. These are the people, in a different field, that the morning the *Challenger* went up, weren't concerned about the O-rings that were affected.

They're not bad people. "Look, we've launched these things before, nobody

would ever . . .” I’m saying there’s a certain arrogance based upon their education, their knowledge, their level of sophistication that leads them to say, “Why don’t you folks let us handle it? We’re the nuclear scientists. You laypeople, really, are responding to hysteria.”

Obviously they were not deliberately placing astronauts at risk. I’m not suggesting that. I’m not saying that the scientists that are pushing for nuclear power are saying, “We really don’t care if everybody in Vegas is devastated with some kind of nuclear event.”

I guess the only other thing that I would point out to you—and I want to give you time for a couple more questions—is the issue of shipping nuclear waste. The transportation issue, in this era of terrorism . . . this material would be shipped thousands of miles along the major interstate highway system and rail routes. To my way of thinking, that is a risk unrelated, per se, to Yucca Mountain, but driven by Yucca to move this thing across the country.

RM: What do you say to the fact that the Japanese ship waste to the coast, then put it on ships and ship it to France? Then in France, it’s unloaded and shipped to the plants where it’s reprocessed.

RB: There’s some risk there, but Japan is much smaller than the United States. I don’t know where the nuclear reactors are in Japan, but I do know that in this country we’re talking about thousands of miles of transporting waste from many different points. I don’t know how many nuclear reactors they have in Japan so I can’t respond. I’m saying, you’re talking about the waste going through some of the most heavily populated corridors in this country. That, to my way of thinking, is a potential prime target.

RM: What about the nuclear weapons that are stored at Nellis?

RB: Those are not being left in place for hundreds of thousands of years. If a problem developed with a particular device, it could be removed.

Another example of the pressure we get from the DOE is that somehow they don't have enough room at the facility outside of Amarillo, Texas, where they, in effect, remove the nuclear pins. I actually went there and the people there said, "No, we've got the ability to do it. We don't need another facility." Do you know what I'm saying?

RM: Yes.

RB: All kinds of arguments are being advanced.

RM: As a final question, how do you see the future of Yucca Mountain? Is it gone or is it going to come back, or what do you think?

RB: I was on a call today with some folks unrelated to Yucca Mountain, but there is a need to secure data that increasingly is subject to privacy invasion, which is becoming a major issue in this age of electronic storage. My sense is an area like Yucca Mountain, which is secure and remote, would have some potential as an enormous storage facility where the data would be secure and protected in an isolated area. It could be used by major corporations and so forth.

RM: That could be true of any number of sites in Nevada because it's so dry.

RB: Yes, but Yucca Mountain is there.

RM: With a Republican majority in the House, my sense is that Harry Reid is the one thing that's really preventing a shift in the future of Yucca Mountain. Would you agree with that?

RB: Let me just say that Reid is there, and Obama is there, so . . .

RM: I'm not sure Obama's really opposed to it but he made a promise to Reid. That's my own opinion. I think the same is true of Secretary Chu.

RB: I've never talked to the secretary or the president, but Reid is clearly the linchpin.

RM: If Reid had been defeated in this November's election, would we be in a new ball game?

RB: We would certainly not have a person in the catbird position. Reid has been successful in what I call "strangling the beast," financially strangling it—reducing the level of appropriations. From the beginning people would say, "This is a Children's Crusade; you can never win." I was told that 27 years ago.

And I said, "Look, time is our ally; the clock is our friend. Every year that it's delayed, delayed, delayed, every dollar that's diverted from Yucca gives us that much additional time."

There are some in the nuclear power industry today who have said, "Maybe we ought to back off Yucca. Doesn't look like it's going to happen." I'm not saying that's a universal, but you do hear that. You did not hear that a decade ago.

RM: I've heard the position in some of the interviewing I've been doing that if we delay Yucca Mountain long enough, it'll go away. Since we live in Las Vegas, maybe I should say a "probability." If you were a betting man, what would you say?

RB: Right now, it would be my view that we are closer today than at any time in the last 27 years to killing the project. At this point we've got an administration that wants to withdraw the application; that's in the process of being litigated, as you know. You've got the funding levels at the lowest level in X number of years and, in effect, we are dismantling the Yucca Mountain office. Are we in the victory suite yet? No, but we're a

lot closer than we've been in the past.

RM: What's your take on the argument that the Nuclear Waste Policy Act of '82, as amended in '87, is the law of the land—and in order to stop Yucca Mountain, you have to change that law?

RB: It certainly doesn't mean that there's no discretion within the Department of Energy to, in effect, make a determination that we ought to go elsewhere, or to rethink it. I think that they have that authority. That, of course, is the argument that's going to be presented to the court. But the administration is supportive of the position, and they will be arguing those issues in the court. That's a battle, obviously, that's yet to play out.

RM: Do you think it will eventually wind up in the Supreme Court?

RB: I think it quite possibly could. This is the preliminary legal skirmish. Remember, the strategy of the proponents has always been to say, "Hey, look. This is inevitable." That's been the call for more than 20 years—it's inevitable. It's going to happen.

RM: And your sense is that it's not at all inevitable?

RB: It's not inevitable.

RM: Is it high probability or low probability at this point?

RB: I think a lower probability than at any time in the past 27 years.

RM: I hope I haven't been too challenging. As you well know, I don't agree with your position. But this interview is your baby, and I'm just the midwife.

RB: Bob, it's been a very fair interview.

RM: Is there anything else you would like to say? Every interview is a failure, in a sense, because you can never get all of the information that a person has.

RB: The primary objection is health and safety. If you believe that a place is at risk, it

seems to me, it would be irresponsible to say, “Okay, we’ll take X.” Added to that, there is the sense that, “These Nevadans don’t really know what they’re talking about. Well, we can offer them enough. They’d be willing to sell their birthright for a pottage of lentils. This is a wasteland. For God’s sake, it’s not good for anything else.” All of those things, I think, add to this feeling in Nevada. Plus the fact—hey, look. Been there. Heard that. A sucker once, with MX, but not a sucker twice.

RM: Another question on a totally different subject: You came to Las Vegas as a little kid and now we’ve got a city with two million people or more. What do you see?

RB: It’s beyond anything that any of us could have imagined. Even the most visionary civic leader could never have visualized this. After the war, one kind of got the sense that things were happening. Even as a kid, our archrival was Reno—we were very competitive with Reno. You got the sense that Las Vegas was on the move, that it was growing. In 1950, Las Vegas was about 25,000 and Reno was probably 32,000, 33,000. But we had moved much further from 1940. I’d say the 1940 Census would be about 8,500, and by 1942 maybe 10,000 people were here. You had a sense that things were happening. A new hotel was opening up—you could sense a vitality.

I love the years that I was in northern Nevada. Two of my three kids live in northern Nevada. I’ve loved the Reno area from the time I was a little kid and went up there the first time in 1943, when my dad took the Nevada bar in Reno. We came up on a bus and there was a governor—you could only go so fast. We stopped at the Mizpah Hotel and my mother wouldn’t let me go into the men’s bathroom. I was so embarrassed; I had to go into the women’s.

RM: My mom did the same thing.

RB: My dad was a graduate of the University of Nevada, and in 1947 we went up there for homecoming for the University of Nevada football, the last time they were ranked. Reno had much more of the feel of a city. The Mapes was a high-rise, and we had no high-rises.

There are real values that I respect and love about Reno. But even in the '50s, the pulse was much quicker here. When I began running statewide for political office, I immediately sensed that the tempo was different, that you had to campaign a bit differently in Reno. There's obviously been that north/south thing in the state.

So in terms of answering the question about feeling the pace, early on it became much clearer that Las Vegas, good or bad, worshipped at the shrine of growth. I can't talk about the '50s, but even when I was in college, Reno was, like, "Gee, do we want this growth? What are the implications?"

I'm not saying it's all bad. I'm saying, in Las Vegas they say, "You mean we'd have to level Sunrise Mountain? Well, yeah. Let's get some cost estimates. How long would it take? Could we finance it? What are the returns?" In effect, Las Vegas, I think, had a more dynamic entrepreneurial spirit—sometimes over the top. We paid a price for that over the years, when we had these surges, then all of a sudden we had a period of time when we had too many hotel rooms and so forth. Now, obviously, Las Vegas is in a much more contemplative mood.

RM: How do you see the future of southern Nevada?

RB: I think that the tourism economy is going to come back, once the national economy revives. But I think it's a wake-up call. We've got to truly diversify the economic base. We've talked about that for years, but we really have to focus on how we

do it. We're not going to be able, in the decades that follow, to sustain the growth rate with an economy that's configured the way it is today. Gaming is much more of a mature industry now. I don't think you're going to see another major hotel property in the next 10 or 15 years.

RM: I agree. Well, thank you so much for talking with me.

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