

JOHN EDUMUND HADDER

Reno, Nevada

An Interview by

Samantha Senda-Cook

18 July 2008

Nuclear Technology in the American West Oral History Project

EVERETT L. COOLEY COLLECTION

u-1982

American West Center

and

**Marriott Library
Special Collections Department**

THE FOLLOWING IS AN INTERVIEW WITH JOHN EDUMUND HADDER ON JULY 18, 2008 CONDUCTED IN LEE, NEVADA AT THE INDIGENOUS ENVIRONMENTAL NETWORK CONFERENCE ON THE WESTERN SHOSHONE RESERVATION. THE INTERVIEWER IS SAMANTHA SENDA-COOK.

SS: I am recording now. My name is Samantha Senda-Cook. Today is Friday, the 18th of July. I am at the Western Shoshone Reservation near Lee, Nevada, and it's about 5 p.m. So, John would you please state your full name and spell it please?

JH: Yes, John Edmund Hadder, J-O-H-N-E-D-U-M-U-N-D-H-A-D-D-E-R.

SS: And what's your current residence?

JH: You want my full residence? Reno, Nevada. Is that good enough?

SS: That's fine.

JH: Okay, whatever.

SS: And then how long have you lived in Reno [Nevada]?

JH: This fall it will be twenty years.

SS: All right, and what's your current occupation?

JH: I'm a staff scientist at Great Basin Resource Watch and I also teach part time at the Community College in Reno.¹

SS: Ok so I'm stopping there. [SS stopped to test the recorder.]

SS: Alright, so this is the second part of the interview. So, this is the background section of the interview. Could you tell me your birthplace and your birth date?

JH: Yes. December 3, 1960, Allentown, Pennsylvania.

SS: I'm from Pennsylvania too.

JH: Oh wow. [laugh]

¹ Great Basin Resource Watch (GBRW) is a non-profit environmental justice organization that focuses on protecting the Great Basin from resource extraction. For more information see the GBRW website: <http://www.gbrw.org/> (accessed February 2, 2009).

SS: Do you have siblings?

JH: Yes I have one sister, she's three years older. She's in England right now.

SS: Okay and what brought you to live in Reno, Nevada?

JH: I came to graduate school in Reno [Nevada]. I had looked...I was actually a returning student. I liked the department there at the university. And that's how I traveled to Reno, from Ohio, which is where I was living in 1988.

SS: So what department was that?

JH: Chemistry.

SS: Oh okay.

JH: My academic background is in chemistry.

SS: Great. Is there anything that you'd like to share about yourself that you think is relevant to your involvement with nuclear issues?

JH: Hmm. Well, kind of, as I mentioned already, my academic background is in chemistry, so I kind of—that sort of science mentality, sort of somewhat permeates my work to some extent. And that's what I focused on initially. But that's—that's at—that's kind of the opposite of what—a lot of the other work that I have done. What you don't get in academic work is the interaction, the working with people, the community work. That's all—there's no school for that. So it's kind of interesting. I come from a back—my back...And I had no intention when I came to Reno, to do anything of this kind of work at all. I hadn't even thought about it. I just knew I liked walks in the woods, enjoyed being outside in, in nat...And my father was a biologist, so we shared that. We'd go on these walks. So I had sort of that, I guess a sort of a natural enjoyment of the

outside. That's basically all I really you know. And I think that that's what kind of struck me first is how were impacting, you know, where we live. So...

SS: So you mentioned your father as, I guess, sort of an influence to get you into the sciences?

JH: Probably. I mean, he was not pushy.

SS: Right.

JH: He was a very laid back person that way. But I think he loved the fact that I was interested in science also. [laugh]

SS: Right

JH: He was a biologist and he taught at the local college and that sort of thing. So, and he...I was a basement chemist. You know, what's the Bob Dylan song? 'Johnny's in the basement mixing up the chemicals.' That's kind of the way I was. And he was happy to bring stuff home [laugh] to sort of fuel that interest. Too much stuff really. But anyway... Yeah, so there was definitely that aspect of it.

My mother, her—she was a social worker. And she actually—her—she was a social worker by career but she had a lot of interest in arts. And she had done some dance and theatre and that sort of stuff. So she came from...My two parents were very different in that way in terms of what they did—what their sort of active interests, I suppose, are in that way. So I kind of feel like I kind of, you know, that made me a little—they gave me some breadth that way to appreciate. 'Cause I know a lot of people in science and they're very [laugh] 'blindness on.' [laugh]

SS: Right

JH: You know, that's fine. There's advantages to having that—to doing that kind of work also. But I didn't really come entirely from that kind of background. Even though my father was very influential, I feel like my mother's influence also in, you know, interest in arts... And I did some theatre in high school. And I continued to do some later on too so...

SS: Can you think of any major events growing up that have shaped maybe your decision to merge the community organizing aspect with the scientific aspects?

JH: Hmm. Well I know that in—when I as twenty-five years old, my father died of cancer. But he had been diagnosed when I was twenty, in 1980. And, I mean, he knew it was—he knew that eventually it would take him. That was his perspective on it. I'm sure he was right having... I'm sure that especially at that time, there's maybe a few other therapies out there today, but bone cancer is not one that you usually survive from in the long term. Anyway so, I think that that impacted me quite a bit. In that it was a jolt fairly early on that things can change very quickly in life. You have to be kind of adaptable and I didn't really have an opportunity... I think I was too young to really have the opportunity to really understand who he was completely as a person. And he wasn't a talker, like my mother was. [laugh] And so it was—in men—that sort of a culture of men to some extent too. And, but there was a lot there that I don't think—a lot of stories and a lot of things about his growing up that I didn't get. I think that that did have an influence that wasn't really perceptible to me at the time. But what it did do is, at that time, I was in graduate school also and it... I broke away from school. I had finished up a Masters. I was working for a little while in Cincinnati, Ohio. But it put me in a place where I was more open, I think, and like, you know, whatever. You know, things can change

overnight, you know, whatever. And so I did go back to school, but I think I was in a different—a way different place when I returned to school. So I say that that may have been a—something of a critical piece at that time, that kind of being open. And at the time I was also doing a lot of different kinds of reading that I had done—than I had done before. You know authors talking about Zen, existentialism, and all kinds of other sorts of topics, you know, literatures that I hadn't really looked at before. So I think my mind was opening up...what do people do in their twenty's anyway. That's not uncommon. But I think that piece—that event actually did, did really jolt me into a different perspective than I had before.

SS: Who, who would you say were your role models growing up or what were some major ethical influences on you?

JH: Well, definitely my father was. You know, both my parents to some extent. With my father it was probably mostly—well, with both my parents—but he showed it a different way than most men do. He was a very kind person. And he was not a very good disciplinarian. [laugh] I have to laugh at that. But I mean I think what it did was I saw a man behaving in a way that just does not stereotype in this culture. And I think that had—that has influenced me very strongly. And my mother was a very optimistic person. She went through a very difficult time when I was about eight or nine for about ten years or so there. I mean it's...But overall, she had a very optimistic outlook on life. And I realized that more after my father had died. I got to know that part of her a little bit better. So I think that has a...I think doing this kind of work, it's hard to be a pessimist. Because it's—otherwise you take in a lot of negatively will pull you down. So I think that's—that was influential in that way.

You know, another person who influenced me in doing community work kind of early on was person who's a Quaker, actually from Reno [Nevada]. It's when I kind of just started doing this sort of community work. And, I was still in graduate school and mostly focused on that. But in 1990 when we went to war the first time in Iraq—it's like, 'oh gees, here we are again'—I got involved a little bit with some of the peace movement in Reno. And Ann Scott was a friend, Quaker, an older person from my perspective. I mean she was sixty at the time I suppose. What I saw there was someone who was very energetic, dynamic, was—would focus on the person she was speaking to, and was a good listener at the same time. But she also was good at getting people to do things. I mean she, you know, as... If you're an organizer, an activist, you have to kind of have that quality of being able to ask that. 'Cause you can't do it all. Some people do that and they burn out. So I saw a very interesting quality in her. And also it was my first introduction to the Friends Community² but more importantly to the process of that community, the use of consensus, the listening, the quietude that they—which I had taken with me in everything that I do at this point from that point forward. So I think she was very influential at that stage in life when I was first thinking—when I was first beginning to get interested in or rather doing some kinds of community work. That's... Those people stand out.

SS: Great.

JH: Yeah

SS: So we're going to move on to sort of establish your relationship with nuclear waste issues.

JH: Okay.

² Friends Community is another word for Quaker.

SS: So what nuclear issues or nuclear waste issues are you or have you been involved with?

JH: Ah, just about all aspects really. I, of course, I didn't do any of this or even thought about it before I moved to Nevada. You know, it was really a trip down to the Nevada Test Site [NTS]³ in 1991 pretty much sealed my fate, although I was unwittingly aware of that at the time. I just didn't realize how much of an impact it would have on me. But I... So that's nuclear weapons and that's the testing period—the testing—and we were still doing active nuclear testing at that time. And of course I quickly got—found—learned about what was happening at Yucca Mountain and nuclear waste issues.⁴ And so I worked on those as well. And of course, that's connected with nuclear power, the development of nuclear power. So basically I've been involved in some capacity in all aspects of sort of the nuclear chain, including uranium mining. And the connection... The use of nuclear weapons, the testing, where it's being tested, who's being affected, all the communities. So I've done—been involved in a lot of that. And a lot of it all started with the Nevada Test Site [NTS]. And we had done, over a number of years, some very very amazing events down there where we brought in people from around the world. So I learned a lot about different cultures and communities that were impacted, you know, through nuclear weapons process and development.

³ The Nevada Test Site (NTS) is located in Nye County Nevada, about 65 miles north of Las Vegas. 1951-1992, 1028 atmospheric and underground nuclear tests were conducted on the NTS. Now, a variety of programs are conducted at the NTS.

⁴ Yucca Mountain is the proposed site for the nation's first permanent high-level nuclear waste repository. Yucca Mountain is located in Nye County, Nevada, about 70 miles north of Las Vegas. At the time of this interview, the Department of Energy (DOE) had just submitted a licensing application to the Nuclear Regulatory Commission (NRC). If granted an NRC license, the site would be able to start accepting shipments of waste.

SS: So when you got to Nevada did you just read the newspaper and you saw that that was happening or was there maybe a particular person who brought you in or did you just become interested in it through the science community?

JH: It was that—1990. I had just finished that fall—okay, yeah, basically that fall I needed to finish my oral project for graduate school. So, I said ‘OK I’m gonna finish this. I’m gonna make sure—I’ll make sure I’m not going to get distracted yet.’ And then it was—it was in 1991 then the fall again. And I had gone to some—a couple of meetings that were involving the peace community: a group up in Reno called Sierra Interfaith Action for Peace,⁵ which Ann [Scott] was one of the founders of. And then there was a local Greens group, also, that I found out through that same meeting. So I went to some of their meetings also. So it was really kind of an awakening for me of all these kinds of stuff happening.

And I got very interested in the Greens movement because it was an alternative paradigm movement, which had a lot of appealing aspects to me. I like the non-violence aspect, oh yeah, the environment, that’s cool, you know, the post-patriarchal values and community-based economics. All this kind of stuff was things that I had read about here and there. And it just made a lot of sense to me at the time. And that’s when I found out about the [Nevada] Test Site gatherings⁶ was through the Greens—local Greens in Reno. And that fall, in ‘91 as I went down there. And actually I had found out about the struggle

⁵ Sierra Interfaith Action for Peace (SIAP) is a non-profit organization founded in 1986 and later affiliated with Fellowship of Reconciliation. According to SAIP’s mission “We are a network of peacemakers whose mission is to listen, respond, and work together for peace and justice.” For more information, see their website: <http://www.sierrainterfaith.org/index.htm> (accessed January 26, 2009).

⁶ There have been a variety of organizations that held gatherings at the Nevada Test Site (NTS) to call for a stop of nuclear testing. Some groups still hold yearly gatherings at the NTS related to peace and indigenous rights (the NTS is located on land that is claimed by the Western Shoshone nation).

of the Danns.⁷ And I was out there in that winter, 1991, when they were fending off the sheriff and Clifford Dann dowsed gasoline on himself. Oh yeah, it was very intense. And I was like baptismal fire. These people from AIM [American Indian Movement]⁸ are, you know—they're making these—they were cutting off the metal rebar and spikes and putting 'em in the roads. And they had guns and 'Whoa, whoa wait whoa, whoa. What have I got myself into here?' So actually that was the fall. Yeah that was winter '91. So that was after I had gone down to the [Nevada] Test Site. I'm sorry, I got the...It was around that time. In think it was after that...I get those days sort of confused. But it was that year. So I was exposed to that very quickly also. And I was out in this area on the Dann Ranch. And, in fact, at that time they had gotten national press and I was interviewed by one of CBS⁹ or something like that. [laugh] I was washing potatoes. And they were asking me what a graduate student was doing washing potatoes. [laugh] So yeah, so that was—that's how I found out about a lot of stuff was through that Greens group. There—'cause being a paradigm kind of organization, they touched on just about everything, which for me at... What I've learned about myself is that that's kind of how I am. I'm sort of—that sort of, you know, that sort of looking at all kinds of different things, and the connections. The Greens were all about what are the connections between these different issues. So I learned about, you know, what was happening with the indigenous rights, and the Nevada Test Site, and Yucca mountain, and local issues around

⁷ This refers to a Western Shoshone family—the Dann family—who fought for their right to graze cattle on traditional Western Shoshone land near Crescent, Nevada. Carrie Dann and her deceased sister Mary Dann were the main leaders of the struggle. For more information on Carrie and Mary Dann, see: Amnesty International, *Indigenous Rights Are Human Rights: Four Cases of Rights Violations in the Americas*, May 2003; *United States v. Dann*, 470 U.S. 39 (1985).

⁸ The American Indian Movement (AIM) began in the late 1960s to address the oppression of American Indians in the United States. For more information, see their website: <http://www.aimmovement.org> (accessed January 26, 2009).

⁹ An American television broadcasting station.

Reno [Nevada], also growth and community planning and all that stuff the Greens talk about at one point or another. So it was a great melting pot of discussion and so I'm sorry that it doesn't exist there anymore, but there's other things that have evolved since then so...

SS: Do you remember the name of the Greens group you were talking about?

JH: Great Basin Green Alliance. And the people—there were two people that I think started it: Steve Foster and Helen Jones. And Steve [Foster] is in the Bay Area somewhere now. He's a very interesting sort. He's one of those sixties products and did the commune thing, living off the land, that sort of stuff for a while. And he was at the University [of Nevada, Reno] at the time doing—with the IT folks. It was kind of interesting. He left them. I hadn't talked to him in quite some while. And Helen was the director of the women's center, UNR, University of Nevada at Reno. And she's moved around a little bit too. And think she's been on some sort of sabbatical for like the past year. So I've seen her from time to time. Still catch up once in a while. So they're around. But they started it—they started the chapter as far as I know. And then from that we... There was a Green Party¹⁰ that evolved out of that process. And then we had a campus group for a while, which I started at the UNR [University of Nevada, Reno] campus when I was a graduate student. And then after I left graduate school, I wasn't kind of on campus as much any more. I didn't have—I sort of tried to pass the baton to the Greens group. And, like I said, it lasted for 10 years. Unfortunately it's not around anymore. It's hard work. Sometimes some campuses are hard to keep active.

SS: Definitely.

¹⁰ The Green Party is "Committed to environmentalism, non-violence, social justice and grassroots organizing, Greens are renewing democracy without the support of corporate donors." For more information, see the Green Party website: <http://www.gp.org/index.php> (accessed January 26, 2009).

JH: The University of Nevada Reno is one of them. [laugh] So...

SS: And so, let see, you said 1990, so that would mean you've been involved with this movement for about 18 years?

JH: Yeah, yeah really. I mean with nuclear issues....I mean it was really the fall of 1991 that was my first real exposure. I came down to the Nevada Test Site [NTS]. It was a Veteran's Day witness. It was one of the first Veteran's Day events that they had done down there. And it was really—it just...I learned a lot and found out about a lot of stuff and it was striking because the—there had been a number of organizations that had been doing actions down at the Nevada Test Site since the mid-eighties. The Nevada Desert Experience ¹¹ is one of the first organized groups to do events down there. And then American Peace Tests evolved in the mid-eighties and dissolved around 1994, '95, something like that. And they tried to create the sort of the native influence aspects as well—which is really good—to pull in Corbin Harney and Bill Rossi and some of the native folks that have been concerned about these issues. But the veterans aspect was interesting because the—then they had done these mass arrests down there for years. They didn't know how to—the security didn't know how to handle the vets when they got—crossed over the line, which is crossing over from public land to strictly government land. The Nevada Test Site is off limits, you know. It's so called 'withdrawn' quote unquote. Then it was like "well gee it doesn't look good to arrest a veteran." These were atomic veterans—as they're called the atomic veterans. And so it really changed, it kind of changed the whole tone of events ever since that point. Because all of a sudden it

¹¹ The Nevada Desert Experience (NDE) is a non-profit organization based in Las Vegas, Nevada. According to the NDE mission statement, its goal is to use non-violent direct action to stop testing at the Nevada Test Site and move towards nuclear abolition. For more information, see the NDE website: <http://www.nevadadesertexperience.org/index.htm> (accessed January 26, 2009).

wasn't the hippies, or the Indians or whatever, it was, "gee these are people that served." So, I mean, I think they'd gotten arrested there before. But I think this was the first time they had a really major Veteran's Day action down there and it just really struck me how powerful that was. And it really it made it real clear how important you know the coalition building and stuff is, pulling in groups that you might not think of right away to ally with and they represent different community. But, yeah, that was really...

And from then...And I was still in graduate school through a good part of the 90's. So I was still doing that routine, but as time went by my energy was more interested in, you know, the organizing and activism kind of work. And I saw my research as being more cerebral and less connected to people and living on the planet in some ways. And I think I just kind of lost energy for it. I mean I still find...But I've come back to some of that a little bit not so much in the research sense but in terms of science and citizenship. Western culture is extremely scientifically dazed. Anyway, and so and I've tried to—in doing my part time teaching—that's part of what I've been trying to do is bring that part of it in. And one of these days I want to try to develop a class, a course at the community college or at UNR [University of Nevada, Reno], a sort of science and citizenship class. Other places have 'em. We don't have necessarily one. And I know a lot of different...I know—I have good knowledge of the activists, and the organizers and the region to make it a really locally-focused course, so it would be unique to the area. So I think I have connections and stuff to make a good class out of it if I could ever find the time to put it together.

But anyway, yeah, and so as the nineties went on I began to do more work around community organizing and I had consistently been going down to the Nevada Test Site

this whole time. And we had—after '91—'92 was Healing Global Wounds event, the 500 Years Resistance, which was everywhere—big events around, around 500 years since Columbus. And there was huge activities down in Las Vegas and at the Nevada Test Site [NTS] around that as well. And ever since then, there have been two events down at the [Nevada] Test Site gatherings annually. You know, I've consistently have gone down to those events. I've missed a couple here and there because of the circumstances, you know, but generally continued. And then by 1995, I became kind of one of the [Nevada] Test Site organizers. And that's 95-96. So, the baton had kind of gotten passed from the people who had done it before. And they were different types of events, and you know there were—the numbers were different and so forth but yeah.

SS: And so what does your research involve, your chemistry research?

JH: Oh it was [laugh]...it's interesting. It's, like I said, it's pretty—I mean it's in...The general field is what we call chemical physics or physical chemistry sometimes. But technically I was in the chemical physics program at UNR [University of Nevada, Reno], which is a very physics-based kind of chemistry. So actually the technical side of the nuclear issue is something I could pick up very quickly 'cause I had a lot of background in physics and I understood some high energy physics and nuclear physics, and I had some understanding of that so I mean. And then of course with nuclear waste issues as well, there's—you've got all these different chemical components. And again I think my background, you know, kind of gave me an immediate understanding of what that meant. What it means to have a strontium 90, for example, leaking into the water system. Well, as a chemist, I know strontium is right below calcium in the periodic table which means they have similar chemical properties. So it makes perfect sense that your body might

tend to deposit strontium where it deposits calcium. And therefore, bone cancer and things like that. So I immediately had that connection with some of these issues that came up from a technical side. So I think that's one of the reasons why I kind of maybe picked up on it or gravitated to it to some extent. I've always—my interest has kind of always been that way. But in chemical physics what I specifically did was called molecular dynamics where you look at the energy movement within molecules, how it gets transferred in chemical reactions and so forth, which I still find interesting. It's not that I don't find it interesting anymore. It's just that, like I said, it was very cerebral kind of work [laugh], and it was all on computers, it was all kind of modeling. And what I had said to my graduate advisor when I left...And he was a good guy, the guy I worked with was great, I made a good selection that way. When I left graduate school, not having finished my degree, was that I think I've learned what I needed to learn here. And it's difficult sometimes 'cause there's a lot of stigma associated with not finishing a degree or blah, blah, blah. But kind of how I felt at the time—and I still feel that's true...But I did learn some important things there. And in my research, since I worked with computers and we did a ton of modeling kind of stuff, well that's what we deal with all the time when we looked at an Environmental Impact Statement. When they talk about mines here, they're talking about Yucca Mountain. I mean the modeling associated with Yucca Mountain is enormous. And again I could look at that and immediately have some understanding of the complications that would come into doing that work and how it works. So I think I, as I said, I think I got something out of that. I don't see it as a waste of time, but that was essentially what I did.

SS: Great. So I'm going to move on to what your perceptions of nuclear issues are from here. So, how would you describe your current role in the debate over nuclear waste, uranium mining, and nuclear testing?

JH: Hmm. Well, I think I've been—I think that—I think currently I'm mostly a resource person right now. I...Because of various events that have happened in the Great Basin, there really isn't a public interest organization that's focusing on nuclear issues. There have been. I've worked for Citizen Alert for ten years, which had been the organization that everyone kind of looked to for the most part to organize people around nuclear issues. And it's pretty much all but disappeared the past couple years. And I left in 2006 when I was not able to function in that organization. But the point being is, is that there's sort of this—a little bit of—this kind of a hole in terms of organizing capacity around these issues. There's a number of groups that do a little bit. I do a little bit. I'm on the board of an organization call HOME, Healing Ourselves and Mother Earth.¹² And we do what we can but we're not—we don't really have a good solid funding base to do much more than just keep up with things, comment when we can and try to send out emails to networks and so forth. "Hey this is happening." It's fairly minimal kind of activity at the time. The Nevada Desert Experience [NDE] still exists in Las Vegas [Nevada]. They don't really—they've never really had the organized capacity anyway. In general they're a great group and they keep that witness going, which is very important. Shundahai Network¹³ is another group that I'm on the board of, but, and I don't know if it's going to

¹² Healing Ourselves and Mother Earth (HOME) is a nonprofit organization located in Tecopa, California and Reno, Nevada. For more information, see their website: <http://www.h-o-m-e.org> (accessed January 26, 2009).

¹³ The mission statement of the Shundahai Network states: "Shundahai Network is a nonprofit organization dedicated to breaking the nuclear chain by building alliances with indigenous communities and environmental, peace and human rights movements. We seek to abolish all nuclear weapons and an end to nuclear testing. We advocate phasing out nuclear energy and ending the transportation and dumping of

come back or not. But again this is where there's a hole. But I have had a lot of years of experience organizing, doing research, creating education materials. So I consider myself currently as mostly a resource person right now. And I...we're still at HOME [Healing Ourselves and Mother Earth] trying to continue the education program work because it concerns me a little bit that—more than a little bit really—concerns me that there aren't that many young people that are involved in this work because you know, it'—there have been at different times and there are some, but it doesn't seem to be capturing the...

And I think there's an important need because we're sitting on a place in history, in my view, where we—there could be a completely different path that we go down around nuclear material. The United States has been teetering on nuclear power for a number of years. There hasn't been a new reactor built for 20 years or so and a lot of other countries in the world have been turning away from nuclear power. No one wants nuclear weapons, yet the United States continues to develop new programs for nuclear weapons. Other countries, of course we're seeing in the current face of things, other countries are saying "Hey if we get a nuclear weapon, we can get the United States off our backs or we can threaten other people." So there's a, there's a point where, I think we're at kind of a crossroads in a sense where we really need to have a good policy of—around these issues, where we, we actively move towards getting rid of nuclear weapons—non-proliferation. We haven't had an administration in the White House that has been very active on it for years. We currently have an administration that's been completely the opposite. We'll see what the next administration does. But, but with the

nuclear waste. We promote the principles of Environmental Justice and strive to insure that indigenous voices are heard in the movement to influence U.S. Nuclear and environmental policies. All of our campaigns and events incorporate the values of community building, education, spiritual ceremonies and nonviolent direct action." For more information, see their website: <http://www.shundahai.org/> (accessed January 26, 2009).

status where we are right now there's an opportunity to make for a really different course to go in especially around nuclear power development 'cause the nuclear industry's trying to reassert itself as a solution to climate change and all this nonsense. Yet we also receive a lot of innovation around renewable energy resources. And from what I understand the economics is better that way anyway. So we're at that point where there's a lot of people that are concerned about climate change and a lot of people getting on that, a lot of young people getting in on it. That's great. But if we don't keep our eye on what's going on over here with the nuclear power, it could sneak back in. We could have another 50 years of wasted resources on nuclear power. So I think what I bring to this at this point is a little bit of history around that. And seeing what has happened in the past and seeing where we—the road that we could go down or another road, which to me is more positive. The positive road is that we don't develop nuclear power reactors as they are and we start dismantling more of the nuclear weapons complex.

I've done a lot of organizing in the past ten years when I worked with Citizen Alert around... We have a mock nuclear waste cask. And there's one—it's not in Reno right now, it's actually in Smith Valley [Nevada]. But it was left up in Reno [Nevada]. And it's a scale model of a transportation container for nuclear waste. Citizen Alert started this back in 1990. And going around with this thing kind of getting people to understand that "Hey you know the waste is gonna come through your community. It's not just a Nevada issue." And so I spent some time doing that kind of stuff. And listening to people in various communities and actually talking to people but also about "did you know this is a possibility?" And people were shocked largely across the country. Once

you get outside of certain places, especially in Nevada. It's like "Oh really? I didn't have any idea this was happening."

So I know how to do that kind of stuff. I feel like I could be a resource person that way. I don't know how much energy I have for going around with the cask anymore but I think again I can resource for people wanting to do that kind of work. And I have a sense of the landscape of where we've been with nuclear issues. What are the concerns that communities have around nuclear waste, nuclear weapons? What—how can we use them in an effective? Who, and moving forward on policy, who needs to be at the table? Who should we be talking to? You know these kinds of things. So that's kind of mostly how I see myself now, as currently more of a resource and educator. And if the organization that I'm working for right now, if we do pick up the baton to work on some nuclear issues stuff, which we may do, I may begin to take a little different role in that. I may do a little more organizing and stuff that I've done in the past with it. But right now, like I said, in my organizing and activism work is mostly coming to events like this and getting information out there you know and that sort of thing.

SS: So what do you see as the primary problem with nuclear waste?

JH: Well it's the forever problem. And it's toxic, it's very... There's various forms of nuclear waste. This is, you know, part of the confusion around it. You've got some nuclear waste which is highly radioactive and some that's not as highly radioactive. You got some that's around for a very, very long time, and some that's around for not so long. And they're all different. And the waste that comes from nuclear reactors, which is what most people have concerns about, is a mixture of all of the above. Some of it's around for a very short time. It's extremely dangerous in that time period. But there's components

that will last for longer than humans have been on the earth you know. So it's a forever problem.

Mining, actually, is very similar in that way. There are artisanal old Roman mines that still release acid water into the environment. So and that's—they're not even that old, I mean, we're talking about a couple thousand years or so. Maybe three or four—three thousand years at the most. There's been a lot of mining talk at this event. Nuclear waste has, you know, beyond that. It's more than thousands of years. It's hundreds of thousands of years. It's mind boggling, the nature of the problem that we have created. And to me the nuclear waste and nuclear weapons are very unique in terms of their role in technology [unintelligible]. And we've taken it about as—we've taken it very far. Because the first use of nuclear—the first use of this—of nuclear power was weapons. This is not uncommon though in human history that, you know, we would use a new technology first in warfare. And it hasn't really done too much better since then. We haven't really... And here's the difference, in my view. Unlike other technologies, we can't, we don't have the same leeway with nuclear techno—we can't make the same kinds of mistakes. The stakes are high in my view.

One thing I tell classes when I talk to them, and this is part of the allure of nuclear power. In the early days was, "you can get so much energy for just a little bit." It's true. Pound, you know, pound for pound nuclear energy is about a million times more energy per unit mass per pound than coal, oil, all the other. The difference is, of course, is that the chemicals—a chemical—it's chemical reactions. Nuclear power is a nuclear reaction. So you're dealing with a whole different set of forces. It's the energy that powers the universe. It's very awe-struck. Our sun is a nuclear reactor. And in my view nature

doesn't...Nature says "Okay, use can use this but you're going to have to be very wise because it's very powerful." And think that's what's happened is that we've found out how we can fiddle with it but we haven't got the wisdom to know how to really use it properly. Nature's devised a great way of using nuclear power to create life. We have a system here on this planet where we have great distance from the sun. That's one thing. So a lot of the radiation is attenuating offsite. And also we have an atmosphere. That's helped—to help to allow radiation to come in that has fostered life, and not too much of the bad stuff that destroys it. So I mean nature's created this great system. Humans, we have not been so clever on how we use it. So it's a, it's a forever problem. There are some scientists that think we might be able to figure out ways of neutralizing it. Maybe. There are laboratory experiments that can demonstrate some possibilities, but I don't see it as being feasible at this point in time. It sort of like counting grains of sand on the beach. How many sand grains are there? And, you know, so it has that. It's also—nuclear waste comes from nuclear industry power plants.

It also comes from the nuclear weapon side as well. And, of course, the impact there has been enormous to a lot of communities—sort of the blind process around the Cold War around "Mutually Assured Destruction." Crazy logic that's evolved around that is to me hallmarks of lack of wisdom. Something which is a million times more powerful than what we were used to. I mean imagine that. Think of it, for example, an obvious example is, you know, we sit down and we turn the key of our car we turn it on. Well imagine it as that pedal will accelerate instead of from zero to sixty in a second is zero to six thousand miles in a second. Imagine, you know, ramping up the power of that a million times what could happen if we didn't know how to handle it. And that's exactly

in my view, what's happened. And some key scientists realized that too late. There's some interesting quotes from people from the Manhattan Project and so forth when they did the Trinity device.¹⁴ "Oh." [laugh] In fact, they said it worked better than expected in terms of effectiveness, but they were—they began to realize what they really had at their disposal. I mean it's one thing to calculate the numbers on paper. It's another thing to actually see it in action. And we have seen it. They saw that in action and immediately a number of them said, "Well we can't use this. You know, we can't use this." And of course, the wheels—the military wheels had already been turning at that point. And it was really hard to stop it.

But we've also seen...not only is just the detonation itself an awesome display of power which impacted those scientists, but we've also seen the effects of years of testing on communities—displaced communities, destroyed cultures virtually. I mean the Marshall Islands, some of their islands are just completely vaporized.¹⁵ They completely removed the civilization that existed there. They were completely displaced. They can no longer go back there. It's like "Your home is gone," you know. And, on top of them, in the case of Marshall Islands they didn't understand at all because they didn't have a word for "war." They were, you know, an island culture that's isolated. They had plenty of resources at their disposal. They lived happily for who knows how long. So, it was mystifying to them when the United States government approached them about these experiments that they were going to do. So we've seen a huge...So not only has the power—not only a million times more power and energy, but it's also a million more

¹⁴ The Manhattan Project (1941-1946), under the direction of General Leslie Groves and J. Robert Oppenheimer, designed the first nuclear weapon. In the Trinity test, the nuclear weapon was detonated on July 16, 1945 in New Mexico.

¹⁵ There were 106 atomic tests in the Pacific Islands, including Bikini Atoll, Christmas Island, Enewatak Atoll, Johnston Island, and in the Pacific Ocean.

times powerful on how it's impacted life on this planet, human culture as well as plants and animals and so forth. I mean we've detonated thousands of nuclear weapons during the Cold War period. Released in the atmosphere radioactive particles, some of which have decayed away. There's still some residual left, so I mean. There are people that think we may have changed life on this planet forever as a result of increasing background radiation level even just slightly. We don't know. We don't know the answers to those questions. We don't know what the long term implications are. So there's a lot of heaviness to this issue.

And the other thing, the other side of it is that those people that are involved in the nuclear industry, the nuclear side of our government, and the Department of Energy [DOE] and our... There's a whole culture inside there that doesn't really seem to care about this, or unaware of it, or that these people just don't understand. You know, "we know better" kind of mentality, which I think that I have some understanding of as someone who comes from a background of science because a lot of those people are science background. And what they've done, is they've taken that philosophy—and in my view not the correct philosophy—the philosophy of the science of objectivity too far. Science tries to claim objectivity, which is wrong, in my view is a false claim. You can only go so far with that. And, you know, sorry but there's people in communities and they've been affected and you just can't be objective about it. And so I think that's what I've seen is how heavily impacted it is. And it's...

The other thing about nuclear waste materials is that we don't carry Geiger counters around with us. In general, most of us don't know that it's there until it's too late. Sometimes, when there's a chemical toxin in our environment, we get a hint. We get

a little bit of an early warning. Maybe because there's an odor or there's an appearance, you know, the little—sometimes a little bit of a warning. A lot of times with radiation we don't get the warning. It's virtually invisible. And, as I mentioned before, a lot of the chemical components that are radioactive, like strontium 90 for example, waste, body absorbs it just like it absorbs ordinary strontium or calcium. It doesn't really differentiate from it. And so, 20 years down the road, you got cancer. And the other side of it. And this is not just true of radiation, this is also true of a lot of chemical toxics, but it's true of a lot of times cancer-born illnesses, is that there's a latency period. Meaning that you've got a time, a fairly wide span of time between perhaps the critical exposure event, whenever it was, and when symptoms occur. And so the connection between the two is difficult to make. This is another insidious aspect of the sort of radiation damage. It often doesn't show up right away unless it's intense. You know, obviously people that were killed during Hiroshima, that's an intense initial exposure experience. The firefighters that went into Chernobyl after it, that was an intense exposure experience. So they died within weeks. So we're all aware of that kind of, it's a pretty clear connection. For most of us—for most people affected by radiation, it doesn't show up. It's more of a lower level exposure and of unknown consequence and difficult to trace back to connection. There has been some progress on that. The Center—the National Cancer Institute [NCI] and the Center—the CDC—Center for Disease Control finally released their Iodine 131 reports in the late nineties, way later than they should have in our view, but required citizen pressure to do that. Another good, another example of where the science... You can figure out the science is there but you've got to have people there to get it to happen and that's what eventually it did. But there was a connection between the fallout from weapon

Iodine 131 and thyroid cancer, one of the few clear pathways—epidemiological pathways. There are possibly others that I know that are in process. There's the Tooth Fairy Project¹⁶ which is trying to trace strontium. So there are some out there that other ones are trying to, but it's difficult. And so that's another insidious aspect of this problem is in Yucca Mountain and wherever we put nuclear waste is going to be another issue. 'Cause if, if the nuclear waste does end up at Yucca Mountain, the DOE—the Department of Energy will be able to build the site good enough so that the people that are building it now will be off the hook. Unless there's some bizarre, some very unusual catastrophic thing happen. And it could be. But it's most likely it's gonna be down the road—future generations because it has to get out of the site, and then it has exposure period. So, it's a lot of...And so most likely they're gonna be off the hook, and that's all a lot of them probably care about. On their watch, nothing happened. So that's—another problem with it is you can't point to it right away, you don't know it's there until it's often too late. Skin cancer with the sun is the same example. Although we do get sunburns and severe radiation exposure you do get that surface burn but mostly it's just low level stuff and—or something in the water took in and accumulated. And it's hard to know, hard to trace it back. So that's another aspect, I think, where nuclear waste, radioactive materials sort of stand out. A lot of chemical toxics are the same way where they have a latency period as well. And sometimes, and those are very often very difficult to trace too. But the history is not quite as challenging as it is with radiation. And the mechanisms behind how our body responds to radiation are still pretty unclear in a lot of

¹⁶ The Tooth Fairy Project is part of the Radiation and Public Health Project (RPHP), directed by Dr. Jay Gould. The project collects children's baby teeth to analyze the levels of strontium-90. For more information, see the project's website: http://www.radiation.org/projects/tooth_fairy.html (accessed January 26, 2009).

ways. We have an immune system that can handle a certain amount of exposure but there's a limit and everybody's a little bit different. It's just—that's kind of the way the cancer aspect is.

And also, another thing—the studies of Hiroshima, the A-bomb studies have been changed, have been redone over the years many, many times, a number of times. And the results of those studies, one of the results that the gov—that a lot of the people in the industry, the nuclear industry quote a lot is that those studies indicate that there are no what they call “heritable effects” from radiation exposure. In other words, it gets passed on to the next generation. And so I don't—I haven't studied those in detail myself. I'm not an epidemiologist but from what I have read about it, there's been a lot sharp criticism about how those results have been analyzed over the years that, you know, could create a false conclusion regarding that particular aspect of it. So, there again there's again a lack of information around it. And so it's—so a lot of people that are supporting nuclear power or government agencies that say—they're not supporting but they may feel supportive—can say “well, there's no scientific evidence.” And they're not really wrong in saying that. But that's a half-truth because science—what the science says is that well the fact there's no evidence doesn't mean that the connection doesn't exist. That to me is the more complete scientific statement about it. Does it, you know, it's a matter of proof versus disproof sort of thing.

So I think that's the long answer to your question. You know I think that's part of why I think that nuclear, nuclear radioactive materials kind of have a special place because of those characteristics.

SS: So we've got the nuclear waste. What do you see as some viable solutions? You mention feasible solutions, one's that aren't feasible. So what would you see as feasible solutions right now?

JH: We don't really have one, in my view. Any place that we put the waste is gonna find a way out eventually. We're talking about time spans that are enormously long. What I think that we need to do with the waste now is store it for as long as we can closest to where it's generated. And the reason for this is that we want to minimize handling because the material's so dangerous. And we want to minimize its transportation because it's dangerous. If we—if we're able to store close to source of generation for a couple hundred years, then at least certain components of the waste like radioactive strontium and cesium-137 and those short-lived isotopes will be largely gone at that point. And they are the real problematic aspects of the waste in terms of handling and transportation in the short term because they emit an intense radiation field. If there's an accident in transporting it, those are the components that are going to create the most public health problems and environmental problems in the short term. So in 200 years, if we still don't have anything better to do with it and we have to bury it somewhere, at least moving it won't be as dangerous. It's hard to find a good answer to that question. And that's part of the challenge of people that work in this field. Because the question comes up "what'll we do with it if we don't put it in the Yucca Mountain, if we don't put it there?" I said well we created something we don't have a good solution. One possibility also is that if we do store it close to the source of generation, we can continue to research methods of neutralizing the radioactive components. Right now, I feel like that there's laboratory experiments that show this can be done, but feasibility-engineering side of it is another

story. It's an enormously complicated undertaking to neutralize the waste with the available—with the current technology that we have now. And I don't even know if it's...I mean the cost may also make it almost prohibitive as well. Although one might say, you know, "There's no cost that's too high when it comes to, you know, the health and safety issues." I'm not going to argue that, I mean, but political will comes in once the cost gets to a certain point. So I think onsite storage is what we have to do in the short term because it will help, at the very least it will buy us some time to continue to see if there are other methods that we can use to neutralize it that don't create other problems. This is a problem there. The government and some of the people inside the government have been working on schemes for neutralizing nuclear waste. They call it—it's called "transmutation." They use other reactors and this whole complicated scenario of developing a way to neutralize it. And this has gotten some people that work in the government labs excited because it's very technical and they love working on that kind of stuff. And I understand that 'cause I come from that background to some extent too, but you don't want to lose sight of the fact that we're trying to get rid of this. And we don't want to create other waste streams that are also toxic that we have to deal with in a long term prospect. And in my view, this is different than what the government labs are thinking. In my view, I don't want to see us promote a process which can then encourage development of more nuclear reactors and then we get more waste on top of that. So for when we should be developing other ways of dealing with—of creating energy for our society. So I, you know, I think there's a possibility of research in that area. We might develop the technology that can feasibly neutralize in the future. But we have time to store it on site.

And I think that the United States government is probably stable enough for the next—probably be around for long enough. But that is a concern though, in the long term. That who's gonna be around to watch this stuff. And that's one reason why the repository concept is—has some merit that way is that if we can isolate it from the environment for a long enough time, then it's sort of a sealed vault and that we don't have to worry about. And then if the government's gone, that's okay. We just need to leave appropriate markers so people understand what it is, which is another whole aspect of the forever plan too is how do we leave markers to leave this alone that future generations will understand? For all we know the pyramids in Egypt could be markers not to mess with this. You know, we went in there anyway. [laugh] So that's a big question, you know, how to deal with that. There are some geological formations which are considered to be more stable than others. The problem is that someone's gonna go in somebody's backyard. And, you know we have community largely have not advocated for that. So we've been stressing the onsite—the onsite storage, but it's not permanent and we need to figure out how to deal with it in the long term. And it's a big problem but I'd say that in terms of...I think that the transmutation, the technical fix sort of thing has some possibilities, but only with a lot of public oversight so that it doesn't go south and develop other technologies that creates more nuclear waste, creates more problems, it helps us develop more weapons. No, we've got to get away from that. But maybe if we store it on site and start shutting down the nuclear complex, then the research may be able to go forward in a better way.

And I think that whatever we do with nuclear waste, one thing is very important is that it not be the decision of a handful of technocrats and beaurocrats, which is what it

has been in my view. So one suggestion that I saw that came out of the Institute for Energy and Environmental Research [IEER]¹⁷ was to create kind of a public—a limited corporation of some sort that's not governmental but has a very limited chartered mission and that is to find a socially-responsible environmentally-as-sound-as-possible solution for this waste problem. And so, in other words, takes it out of the hands of the government that has all kinds of influences on it that are political and so forth that are not—that are undermining finding the best possible thing to do with it in the meantime. And at that table—and I would add to their proposal that that corporation or non-profit agency be controlled by a board, which is a consensus-based for one, so that you don't get any politicking inside the board and that it contain some technical people, it contain some government people, it contain indigenous people, tribal, it contain people in reactor communities, activists. It needs to have a broad spectrum so that all of the concerns are on the table with this. Because we're talking about a forever plan, you know whatever it is, so it can't be taken lightly. We got to think of that—those seven generations and so forth. And I think that all those, all these communities need to be at the table that haven't been. My hope is that if we can move in that direction, that we can find out something that will work. But it's a big challenge 'cause like I said it's—stuff is—the materials are gonna be around for so long. It's hard to find any place to put them for that long a time. Just an enormous challenge, we've gotten ourselves into a fix, a pickle this time.

SS: How does your organization, I guess contribute to these solutions that you've outlined or some of these, at least, temporary solutions?

¹⁷ The Institute for Energy and Environmental Research (IEER) is a nonprofit organization that "provides activists, policy-makers, journalists, and the public with understandable and accurate scientific and technical information on energy and environmental issues." For more information, see IEER's website: <http://www.ieer.org/> (accessed January 26, 2009).

JH: Well, HOME [Healing Ourselves and Mother Earth] created a People's Policy on Nuclear Waste, which is a multi-point policy to, you know, for a nuclear-free whatever world.¹⁸ And it involved—we talk about nuclear weapons, nuclear waste and all this kind of stuff is in there. So we had that policy out there for a while and a number of people that serve on our board are also very involved in the nuclear issue. There's a couple. One person who's on the board who actually worked for the state of Nevada. He's our technical person for the state of Nevada. And a—and another person who's in Las Vegas has done, she's also on our board. And she's done a lot of work, Judy Treichel. She has a public interest organization called Nuclear Waste Task Force.¹⁹ It's focused specially on Yucca Mountain. But they haven't done any—it's pretty much a one-person operation for years. And is involved in a lot in the technical meetings and so forth and keeps track of that side of it. Doesn't—hasn't done—doesn't really do community organizing, per se, but is involved and is a voice and is a presence and so forth. And then we have some people from the Shoshone community that are also on our board. We got a person who's...

[Child interrupts]

SS: No, thank you.

JH: Later. Okay, well maybe some other time, okay.

[Unidentified child]: We're trying to raise money...

JH: Yeah, we're in the middle of something right now, so come back later okay?

[Unidentified child]: Uh, huh. We're trying to raise money...

¹⁸ This refers to the Peoples' Nuclear Waste Policy. For more information, see the HOME website: <http://www.h-o-m-e.org/> (accessed on January 29, 2009).

¹⁹ The Nevada Nuclear Waste Task Force is a non-profit organization focused on the Yucca Mountain nuclear waste facility. For more information, see: <http://www.nvantinuclear.org/> (accessed on January 29, 2009).

JH: Sounds great...

SS: Thank you.

STOPPED HERE

JH: She's in California and she's been working—she works—she kind of lives near the Diablo Canyon facility.²⁰ And so, and then there's someone, there also a person from Utah that's on our board also. So... And there's been a lot of discussions around what should be the next, how should we take the nuclear policy—the Nuclear Waste Policy Act²¹, which is the—which was the law that's been driving the Yucca Mountain process. And how do we scrap that, start over and what should be a sound policy. So I think that our organization has been contributing to that process by talking—we've been talking about it on our board. And then we've been communicating with larger—a larger network, a larger community, and sort of keeping the discussion going. And I guess one of the hopes that I have for it is that, you know, depending upon how things go. I mean, this next election cycle can make a big difference in terms of what happens at Yucca Mountain.²² But the opportunity to come in with some new ideas and to create new language at least in the government level to deal with nuclear waste. So, I think we've been contributing in some way to that discussion. And we are also connected to the wider nuclear network. So, as far as work in the Great Basin, we can bring in discussions that are happening around the country and around the world on nuclear weapons and nuclear waste and bring that information to our local community as well. We do that to some extent also. And, you know, bear witness to what's been happening and what continues to happen.

²⁰ "The Diablo Canyon facility is a Nuclear Power Plant located near San Luis Obispo, California.

²¹ The Nuclear Waste Policy Act was passed in 1982.

²² November 2008 presidential and congressional elections.

We, HOME [Healing Ourselves and Mother Earth], did a study in Amargosa Valley [Nevada], we did a water study in Amargosa Valley [Nevada] sampling and water analysis. And we had a report that came out about that. So that was an informational piece also on radioactivity in the area and also discussion about the Nevada Test Site [NTS] along with that. So that's you know that's part of it. It's where to from here? What are the next steps? What should we be doing? You know working on trying to talk about policy. There's a lot of people—there's people in some of the Washington, D.C. that talk about policy but they're disconnected from some of the communities on the ground. So HOME is one of the organizations that does have a connection with people on the ground. I'm here at this conference now as an example of that. So I hear what people are saying too. So in terms of the policy development, that piece of it needs to be in there because it hasn't been in the past. And that's been part of the problem. So I think we serve that role as well.

SS: Great. Who has been or will be affected by nuclear waste disposal and in what ways?

JH: Well everyone's affected in my view. I mean, it affects on many different levels. The disposal—if there isn't a good way to deal with the waste, it continues to back up the process of nuclear energy development. In fact, California has a state law that they're not gonna—there are no new nuclear reactors in California until there's a solution for the waste. So, as long as Yucca Mountain can't take waste, as long as nothing else, it stymies that process. So that affects everybody because, because that's energy policy really. I mean nuclear reactors, is that going to be our source of energy in the future? How much of it is going to be there? So that has national and global implications the way—what we do with the waste it affects everybody.

And of course there's waste from nuclear weapons side as well. So that impacts you know what happens with nuclear weapons which is also a global issue. If we're not careful, you know, there could be a confrontation in the Middle East over nuclear weapons. That could be catastrophic in terms of life on this planet if it, you know, if it's a chain reaction kind of thing where other countries get involved. Even if it's not, it's still catastrophic. So I think it's a very global, global that way. In terms of the repository itself where if we do have, if it's Yucca Mountain or if we do have another siting, I mean it's clearly going to affect that region very dramatically. All the waste will be coming to that location. That affects wherever it's being transported. It affects all the communities that it goes through if not in actuality—if not in physical reality, at least in psychological reality. There's sociological aspects of it. We don't know what the long term implications will be for health, but it will affect a lot of different communities if and how we deal with that nuclear waste. If we think we have a solution for the nuclear waste, then we might start building more nuclear reactors. And that—the United States has in the past imported nuclear technology. Supposedly the agreement was with other countries is, "We'll give you the nuclear technology, if you say you won't develop it into nuclear weapons." This was the Atoms for Peace Program that was started back in nineteen—1950's with the Eisenhower administration. Of course, a number of those countries now have nuclear weapons, so that wasn't really a successful policy. And this, this current administration has tried to reinstate that process. So, the waste, the waste impacts where the technology goes as well. In terms of do we have a solution for—what to do with it?

So, I think it's impacted pretty broad although people don't realize it right away. Again it's that long term thing. You know when you have an incinerator come next door,

I mean, that affects you right away and you know it. That's not going to be the case in general with a lot of nuclear waste, unless there's a catastrophic occurrence, which is what happened at Chernobyl. That could happen again if we're not careful. The way the industry, the way the Department of Energy [DOE] talks about handling nuclear waste scares me in the sense that they're very cavalier. "Oh, we understand this stuff. Oh, we know what we're doing. We've done it before." That fact is that, no, we have never built a repository before. And we have never transported nuclear waste on the scale that you're talking about here. And the possibility for human error is very pos—is very high over the course of time. So, there could be a catastrophic event around nuclear waste just because of lack of attention to detail and too cavalier an attitude on the part of the agencies and the industry.

SS: Great. So who's responsible for the nuclear waste situation and how is this party taking responsibility for it?

JH: Who's responsible? Well everybody is really. I mean we have nuclear waste because we have policies that create them. I mean collectively the communities have to decide whether we're gonna have nuclear power or nuclear weapons, or what are we gonna do with it. So I mean we're allowing people to get elected to office that are going to continue to promote these programs. So to some extent all—everybody that's involved in a democratic society anyway is somewhat responsible. [Cleared his throat.] Excuse me. And I think also...I think also the promoters of nuclear power did not necessarily present the most accurate case to communities before they developed it in the community. I mean, they may not have been aware of what they were getting into. So that's the big picture.

More specifically, I think that we have nuclear power in this country because of the Cold War. In my view, from what I've read and what I understand, that the process of developing nuclear power was highly dependent upon the military. Back in the nineteen—back in the early 1950's and so forth, the idea of having a nuclear-powered submarine, enormous tactical advantage. I mean, it's just enormous. I can't—I cannot understate how powerful that is. Particularly submarines because back during World War II, the submarines, you know, they ran on diesel fuel and oh my God, what a horrible experience that was. I mean, from what I've read and talking to people that actually did—that were on those subs, they could only stay under for a very short time, very limited to a certain number of hours usually. That's how the—that's how they would get destroyed a lot of times. If the cruisers on the surface during World War II, if the cruisers knew there was a sub down there, which they often did by sonar, or had a suspicion, they could just wait it out. And even, just keep...And eventually the submarine has gotta give up. And they don't have that much time. They didn't have that much time. They could only go under for a very limited amount of time. The working—the conditions were cramped, difficult, there're diesel fuel fumes, they needed oxygen all the time to run the generators and so forth. So they were used a lot. But with a nuclear sub, you can go under for weeks. [laugh] You can go under the ice caps because you got a source of power that doesn't need oxygen. And because it's a million times more powerful than chemical fuels, you can load up what appears to be a very small amount of fuel and that'll last you for months and months and months. Enormous tactical advantage. Just...And then load it with nuclear weapons. Basically our Trident nuclear sub force could destroy the face of the earth.²³

²³ The Trident missile is an intercontinental ballistic missile armed with nuclear warheads and launched

[Pause]

JH: That always gets me, one submarine. Sorry.

SS: That's okay.

JH: That always gets me when I think about that because it seems so irresponsible. But from a military point of view, a tactical point of view it's enormous.

SS: Mmm hmmm.

JH: And to be able to do—to be able to have that allows you to wield an enormous amount of control and power. And it has done. And we saw that in the period of the Cold War. The United States and the Soviet Union also developed these submarines as well. We're basically unrivaled for this trite reason. So it's my feeling that ultimately responsibility of where we're at today is because of that. Because we—because that tactical advantage of having those subs and having that ability was so, was felt to be so important in our government. And the people, largely the population went along with it. Although I would contend that the public wasn't fully aware either. They weren't fully informed about what was happening at the highest levels and so there was—it was unchecked virtually. It was just basically—it was basically like what happened out here at Nevada, at the Nevada Test Site[NTS]. The government came in and said "Well you know this is national security, this is for your own good that we're going to test these weapons and you're doing your patriotic duty to, to not make a stink about it." 'Till they realized, they found out later that the government essentially lied to them when they said that this was okay. It wasn't okay. People were affected in enormous ways. That was a

from submarines. For more information:

<http://www.navy.mil/navydata/fact_print.asp?cid=2200&tid=1400&ct=2&page=1>

program that was unchecked. This is connected to that. So I think that is really—is where it came from.

And then what you see, the first nuclear power reactors that were developed were sub designs. The same designs they used in the submarine, which from an engineering point made no sense because there's a huge difference between the function of a nuclear power—of a power plant on a submarine versus a power plant on a stationary ground facility. Huge difference in how you do it. What you're looking for in a submarine, you're looking—you're not necessarily... Well for one thing, the radiation field is not as much a concern 'cause a lot of it goes out into the ocean, assuming you don't care about the critters in the ocean. [laugh] But from a military perspective, you can design the reactors so that a lot of the radiation goes out into the water, which actually water's a pretty good way to block it. So that's one thing, is how you design—how you do the layout. It's also designed for a maximum power profile, for speed and so forth. At which not necessarily maximum efficiency or whether how much waste or how the waste, what the nature of the waste is and so forth. So the power reactors that were first developed in the United States, anyway, were actually not the best design for a stationary power plant but there—they were the sub designs. And it was Admiral [Hyman G.] Rickover who was the master driver behind this whole submarine and nuclear power program. And what they re—what the military, I think, realized is

“Well, if we're gonna—if we're gonna to be able to have a fleet of nuclear power subs and nuclear power aircraft carriers, we got to have engineers, we got to have infrastructure. We don't have that. All we got is the Manhattan Project and what's left over from that. How are we going to get infrastructure? Well, we need

colleges and universities to have nuclear programs. Well they're not all going to go into weapons work, some of them are going to do research. We got to have—we got to have a commercial side. We need to have a commercial nuclear program to make this work and to get public buy in. We're going to benefit.”

This is “too cheap to meter” was the phrase that was used. Of course, it's never been true. The utilities were not interested in nuclear power in the fifties. It seemed...Nuclear—the utilities have historically been a very conservative industry. And it's like, “Well we don't know about this technology so we're not too sure about it.” And then Brookhaven Labs²⁴ came out with a study early on about the impacts if there was a major accident, and then that sealed it. They're like “ah, ah, we're not even, we're not even touching this hot potato.” So the military stepped in to actually build, lend its designs from its sub, make—modify those designs for the first reactors and construct demos and give them to the utilities, essentially. And then we passed the Price Anderson Act²⁵, which indemnified the industry so that basically the U.S. taxpayer would pay for an accident beyond a certain amount because basically they—basically the utilities couldn't insure 'em because the liability's too high. So the government really stepped in in a big way. And it was the military that pushed it. And I believe that it really ties to those nuclear subs and those aircraft carriers but particularly the subs. Particularly the subs because what they could do, they changed the whole face of the po—the military power structure of the planet basically. I mean, in a matter of years the United States went from a very powerful military power but from a—but to a power for—a power that could wipe out the earth and from an undisclosed location that was untouchable. Just imagine, that's like your

²⁴ Brookhaven National Laboratory, located in New York state, is affiliated with the Office of Science and the Department of Energy.

²⁵ Congress passed the Price Anderson Nuclear Industries Indemnity Act in 1957

enemy is invisible and it could pop up anywhere and hit you in the face. I mean that's an enormous tactical advantage, a more powerful advantage. So, I—that's personally why I feel it drove that way. And I think that if it hadn't been for that Cold War mentality, I don't know if we'd have nuclear power today because it seems like the industry wasn't interested. It hasn't really been very inexpensive. It's complicated and you got to do all kinds of crazy things to make it work. And in fact, even back in the fifties, there was a study, a government-sponsored study, that said we should "Look into solar because we don't think this nuclear thing is the way to go." It's called the Paley Study it goes back to like 1952's.²⁶ Hired...It was set up to Eisenhower administration. And their footnote recommendation is to look at the possibility of solar power. This is a long time ago. [laugh] And you know, solar is actually nuclear, but it comes to us in a very different way. So that's what I—ultimately in terms of how it got started, I think that's it. I think as the public, as citizens, we can't just say okay they're the bad guys. We have to take responsibility. We're all responsible in some ways.

SS: I'm going to stop it.

SS: Okay. So you just gave an amazing history of all of this. Where—what are your sources? Have you just been doing research over the past eighteen years?

JH: You know, it varies. I mean there's a lot of, a lot of first-people sources. We had a lot of great people that came to the [Nevada] Test Site over the years like the Marshall Islanders. So that's a first hand. They came to us and they told us "they had a need for this and we don't have a word for war, you know. So, we didn't know what they meant." So, this was a person—was one of the—he was a government—he was with the local,

²⁶ The Paley Commission Report came out in 1952. The report was conducted by The President's Materials Policy Commission appointed by President Truman.

with the Marshall government. So a lot of them... There's first person sources like that, downwinders. Some of it has been from me hearing them speak or talking to them. Some has been from what they've written. There's been a number of good publications that have talked about this. There's the atomic vets and some of their work. And a lot of atomic vets came from the [Nevada] Test Site gatherings. So I've spoken with many of them in person. But there's been a number of good publications about the... *Killing our Own*, I think, was one of the best publications I've read on that.²⁷ It talks about the atomic veteran experience. Some of it is government documents, Department of Energy, you know, those sorts of things. There's a lot of government document sources. Some sources are independent scientific sources. The Institute for Energy and Environmental Resources [IEER] is one of those think tanks that's put together a lot of that stuff. They're one of the... and they're an independent institute, but there's other organizations like those. Some are first person constructions like Helen Caldicott and people like that that have been around for a lot of years. Linus Pauling he was a chemist, kindred spirit in that way. He was a very strong voice on nuclear issues early on. He did an early study in the late fifties on Carbon 14 which was released from the nuclear explosions and he was making connections between that and fallout and [unintelligible]. It was actually his studies were part of what got the above-ground testing stopped. It was a combination of things, but his studies were important because here was a very well received scientist with good documentation. "Hey we're increasing the level of Carbon 14." And Carbon 14 well, it's carbon. Our bodies are mostly carbon, a lot of carbon. So we're going to take it in and it's going to radiate internally. So it was a very good study that way. So,

²⁷ Harvey Wasserman, *Killing Our Own: The Disaster of America's Experience With Atomic Radiation* (Delacorte Press, 1982).

scientific sources as well. I try to follow my training in science and look for a lot of sources and don't—and try to be careful how we judge them. I think a lot of people—that's one of the problems. I try to respect all of the sources for what they are and incorporate them in what I do. And, like I said, the first person sources, the oral history stuff, the people that have been telling their stories are so valuable. You're not going to get that in the scientific literature, in most cases. But, you get other stuff from the scientific literature.

So it's of and various. I think I've traveled around a lot. I've talked to people in other communities. There's a network of other organizations in the United States where it's sprung up as a result of all the different places in the United States that have been contaminated by nuclear radiation and radioactive materials. And it's largely around the weapons—nuclear weapons complex, which is on my shirt by the way. And there's usually an organization next to each one of them because almost everyone of those places has contaminated the local community. And so there's this whole network. So I've heard stories from all the different places around the United States and even other countries as well, from people that are doing organizing work as well. They're sort of my counterpart there to some extent and so there's a lot of different sources like that. I actually have a bibliography that I hand out to teachers. And it's actually—and I've got to update it 'cause there's a lot more sources than that. But it gives them a sense of where the information comes from and I encourage students to look for different sources as well. Newspaper articles, magazine publications, *Bulletin of Atomic Scientists*, *Scientific American*, *Atlantic Monthly*. You know, you name it. I try to find—I try to pick from a lot of different sources and because they tell the story in a lot of different ways and some

are more readable to others. *National Geographic* did a great spread on nuclear waste, I'm thinking it's 2002. The thing that's great about *National Geographic* is that they have wonderful pictures. Pictures, I think, are very helpful in telling the story as well. So that's a source I put out there a lot—I put out there to a lot to people, especially instructors because the text is very—it's fairly readable by most people. It has great images. Shows you know, so they can kind of see. And of course they're great color pictures. So that's a good source. So I try to find a lot of those kinds of sources as well to read and get perspectives from...

I've got a book I bought in a used book store that says, "Before it's too late: A case for nuclear power." It's good to hear what that perspective's about. You know, and they had—they bring up some interesting information that way. I mean there's a lot of people in the scientific community that think nuclear, you know, is the way to go. And they're—again part is they look at that equation: "Gees a million times more energy. We got to make use of this some how." And maybe we will someday be able to do it wisely, maybe someday, but I don't think we're there yet. So, you know, those are sources too, people that are on the other side of it, you know. And I try to look at what their arguments are, and I talk to other people about it too. And say, "Well, what do you think of this?" Especially people that may have a specific understanding of that, you know, people in government. So those are kind of some of my sources. I think that it's important to hear from perspectives that are, that are not like our own.

I think the Native perspective is very interesting because, they're one of the few cultures that are still around that provides a good critique of some of these technologies and some of this sort of "scientificese" to it. They come from a different, a real different

place and the world view I think is something really critical. So, you know, I really got—learned a lot from all of my exposure to the Native communities. The Corbin Harneys, people like Chet here, Bill Rossi, a wonderful spirit who died a number of years ago. He had actually... Bill Rossi was key. He was one of these—he was a—he was like a bridge person because at the time—this is talking about around 1986 or so, you know. Corbin Harney was not out around much. He was a spiritual person. He wasn't out on these issues. Bill Rossi brought him out. 'Cause Bill was on that side. He's Native American Shoshone person and sort of had all that culture but he was also connected to more of some of the Western culture stuff in the sense that he was in communication with. So he got Corbin Harney out, as he said, "brought him out from the bush." And of course it had an enormous impact in the movement. I mean Corbin was, I mean, I can't tell you how many times I've come across someone, it's like "Oh I heard Corbin speak. And you know I'm doing it. What do you need? I'll do it for free." I mean it happens all the time. He, you know, just sort of... I think, especially a lot of Westerners, you know, the spiritual, we don't—you know there isn't—it doesn't exist in a real tangible way, you know. Church—we're tired of churches 'cause it seems stuffy, some God's telling you what to do, whatever. But the way that, you know, Corbin expresses the message is very appealing to a lot of people even if they don't take up that particular religion. It's like, "Well I like the fact that it's, you know, trying to preserve the earth. Connected in that way and so forth." So he's hooked a lot of people up. So these are really important voices I think 'cause they come from a really different place. You know, hearing the Marshallese people, same sort of thing, it's sort of indigenous culture. It's like... In fact I've got a poster over there that I bring with me. If you look at where the nuclear

weapons tests have been done, pretty much all on indigenous lands. And you know, I mean, it's not a surprise in a sense because a lot of the indigenous peoples have... Well they've been under attack, and you know by—colonized. And so they've closed in to some extent. They're not connected to the political, lighter political. So they haven't been historically. And so it's easy for the government to move in and do it's testing. And then say, "oh" and push them off away kind of thing. And it's out of the way a lot of the times. These are often places that... The Nevada Test Site [NTS] is considered very remote, you know, by most people. And it is, really in the United States, I mean... Nevada's got vast tracks you don't see any body for quite a while. And this is true of a lot of places where they've done nuclear weapons testing. So that perspective is very important I think as well. So I've tried to honor as best as possible. And I tried to—you know what you get from it. And I... Corbin Harney's, you know, he's not going to talk to "technicese." You know it's like when he does he gets lost with the technical stuff. It wasn't his thing, you know. And, that's, well what he... I think one of the things, one of the lessons that I learned, I learned from that voice. And a lot of the indigenous voices is that. You know that's—science doesn't have all the answers. It's only one way to view the world. And so you know you can talk technical all you want but you know there's another view out there and that has to be honored also. And that's a challenge that I think we face now is how do we bring all the voices together and honor them all and celebrate them all and not run roughshod? 'Cause that—science has become a huge part of Western culture. Basically... and I teach this—I teach a class, it's a chemistry class, but it's a chemistry for non-science people so I get to bring in all this other stuff. It's kind of good in a way. I've taught the regular classes before too, and you have to stick to—you have to

be more rigid with the curriculum 'cause it's American Chemical Society, a certification, and you got to cover certain things. But this other class doesn't have that baggage with it so we can talk about how science relates to the issues and stuff. And what you—what I've found with the students is basically, "well if a scientist says it, it must be true," you know [laugh]. So this is a—there's a whole level of kind of respect there that, warranted or otherwise. But it's—so there's... And I think that that's what I've learned is that, you know, indigenous folks say, "Well, if a scientist says it, I think maybe it's not true." Almost, you know, like they're on the opposite side in a way because they've seen how the application of some of the scientific principles has created and destroyed the land and changed it in ways that are irreversible. So they have a really different, really different slant on that. And I think that's really important that we get that in our works.

So, yeah sources, it's a—that's a—it's a tricky one. One of the things that I try to do with the class is have the students think about sources. Think about what they, you know, what is it, what does it mean to, what is scientific information? What does that mean? Where does it come—how is it different from other forms of information? What do you respect? Why you respect... You know that whole discussion I think is really important. And it's the thing about, you know, coming back to the nuclear issue is that it's very technical in many ways. And the people that have promulgated the technology have made it that way. And they have presented it in such a way that "well, you can't understand it so just trust us." This has kind of been and this of course caused many problems 'cause now's there's enormous mistrust. We may realize that, "Well, we may not have understood it, but you didn't either and misused it." So it's a very technical issue that way. And as an organizer, there's a challenge to that because it's easy for people to

glaze over quickly. So you—and this is where these voices are really important in doing the organizing and the activism work is because, you know, my training basically, my academic training, is in science and that sort of stuff. But what—I've learned out here in the field is how you can—how to talk—how to help to sort of talk otherwise about it, to sort of make it real for people and to, to work it. So I try those—to weave those two together as best as possible. And you know usually, when it comes to—when I talk about the issues, it's not the techie stuff that usually gets the attention of the people anyway. It's the other side that gets your attention. And then once—then you can sort of talk a little bit about some of the technical terms or what language they need to know to do more with it. But it does have that side to it, which is a challenge, a definite challenge.

So I mean in doing this work, one thing that—I think one thing that's important is to honor all of it. Honor the scientific. Honor that technical side. Make sure you get your facts right that way because you're going to get challenged on it. And don't—but don't forget to honor the other voices, the voices of the people that live in the communities that are affected, the voices of the people that don't necessarily accept the technical lifestyle or the scientific—the different point of view. And make sure you cite those. And make sure you speak to those too. And I try to just—I try to really—I try to use quotes as much as possible 'cause you don't want to speak for someone when they're not there and that sort of thing. But that's an important of it, definitely a very important part of it. And you know, so sources are, are critical. And then I think that in doing the activism and organizing work, by being able to talk and cite a number of different people, people get a sense of, "Oh, you've been around. You've seen, you've talked to a few people, you haven't just stuck to this one thing and sort of stayed with it," you know. That makes a

difference in terms of creating a rapport with people. And a lot of what I've done, especially in indigenous communities, is not talk. You know, especially as a person who's not of Native descent, I'm a European-American whatever, I'm a transplant too. There's a certain level of trust that you have to establish when you come into a community and so the not talking part I think is really important. And not only from advancing from what I want to do but it's so, I mean, I've grown so much as a person I think by just listening to those stories and taking that in. So...

SS: Great. Well, to close...

JS: Okay.

SS: Is there anything that you would like to add that we didn't touch on yet?

JH: Ah, let's see. We touched on quite a few things. One comment that might be, sort of, I don't know if I really touched on, and this pertains to—and this goes back to Yucca Mountain is that it's one of the biggest sleeper issues that I've ever seen. And the industry, the nuclear industry particularly has tried to—their propaganda and influence in the agencies I think has been to sort of make it a Nevada issue. It's not. It's very—it's actually—it's very... To me, it hinges on many aspects. Like I said, as I mentioned before energy policy, you know. Where are we going with energy and nuclear power? Nuclear weapons it connects because I think the nuclear—you can't have nuclear weapons and nuclear power completely separate. Nuclear weapons materials come from power reactors—come from reactors, and so there's a whole connection there with it. So you kind of, as I mentioned earlier, the military wanted that commercial side so they could... So I think they're connected, but it's been a big sleeper issue. Very few people know that much about it and from what I understand and from my traveling, "Oh, there's gonna be

nuclear waste coming through here? What's that about?" There's a lot of that. So I think the industry's done a good job in their propaganda in making it a Nevada issue, especially the legislators, especially the legislators. And so I think it's one of the biggest sleeper issues because it has so much impact on many aspects of how the future's going to look and so it's sort of interesting to work on an issue like that. Where—unlike global climate change all of the sudden everyone knows about it. It took a while for people to get it. Once it's out, it's really out there in a big way. The Yucca Mountain issue's never been that way, and I don't know if it ever will. Again partly because, you know, nuclear waste is kind of not clear in people's minds what it is and the technical side of it.

Climate change is different, polar bears are falling through the ice, you can take pictures of that, you can see the glaciers melting. So I mean, there's a lot of issues are like that, and it's more. So, this has been I think one of, one of the biggest kind of a sleeper issues that way, but once people get some of the basics, understand a little bit, they get, "Whoa." It really—it does get their attention a little bit. But I think it has. To me historically it could stand as one of the most important issues of the times. It's gotten very little attention except at a few critical points, which is interesting. I don't know. I think that's one thing I didn't really articulate specifically. I don't know if there's really anything else.

I think I—one thing I will say, it's been quite a ride [laugh] for me personally. For someone who essentially was going to get an advanced degree in chemistry and presumably would then get an academic post at some point. It's been a really different life than what I expected. And to me a lot, to me a very rich and it's difficult at times, and fun at other times. There's lot of—you meet lots of wonderful people, interesting folks,

very interesting folks, especially through some of those test site gatherings. People came from all over the world. The various communities that merged, that came together through those is something you don't experience in too many other, you know. So this is the kind of work that it is. So, like I said it's been a ride that's for sure and it continues. [laugh] So, I guess that's about it.

SS: Can you recommend anybody else that you think we should interview?

JH: Oh wow there's lots of people.

SS: Yeah.

JH: I notice in your form, that you're trying to focus mostly on indigenous voices. It looked like that's what it was. So there's plenty of people here that I'm sure that you're finding. I definitely would interview Chet, Chet Stevens. He passed by here a little while ago. But he's doing the morning circle and he does the sweat lodges. But I don't see him handy right now. But he has—he braids his hair and it's pretty long. He's sort of a heavy guy, a big guy. If I see him I'll point him out to you. But he's a good person to interview. He's—again this is Corbin—Corbin took him under his wing, when he came into the circle. And did, and it changed his life.

I would interview Deedee Sanchez. She's doing one of the workshops. She's from Duckwater [Reservation, Nevada]. She—Citizen Alert started a Native American program in around 1990 and it was her brother that started it, Joe Sanchez. He died of lung can—of leukemia, which is a classic downwinder illness. He was a young guy, I mean thirties, a little older than me at the time. So she took over the program from him. So she'll have a lot of very interesting perspectives in history around this. I would definitely interview her as well. And, of course, there's lots of other people here. I could

point you out to a lot of them. I'm trying to think if there's somebody here. There's a lot of people that aren't here that would be good to interview, but I don't know how accessible...I imagine that you are probably going to do some traveling. Expect to do some traveling.

SS: I could always give you my email address and you can email them.

JH: That's good idea I can probably send you some other contacts if you're doing some... Yeah, so Chet's probably going to be floating around for that. See, that's Tom Goldtooth there. Chet looks like, got the long braids like that somewhat similar build but that's not Chet. He's around here. Deedee and... Trying to think of, there is, are you going to be traveling to [Las] Vegas [Nevada] you think at all?

SS: I would say that that's a good possibility.

JH: Yeah I could point you to some people in Las Vegas if you might want to talk to. Of course there's Margene [Bullcreek].

SS: We interviewed her.

JH: Which I'm sure you've interviewed 'cause she's Utah and she's in the area. That fellow Gregor, he worked a lot with Corbin early years and a lot with the Shundahai Network. You might find that to be a very different kind of voice. Gregor Gable, he's about my height, he's got kind of longish hair too. Gregor Grable's a little bit jittery 'cause he's on some medication. He's actually...he's a veteran himself. I think he's a Vietnam veteran. I think he may have PS—PTSD—blah get it out—issues. So that's part of his medication, but any rate. So he's...I don't see him around here. He has a lot of early history with the Shundahai Network which I think is—they're very colorful, the Shundahai Network is a very colorful group. It started around—it started in 1995 and it

was, you know, Corbin's main motivation. It was his organization but, I mean, a bunch of—a lot of other organizers. He's not... See Corbin's wasn't really an organizer. He's a spiritual person, you know. So he's the message and the voice and everything but people like Gregor are the ones that were doing a lot of the ground work. And he'll... There's a number of people with that group too that would be interesting—you'll get a different. See and the thing of it was is that the Shundahai Network was a—and I don't know, we may get it revived at this point, we'll see what happens—a very direct-action oriented, very. Citizen Alert when I worked with them was not so much like that. We mobilized people, we did a lot of informational stuff, we kind of interfaced with technical people and that. And we were big, really well known. Shundahai Network was you know on the ground, seat of your pants organizing, direct action and very important. So I think it's a good voice to get in there is people that worked with Shundahai Network. Gregor's one of them. Oh Willy, Willy Fragosa [spelling??]. He's here. He does a lot of tending around the morning circle too. I would talk to him too. And let's see here he is kind of dark hair too, shorter guy.

SS: I think I met him.

JH: Yeah, but he would be a good person to interview also.

SS: Great

JH: 'Cause he was, he's been in and out of the Shundahai Network. But he's been around test site stuff for a long time as well. He'll definitely have a lot of interesting perspectives, interesting perspectives on that. There's... let's see I'm trying to think of people that might be here that would. You running out of juice there?

SS: I don't know. I can't tell what's beeping. Can't tell if it's me or if it's a watch or something, somewhere.

JH: Let's see, then of course, there's the [Western Shoshone] Defense Project people. Julie Fischel, you know. And of course there's Larson Bill. He's with that Shoshone perspective as well. And of course, Carrie Dann. And so there's a number of people. I would...you might find it interesting interviewing Govinda too, who does techie stuff over here at the bus. He's been around these events for years and he's always done this sort ham—this sort of guerilla radio stuff and everything. He's travelled extensively. I think he'll be—you probably would—he'd be an interesting voice on this project. He's here so. I don't know if you know who I'm talking about.

SS: I do yeah.

JH: He's standing right over there. Yeah, he's over there so. He would be another person you might find, might get another different perspective. There's so many people really. [laugh] Yeah, it's too bad, it's too bad that Bill Rossi isn't still around 'cause he'd be great too. 'Cause he was one of the key people.

It seems like there are some other folks that are here. I'll think about it some more, if I come up with any other ideas. And I can email you a bunch of names too as you travel that aren't here. I would, if you're ever in the Reno area, that's where I am, I would interview Bob Fulkerson. He actually was a major—he got on—he was the Executive Director of Citizen Alert right after it came off of a...Citizen Alert was key in defeating the MX missile program that was going to be in eastern Nevada.²⁸ You may not know much about that but there was a whole program. Cold War stuff again about,

²⁸ The U.S. military wanted to install an intercontinental ballistic missile system (ICBM) in the Great Basin area of western Utah. For more information:
<http://historytogo.utah.gov/utah_chapters/utah_today/themxmssileproject.html>

you know, hiding these missiles and we were going to set up a set of silos in eastern Nevada. Citizen Alert was very key and that brought Citizen Alert to a very high profile by defeating the MX missile program. He came in right at that time, around 1985. And he's been around for years, a Nevada person, an organizer, activist, and very prominent. Actually he's a nationally known figure as well. He started an organization called Progressive Leadership Alliance of Nevada.²⁹ But he's been around these issues for a long time. And he...For Citizen Alert he was the one that got the Alliance for Nuclear Accountability, which is this network, to get—put Yucca Mountain on their list of issues.³⁰ 'Cause they were mostly focused on weapons stuff. So he was the one who got that on board. So if you're in Reno, I would definitely interview him for sure.

[Interruption.]

[Unidentified voice]: I'm just sitting here looking at John Hadder, and he's doing an interview with someone else here and I was always interested. Do you mind if I sat in here on it with you? Are you...

SS: We're almost finished actually. We just did the last question...

[Unidentified voice]: Well, I'll come back in a couple of minutes.

JH: Okay...

SS: Thanks.

²⁹ Progressive Leadership Alliance of Nevada's (PLAN) "mission is to build collective strategic action among coalition partners in order to deepen democracy and achieve greater social justice in Nevada." For more information, see PLAN's website: <http://planevada.org> (accessed January 30, 2009).

³⁰ Alliance for Nuclear Accountability (ANA) is "a national network of organizations working to address issues of nuclear weapons production and waste cleanup." For more information, see the ANA website: <http://www.ananuclear.org> (accessed January 30, 2009).

JH: We're just kind of wrapping up, yeah...I can send you some more names. But what you might do—what you can do is if I know where you're going, I can kind of tell you who's there.

SS: Oh that would be helpful.

JH: Or I can send you a list of different...but knowing the location would help trigger my memory as well so.

SS: Okay.

JH: But there's, like I say, there's a number of folks. That's right Joann would be a good person too. Joann. She lives in Baker, Nevada. Yeah, and she was on the Citizen Alert board for years. And she's a long time resident of Nevada. And she's now working on these water issues heavily. Joann Garrett [spelling??], last name's Garrett. She's another interesting person to interview as a long time Nevadan, very poised lady I think you'll find. And she's—she was sitting on the Citizen Alert board when we were working on all these issues. She would be another interesting one. I don't know. I can give you her contact information as well. She's not here. But there's so many people around. [laugh] She was going to be thinking of traveling. And you know, I mean, in terms of the nuclear, I mean if the project is nuclear waste siting, there's people across the country. I mean, there's so many people. I mean, which would be difficult to do as an interview in this style. I mean in a phone interview, I don't know if you are doing them that way as well.

SS: We'll see.

JH: It's different. You don't get a sense of the person the same way you do when you do a face-to-face, but there's people across the country, there's just so many. One thing you could do, which might be helpful in your process is you could send out an email to what

is called—the network I talked about has a list serve called the Bananas List. You could send your stuff out and so people know that you're doing this. And, you know, you might get some responses back, and say “well, let me know if you're interested...” and then find out where people are. So then if you do travel, you can say well this person emailed me. So you can kind of—if you're going, you can at least look them up when you're there. That might be one way. You can send it to me and I can put it on the list or I can email you the list serve and I think probably if you have a list serve email address it should go on. I don't think it's moderated to where...I don't think every message is moderated, you know what I mean? I don't think it's that strictly controlled. So, you can probably send it on yourself. I mean, you could get added to the list. You get a lot of emails. I don't know if you want all that.

SS: Yeah.

JH: It's always discussion about nuclear stuff. So you may or may not want that, want to be on the list. But that would be a good source because that's a network that's people across the nation, all kinds of stories, and everyone at some capacity has worked on nuclear issues on that list and you'll get a lot of...I mean up in Hanford, Washington, talk about siting. And they got that whole problem with waste up there leftover from the weapons stuff and that's a huge mess. Some of that stuff is slated for Yucca Mountain. You know Gerry Pollet with Heart of America Northwest.³¹ It's, and they're connected with a lot of Native voices around that area too.

³¹ The Heart of America Northwest's 'mission is to advance our region's quality of life through highly credible research, education, and participation of citizens in issues affecting the health, environment, and economy of the Northwest.... [They are a] grassroots organization working on the clean-up of the Hanford Nuclear Reservation, transportation of nuclear waste to the Northwest, and other hazardous waste issues.' For more information: <<http://www.hoanw.org/index.cfm>>

Malla [spelling???], who's on the Shundahai board would be good. He's not here though. He's up in Oregon. He would be another person. Would be great, worked with Corbin closely, you know, as well. So there's just all kinds of people. This could really, could get out of control. There's definitely a lot. But I think the Bananas List might be helpful to you because then you may be able to make some connections with people and then, like I said, if you're traveling, you know, could talk to them. You know Vanessa?

SS: Vanessa Pierce?

JH: Well, she's on ANA [Alliance for Nuclear Accountability] and she's on the Bananas List too. You know, I mean, you could connect that way. She could get you a lot of those what they call ANA ties, Alliance for Nuclear Accountability ties. You get a lot of those too.

SS: Well, thank you.

JH: She and Tony [Guzman] and they all, a lot of good voices that way too.

You know it's interesting, as I said it's a sleeper issue, but it's touched a lot of people and, you know, touched a lot of people. Partly because of the path through nuclear weapons but also part of, you know, just Yucca Mountain and all that kind of stuff so. So it's a good project. I wish you well with it. I'll be very eager to see the final results of it. I guess it'll be in the library there at the University [of Utah]. So...

SS: It will.

JH: I'll look forward to that.

SS: Alright thank you so much for your time.

JH: You bet. Absolutely.

END OF INTERVIEW