GWEN CLANCY'S

INTERVIEW WITH ABBY JOHNSON

AND

JOHN WALKER

EUREKA COUNTY, NEVADA

YUCCA MOUNTAIN LESSONS LEARNED PROJECT

held in

CARSON CITY, NEVADA

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MS. CLANCY: My name is Gwen Clancy. Today is January 12, 2011. We're in Carson City, Nevada. These videotaped interviews are part of the Eureka County, Nevada, Yucca Mountain Lessons Learned Project. Our interview today is with Abby Johnson and John Walker. I'll ask each of you to introduce yourself. Abby, let's start with you.

MS. JOHNSON: My name is Abby Johnson. I'm the Nuclear Waste Advisory for Eureka County, Nevada. I've been the Nuclear Waste Advisor for about 15 years, but I've been involved in the nuclear waste issue personally or

11 professionally since 1983.

I started with the nuclear waste issue when I was with Citizen Alert, Nevada Statewide Citizen Action Organization, and continued on because it interested me so much, and ended up working for Eureka County, representing their interests on the nuclear waste issue.

MS. CLANCY: Great. And, how about you, John? MR. WALKER: I'm John Walker. I'm the long-time webmaster for Yucca Mountain.Org, the website supported Eureka County's oversight efforts dealing with repository at Yucca Mountain, and the website has been ongoing for, I don't know, most of 15 years, I think.

23 MS. JOHNSON: Probably, yes.

24 MS. CLANCY: Great. Thank you.

25 So, Abby, why don't we start at the beginning.

1 When did you first become aware of the project?

MS. JOHNSON: I guess I first became aware of the nuclear waste repository project when I was working with Citizen Alert, because Citizen Alert had been founded because of the threat of nuclear waste in 1975, when the Department of Energy, or its predecessor, came to the Nevada Legislature looking for a place to put nuclear waste in Nevada.

8 But, then, I really became aware of it in 1983 when 9 the Department of Energy held guideline hearings in Salt Lake 10 City when they were going to establish guidelines for siting a nuclear waste repository. And, I went to those hearings in 11 12 Salt Lake City on behalf of Citizen Alert, and essentially 13 got hooked because it was such an interesting issue, and there were, even back then, so many flaws in the process that 14 it was very enticing to keep going, and it was clearly an 15 16 issue that was going to affect Nevada's future for decades. 17 MS. CLANCY: Okay. And, can you explain what was

18 going on in those early years in terms of the Federal 19 Government, what were they up to? Or what was happening? 20 What was the intent?

MS. JOHNSON: Well, the Federal Government, in 1980, had completed an Environmental Impact Statement on deep geologic storage, or disposal of nuclear waste. And, based on that foundation that this was the solution, to put the waste in a repository underground, that launched the

1 beginning of their search for a repository.

2 However, in 1982, the Nuclear Waste Policy Act was 3 passed by Congress, and that was a compromise which was 4 designed to bring equity to the process, and to make sure 5 that the burden of nuclear waste was assumed by both the people in eastern states as well as in the west. 6 The Nuclear 7 Waste Policy Act was passed in very, very late 1982, and it 8 has been amended over the years several times. The Nuclear 9 Waste Policy Act was meant to be an equitable solution to a 10 national problem of what to do with the waste, and it was meant to really solve a long-standing problem that had 11 12 started in the 1950's with the advent of nuclear power. But, 13 as we have learned in Nevada, it didn't really turn out like 14 that.

15 Another thing that was happening in 1980 at the 16 same time the Environmental Impact Statement was released on 17 what to do with nuclear waste, was Nevada was the target of 18 the Air Force and the Federal Government for the MX. The MX 19 was a project to put intercontinental ballistic missiles in 20 Nevada and Utah in a waste track basing mode. Some of the 21 missiles would be real and some of the missiles would be fake, and so it would take a lot of time for the Russians to 22 23 figure out which ones were which. They would be on a 24 railroad waste track in many of the valleys in rural Nevada. It was a tremendous threat to rural life, and it was also a 25

project that the Federal Government was trying to force on
 Nevada, and Nevada fought back.

3 MR. WALKER: Let me just interrupt and say how did 4 Nevada fight back on that, Abby? I mean, was there a lot of 5 continuity in fighting back from the citizens of Nevada in 6 that, were together on opposing MX?

7 MS. JOHNSON: Well, they were very united in their 8 opposition to MX, and that opposition grew from the late 9 Seventies to 1981 when the project was killed by President 10 Reagan. And, part of the opposition was an effort by the State of Nevada to do a comprehensive review of the 11 12 Environmental Impact Statement that was released. And, in 13 the course of that Environmental Impact Statement, the State 14 involved university professors and regular citizens and activist groups and environmental groups and the Cattlemen's 15 16 Association, and it was really a lot of coalition building 17 based on information of how poorly done the Environmental 18 Impact Statement had been, and what terrible impacts there would be for the State of Nevada. 19

20 MR. WALKER: Would you say that after the MX, after 21 it was decided not to deploy in Nevada, that that may have 22 politicized Nevadans in preparation for the Nuclear Waste 23 Policy Act and its implications?

24 MS. JOHNSON: I think that Nevadans were already 25 very, very sensitive to the Feds trying to put unwanted

1 projects in our State. And, so, when the Yucca Mountain 2 project came along, it was a very open wound, and it was very 3 sensitive.

MR. WALKER: So, Abby, there's this book here, "The Nuclear Waste Primer," by the League of Women Voters, it seems to me that a lot of Nevadans really got involved with the Federal Government and with these major projects in the early 1980's.

9 MS. JOHNSON: They sure did. "The Nuclear Waste 10 Primer" was a great tool that the League of Women Voters used when they were helping the public to understand more about 11 12 the nuclear waste issue. And, it's just really basic 13 information, but there's so much, it's such a complex issue it really covered all the bases. I was involved with the 14 League in the early Eighties, and I'm still a member, and the 15 16 League became more involved in the nuclear waste issue in the 17 1980's trying to, as they supported the Nuclear Waste Policy 18 Act, and then as they saw the agreement of the Act fall 19 apart, the League was also involved in trying to oppose the 20 amendments of 1987, which is now, of course, the "Screw 21 Nevada" bill.

22 MR. WALKER: That's when the Act really did fall 23 apart?

24 MS. JOHNSON: It did.

25 MR. WALKER: Completely.

1 MS. JOHNSON: Yes.

2 MR. WALKER: And, I think at that time, you know, I 3 was just a Nevadan, and at that time I think it polarized 4 Nevadans against the Department of Energy and the Yucca 5 Mountain project, because the Act really did single Nevada 6 out only as the place to put all the nuclear waste in the 7 country.

8 MS. JOHNSON: Well, Jim Day, who is a cartoonist in 9 Las Vegas, did a whole book on it called, "Screw Nevada," and 10 of course it sounds like it's a very crude term, but it was 11 coined by Senator Richard Bryan, and it is a crude term 12 because it was raw politics and power overcoming the 13 objections of a small in numbers, large in area state. And, Jim has a cartoon in here that pretty much depicts what was 14 going on with the "Screw Nevada" bill, and at that point, I 15 16 think there were many people who previously had felt that we 17 had to give the Federal Government a chance, and then at that 18 point, the gloves were off and the fight was on between 19 Nevada and the Department of Energy and the Federal 20 Government.

21 MR. WALKER: These were strange times for Nevada, 22 actually. You know, with the "Screw Nevada" bill, you know, 23 we also had the "down winder" problem in Nevada, and I think 24 maybe some of those problems might continue to this day, at 25 least in the soil, and "down winders" happened because of

nuclear testing. And, you know, we had the "Screw Nevada" 1 2 bill, the Government wanted to put all of the nuclear waste 3 at a site, you know, on the Nevada Test Site, and at the 4 Nevada Test Site, we had detonated hundreds, even thousands 5 of nuclear weapons, and, you know, that created all kinds of contamination and fear, and, so, the public saw that fear and 6 that contamination, and then we had the "Screw Nevada" bill 7 8 which just kind of added to the problem. Wouldn't you say?

9 MS. JOHNSON: I would say. And, I have kept for a 10 long time this very telling piece of art, which is also sort 11 of a cartoon of a Twinkie--

12 MR. WALKER: A Twinkie?

MS. JOHNSON: A Twinkie on the Nevada Test Site, and a Twinkie at a nuclear repository, done by Nancy Peppin (phonetic) in Reno, and it just is an indication of how people were thinking about nuclear waste and nuclear testing, and making the connections between the two.

18 MR. WALKER: The connections were significant.
19 MS. JOHNSON: It said, "Pick it up."

20 MR. WALKER: Twinkies, that's quite interesting, 21 Abby. I think you should read the captions on this, because 22 I think they really do tell the story.

MS. JOHNSON: Well, we've got the Twinkie, we've got the Twinkie that sat on the Nevada Test Site from 1954 to 1987, and then we have the Twinkie after 10,000 years in a

1 nuclear repository, no change.

All kidding aside, Twinkies have a bad reputation of lasting forever, and that's the same as nuclear waste. The half life of nuclear waste is so long that the 10,000 years turned out to be legally inappropriate, and the courts found that the appropriate time limit to keep nuclear waste from the environment is a million years.

8 MR. WALKER: It's a million years, that's correct. 9 And, that was a battle I think the State of Nevada fought 10 for, and to get a standard that was realistic, and I think it 11 took a number of years for EPA to arrive at that million year 12 standard. I think there were lawsuits involved.

13 MS. JOHNSON: That's right.

14 MR. WALKER: In actually ending with that standard. But, back to the reason people were afraid, and are 15 16 afraid, of things nuclear and nuclear waste, can be demonstrated here where we had a test shot at the Nevada Test 17 18 Site, and this was not an above ground test shot, this was a 19 test shot that was shot in the ground and leaked 20 radioactivity into the atmosphere, and blew down wind, and 21 that's we use the term "down winders."

MS. JOHNSON: And, then, of course, this isn't just any newspaper. This is the Eureka Sentinel. Eureka County is a down wind county because when they were doing the tests and the wind was blowing towards Las Vegas, they didn't do

the tests. When the wind was blowing to the north or to the east, they did the tests, and there was down wind effects in Eureka County. And, so, this is a 2007 newspaper article, and it's doing outreach to find people who lived in Eureka County during certain periods when there was testing, because they might be eligible for a compensation program.

7 MR. WALKER: Abby, what we were just talking about 8 can be demonstrated on a map. I think it's really important. 9 And, I'm just going to block out the Nevada Test Site. This 10 is where they did all of the testing in Nevada. And, I'm just going to block out Eureka County here and kind of show 11 12 you, you know, and this is where they did all the atomic 13 testing here, right down here at the Nevada Test Site. Las 14 Vegas is right below this area. And, when they did the 15 atmospheric testing and the underground testing, there was 16 radiation that leaked from the underground testing, as well 17 as the atmospheric testing that crossed all of Nevada, into 18 Utah, and affected, of course, Eureka County up here. And, 19 so, this entire area of the state, and a number of counties 20 in Utah, the people that live there are considered "down 21 winders." I think that's the term.

22 MS. JOHNSON: Yes. So, it was airborne? 23 MR. WALKER: It was airborne. The atmospheric 24 tests that were done, and I think they did 100 atmospheric 25 tests, that of course was airborne. But, all the underground

tests they did, and they did almost a thousand underground 1 2 tests at the Nevada Test Site, two-thirds of those in the 3 groundwater, by the way, but a lot of those vented and continued to leak, and continue to leak to this day small 4 5 amounts of radiation. So, you know, people have concerns about Nevada, and, thus, Yucca Mountain because, of course, 6 spent fuel has the highest amount of radiation of any 7 8 substance in the universe section.

9 You know, Abby, the original fear that people had 10 with radiation in the environment was from all the atomic testing, as we've talked about, particularly the atmospheric 11 12 testing, you know, into the atmosphere. It blew around. It 13 blew down on people's cars, their houses, it got into the 14 milk, you know, that kind of thing. But, with the repository program, you know, the Department of Energy, their plan is to 15 16 bury all of the waste in Nevada, and it wouldn't get out. But, that's really not the case, is it? 17

MS. JOHNSON: No, it's not. Basically, when I've explained the project to people, I've explained to people, especially back east who aren't familiar with it, it's designed to leak, and it's just a question of when it will leak, not if it will leak. And, the Department of Energy's own graphic, this one is in 1998, shows exactly how that's going to happen.

25 So, what we have is a human receptor, a farmer in

Amargosa Valley, and he's got several ways to get dosed. He can eat the radiation, like from the soil or from his hands, he can drink the water, and he can also eat the farm animals who have already been exposed and get another dose of radiation that way.

6 So, when you look at this graph and you see that 7 actual people are going to get actual harmful exposures from 8 a supposedly safe project, it's kind of a wakeup call.

9 MR. WALKER: It really is, and I think what people 10 have to remember is that the radiation will live on for 11 10,000 years, a million years, and will decay and get into 12 the biosphere. And, this is the risk that Nevadans I think 13 have seen and believe it's going to happen if all this waste 14 is shipped to Nevada and buried there.

15 MS. JOHNSON: Yeah.

MS. CLANCY: Okay, and can we just clarify something. What is the acronym of the TSPA? This is from the Federal Government.

MS. JOHNSON: This is it. Do you want me to say on camera what this means?

21 MS. CLANCY: Uh-huh.

MS. JOHNSON: Okay, this is the biosphere processes in the Total System Performance Assessment in the Viability Assessment. And, all of those acronyms basically mean the Total System Performance Assessment is like a giant database

of all the factors of Yucca Mountain. And, the Viability
 Assessment was basically one of the attempts to run the
 database and to see what the impacts of the project would be.

MS. CLANCY: The Federal Government was not pretending that it--they were assuming that there would be some effects, judging by this graph.

7 MS. JOHNSON: The Federal Government knew that 8 there would be impacts if the waste got out of the mountain 9 and out of the containers, yes.

MR. WALKER: Abby, we were talking about the total systems life cycle, you know, and how the Department of Energy really modeled radiation releases, you know, at the Test Site and at Yucca Mountain particularly. And, that assumes that, you know, Nevada was expendable, it was a place where they could just throw it away. What do you know about that?

17 MS. JOHNSON: Well, I came from the East in 1980, 18 and I didn't know much about Nevada. But, I quickly learned 19 about the MX, and shortly after, learned about the nuclear 20 repository project, and learned about nuclear weapons 21 testing. When I was with Citizen Alert, I was, it was after I had gone to that DOE hearing in Salt Lake City, I was 22 23 flying to Denver, so I strapped myself in my seat in the 24 airplane, and I had, what, an hour and a half to get to Denver, two hours, and I started to work on a bumper sticker 25

for Citizen Alert that would convey what it was that 1 2 basically was Citizen Alert's message at the time about 3 Nevada and about this perception that Nevada was a wasteland. And, Nevada is not a wasteland. That ended up being the 4 5 slogan that Citizen Alert used. I designed it, but it was Bob Folkerson with Citizen Alert who colorized it and 6 7 actually put it on bumpers across the state and made it the 8 slogan that it is.

9 MR. WALKER: That's really an interesting story. 10 It is also interesting that, you know, Nevada is really not a 11 wasteland. Few people know that it is the most mountainous 12 state, you know, in the Great Basin. It's a beautiful state 13 and that's an interesting story.

MS. JOHNSON: I was, when I first came to Nevada, I was--I just fell in love with rural Nevada. I was struck by the wide open spaces, the basin and range topography, the fact that other than the road I was on, it looked the same as it had 200 years ago, and that was part of what started my, I guess you'd call it a career of activism and involvement on environmental issues and the nuclear issues.

So, when Eureka County asked me to start helping them on the nuclear waste issue, it was I thought a perfect match, because I already loved rural Nevada, and I already loved the basin and range topography, the sagebrush, and the rural communities on Highway 50. So, I felt really lucky to

1 be able to work for Eureka County on an issue I knew 2 something about in a place that I really liked.

3 So, behind me is a painting done by Gary Link (phonetic), who is a modern day impressionist artist in 4 5 Eureka. He also teaches at the high school. And, the painting is of the old Ruby Hill Mine, and it shows both the 6 7 beauty of the Eureka area, and the historic nature of Eureka, 8 which is an old time mining town ironically known as "Pittsburgh of the West" from its early days for its 9 10 smelters.

MR. WALKER: So, Abby, after the Nuclear Waste 11 12 Policy Act, Amendments Act of 1987 was passed by Congress, 13 singling out Nevada and Yucca Mountain as the only site to put all the spent fuel and high-level waste in the country, 14 you know, that had a big impact on Nevada, and all that waste 15 16 had to, you know, at least from a planning perspective, had 17 to get here somehow, so what did happen? I mean, how was DOE 18 going to get all the waste to Nevada? I mean, what was the 19 implications of that?

MS. JOHNSON: Well, it meant for Nevada, that we were going to be at the end of a very large funnel, and that all the waste, whether it came by truck or by train, would all end up funneling into Nevada. But, at the same time, the Department of Energy was much more interested in studying Yucca Mountain to see if it was a suitable site than they

were in dealing with transportation issues, because if the real information about transportation had been available to people all across the country on the waste routes, it was likely that people would be pretty upset to hear that nuclear waste was going through their town or front yard, or whatever. And, so, the Department of Energy always put the site-specific issues as a priority over transportation.

8 Now, personally, I think that a chain is only as 9 strong as its weakest link, and if transportation is the weak 10 link, you have a weak project. But, that was a deliberate 11 strategy, I think, on the part of the Department of Energy to 12 not talk about transportation, and to minimize transportation 13 issues.

14 MR. WALKER: Well, tell me, how did they plan to get all the waste actually to Nevada? Were they going to put 15 16 it on trucks, on rails, I mean how was this going to happen? 17 MS. JOHNSON: Well, they essentially started out by 18 hedging their bets. They looked at both truck and rail. 19 They looked at the nuclear power plants, and some of the 20 nuclear power plants are on rail lines, or on rail spurs, and 21 some of them aren't. So, they theorized that a certain 22 percentage of the waste would have to go by truck, even if 23 you had a rail line that went all the way to the repository. 24 And, of course, one of the weak things about the Yucca Mountain repository as a choice is that there is no rail 25

1 transportation to the repository, so they would have to build 2 a rail spur from a main rail line to Yucca Mountain.

3 MR. WALKER: Well, Nevada is not a small place, 4 110,000 square miles, I think it's the seventh largest state. 5 It has all those mountains, you know, it's the most 6 mountainous state, as we talked about. What does it mean to 7 build, I mean, how long was this rail line going to be and 8 what was it going to cost?

9 MS. JOHNSON: Well, it depends on which rail line 10 you looked at. Are you talking about the rail spur?

11 MR. WALKER: The rail spur.

12 MS. JOHNSON: Yes. Well, this is a map from the 13 Draft Environmental Impact Statement in 1999, and this shows the various routes that were being considered. The one that 14 15 Eureka County was most concerned about was known as the 16 Carlin Rail Corridor, which would come off of the Union 17 Pacific Rail Line at the town of Beowawe, which is in Eureka 18 County, and go southwest through Crescent Valley, into Lander 19 County, and down crossing Highway 50 into Big Smokey Valley, 20 or Monitor Valley, and then proceed on through Tonopah and on 21 the west side of the whole Test Site complex to Yucca 22 Mountain.

23 MR. WALKER: And, that route would traverse 24 probably 50 or 60 percent of the state from north to south, 25 wouldn't it?

MS. JOHNSON: Yes. The advantage of the route, the 1 2 Department of Energy asserted, is that because it was a 3 north/south route, and because most of Nevada's mountain ranges are north/south, that it could snake between the 4 5 mountain ranges and not have so many passes to go over, unlike the route that was ultimately selected, the Caliente 6 7 route, which had eight mountain passes to traverse in the 8 long circuitous route from Caliente around the Test Site, not through it, but around it, to Tonopah and then back down to 9 10 Yucca Mountain. MR. WALKER: Did DOE, the Department of Energy, did 11 12 they ever come up with a price of any of those rail lines, 13 the costs involved? 14 MS. JOHNSON: Yes, they did. And, that escapes me 15 right now. 16 MR. WALKER: I'm sure it was in the millions. 17 MS. JOHNSON: Oh, yes, it was in the millions. 18 Those figures used to be in my head. MR. WALKER: I think it was close to a billion 19 20 dollars, is my recollection. 21 MS. JOHNSON: Oh, yes. \$800 million for some, and a billion for others. The longer ones were a billion, I 22 23 think, that would be Caliente and Carlin, which were the two 24 longest routes. 25 MR. WALKER: Yes.

MS. JOHNSON: The other routes, there was a couple in Clark County, but between the time that the route was proposed and the time they started to get serious about it, Clark County's exponential growth had precluded those routes being practical any longer because they basically were in areas that had now become suburbs of Las Vegas.

7 MR. WALKER: The urban area, the Las Vegas Valley,8 I would think.

MS. JOHNSON: Yes.

9

10 MR. WALKER: So, that was the Nevada case with rail lines. What about the national case? What would happen, you 11 12 know, given that the nuclear power plants, and I think a lot 13 of people don't realize that there are very few nuclear power 14 plants in the west, so most of the waste had to be 15 transferred or transported from the east to the west, to 16 Yucca Mountain, if Yucca Mountain were to go forward, and 17 there's just a few reactor sites in the west. There's a 18 couple in California, a couple in Arizona, there's a defunct 19 site in Oregon, and I think one up in Washington. But, the 20 rest of the sites which number I think above 70 or 80, are 21 all on the East Coast, or in the Midwest, or at least east of 22 Nevada.

23 MS. JOHNSON: Yes.

24 MR. WALKER: So, what did that mean from a 25 transportation perspective?

MS. JOHNSON: Well, it meant that there were going 1 2 to be many large cities affected by rail transportation, 3 which incidentally is safer than truck transportation for a 4 number of reasons, and it meant that there was going to be a 5 lot of safety issues related to these big cities. With a 6 truck, you can drive around something, but a rail line is 7 where a rail line is. So, the mechanics and planning for 8 rail transportation is different, and the rail lines, the 9 railroad companies get to call the shots about routing much 10 more than with truck.

11 MS. CLANCY: Okay.

12 MR. WALKER: We're talking about waste 13 transportation. I have a couple of maps here that I think 14 are pretty useful. One is a map showing all of the routes and sites that the nuclear waste would have to be transported 15 16 by truck from all the power plants, and most of them, as you 17 can see on the map, on the East Coast, and they all have to 18 come to Nevada, which of course is here on the West Coast, so 19 all of that waste would have to go by truck from all of those 20 sites, and this map just depicts that.

I have a similar map I'm going to show you that deals with the rail line sites, because if I'm correct, I think that all of the waste wouldn't be shipped by one or the other, there would be a shared shipping campaign. Some would go by rail, if Yucca Mountain were to happen. Some would go

by truck. And, this is a map showing, again, all of the sites in the Eastern part of the United States that would have to ship to Nevada. And, as I mentioned earlier, there's just a few reactors on the West Coast. So, that's kind of the issue.

Now, another point I wanted to ask you, Abby, ishow long would this shipping campaign go?

8 MS. JOHNSON: Well, it would be approximately 50 9 years, is my understanding. And, this is unprecedented. We 10 found that the nuclear power industry would say this is routine. They do shipping all the time. Well, they do. 11 12 They move fuel rods from one plant to the other plant 20 13 miles apart, 50 miles apart. But, to move that much nuclear waste, spent nuclear fuel, as they call it, from those plants 14 3000 miles, or 2500 miles, or 2000 miles, not just once, but 15 16 consistently over a 50 year period is an unprecedented 17 shipping campaign that we have never experienced in this 18 country.

MR. WALKER: And, I think it's important to point out that the nuclear power industry in the country produces about 20 percent of the power, and that industry is not going away, at least in the foreseeable future, so if Yucca Mountain were to happen, the reactors would continue to burn fresh fuel, create spent fuel, and that spent fuel would continually have to be shipped. So, this fuel would be

1 shipped, you know, for 50 years.

MS. JOHNSON: Yes. Actually, there is going to be more spent fuel produced than the current legal capacity of Yucca Mountain to take that fuel, so a second repository would be needed, or an expansion of Yucca Mountain, if the repository ever came to be.

7 MR. WALKER: And, of course, that would require 8 legislation by Congress.

9 MS. JOHNSON: Yes.

25

MS. CLANCY: So, you've been talking about the state, you know, and the Federal Government. So, how did Eureka County itself come on, how did it get onto the radar screen of Eureka County?

14 MS. JOHNSON: Well, what happened was in the provisions of the Nuclear Waste Policy Act, there are 15 16 provisions for "affected units of local government." And, 17 the Department of Energy had interpreted that as being Clark 18 County, Lincoln County and Nye County, where Yucca Mountain 19 is, that's known as the situs county. And, they were giving 20 some funding to those three counties for oversight, which is 21 what is part of Section 116 of the Nuclear Waste Policy Act. Two other counties who were very--who wanted to be involved, 22 23 Esmeralda County, Nevada and Inyo County, California sued to be recognized as affected units of local government. 24

And, actually they won the lawsuit, and as a

result, the Department of Energy interpreted the court ruling so that any county that is contiguous to Nye County, as well as Nye County, was considered to be affected. And, Eureka County is contiguous to Nye County. And, so, we were designated as affected, as an affected unit of local government in, I believe it was, 1992, or '91.

7 MR. WALKER: Yeah, I'm not sure, but you actually, 8 Eureka County was actually affected, even though there were 9 some reasons legally that Eureka County became designated 10 that way, there was, of course, the rail corridor that was 11 proposed through Eureka County. That might even have 12 affected the unit of local government.

MS. JOHNSON: Yes. Eureka County's issues have been primarily related to transportation, some air quality and some just general concerns being a county in the state that is subject to the project.

So, when we became officially affected, but, John,
I want to point out that there's other counties in Nevada
that are also affected by transportation.

20 MR. WALKER: That's true.

21 MS. JOHNSON: That were not designated as affected 22 under Section 116 because they are not contiguous to Nye 23 County, Elko County, for example.

After Eureka County was designated as affected, then the Commissioners decided to participate, and that's

1 when I came on board as a consultant to advise the

2 Commissioners, to represent them, to be their watch dog, and 3 to basically understand the issue and to inform the public 4 what was going on. And, when I informed the public, I used--5 we started out just with a news letter.

6 MR. WALKER: So, Abby, after the "Screw Nevada" 7 bill and it was obvious that Nevada was, you know, designated 8 as the only spot for disposal of nuclear waste, spent fuel, 9 Eureka County was going to be affected in some way, what was 10 your job in trying to decipher that and to help the County 11 Commission and the people of Eureka County understand what 12 the likely impacts might be?

13 MS. JOHNSON: Well, we decided to use a newsletter 14 as the primary way to communicate with the public. And, I have the newsletter from the fall of 1993, which in fact 15 16 shows the original route of the proposed Carlin corridor. Originally, the Department of Energy was thinking that the 17 18 corridor would come off of the Carlin spur, it would be a 19 spur off, right near Carlin, the town of Carlin, City of 20 Carlin, and would go through Pine Valley, and then down 21 through Eureka County and over the way I've previously 22 described. And, so, that was the understanding that we had 23 in 1993, and through the first half of the 1990's. And, we 24 were operating on that assumption, that that was the proposed 25 route.

1 And, that was very controversial because Pine 2 Valley is a very, very fertile agriculture area, and very 3 fragile, because it's a very narrow valley, and so there was 4 a lot of concerns about that.

5 MR. WALKER: Did the citizens that lived out there, 6 how did they get the newsletter? Were they mailed the 7 newsletter, or how did that happen?

8 MS. JOHNSON: Well, the newsletter was mailed to 9 all box holders, as we say, means anybody who gets mail in 10 Eureka County, so everybody, if they got mail, they got the 11 newsletter. And, then, of course, later when we started the 12 website, we also posted the newsletter on the website, and I 13 believe that the full array of newsletters is available on 14 the website from the beginning.

15 MR. WALKER: That is correct, they are.

16 MS. JOHNSON: Good.

MS. CLANCY: So, Abby, there you were as the kind of a public information kind of person, Eureka County, right? And, you were--what was the sense then from people in the county? Did they care? Did they feel like it was an issue really coming home? What was the climate like about this topic in Eureka County at that time?

MS. JOHNSON: Well, in the early Nineties when I first started working in Eureka County, mostly people needed information, and they were curious about the project, and

they weren't sure what the impacts would be. When they learned about the rail line, there was more concern because of the agriculture impacts in Pine Valley, and just a concern about understanding the project and trying to understand where the Department of Energy was coming from and what their plans were.

7 Then, later when we learned, surprisingly, that the 8 route had been moved over to Beowawe from Pine Valley, then 9 the residents of Crescent Valley especially became very upset 10 when they learned that the route might go through Crescent 11 Valley. And, at that point, there was a lot more controversy 12 and discussion in the county about the project.

MR. WALKER: Well, Abby, being the person in Eureka County that was really trying to help the Commission and the citizens understand the nature of the project, what did the people think? I mean, Yucca Mountain was 300 miles at least from, you know, a lot of parts of Eureka County, how did they see themselves being affected in any way?

MS. JOHNSON: Well, at first, it was just a kind of a general program, just because we had the money and we knew that there were going to be general activities to participate in, and information to gather and disseminate. But, as there became more clarity to the DOE's plans, especially the transportation plans, and the rail lines were discussed more, as well as the highway corridors, it became clear that

citizens in Eureka County could be directly affected by the
 project, especially when they moved the proposed rail line
 from Pine Valley to Beowawe and down through Crescent Valley.

At that point, people in Crescent Valley became 4 5 very concerned about the project. Many people moved to Crescent Valley to essentially get away from the Federal 6 7 Government, and here they were in Crescent Valley with their 8 piece of property, and the thought of having a rail line 9 going down through the middle of Crescent Valley was 10 extremely offensive to them, and they were very concerned and very upset. 11

12 When the Department of Energy held their hearing in 13 Crescent Valley on the Draft Environmental Impact Statement in December of 1999, the Elko Free Press covered the hearing, 14 15 and we had a standing room only crowd. For example, we heard 16 from Nancy Lowden (phonetic), who is a resident of Crescent 17 Valley, "If this rail line goes through Crescent Valley, it 18 will put the people here in a no-win situation. If we stay, 19 we get nuked. If we leave, we lose our property," said Nancy 20 Lowden who owns the Crescent Valley Hot Springs.

Another person that participated was Jamie Gruening (phonetic). She came with a parcel map showing how close the rail line would come to her private land. And, she was extremely concerned, how, how much and when would I be compensated, and she had done the math. I can expect 12,227

1 personal low-level radiologic exposures over 24 years.

2 MR. WALKER: Just a side point on that, Abby. I 3 wonder if people really know that if you stood next to, or 4 lived next to a rail line where spent fuel was traveling, you 5 know, on an intermittent basis, that you actually receive a 6 small radiation dose?

MS. JOHNSON: I'm sure most people don't know that. 7 8 But, the people to be most worried about that would be the 9 truck drivers, the people on the railroad, any kind of 10 inspector, any kind of toll booth taker, anybody like that who would have constant exposure like that. I often wondered 11 12 about the Caliente rail depot because that is so close to the 13 rail line, and it's also county offices and city offices, 14 wondered what the impacts would be there.

MR. WALKER: Same with the trucking nuclear waste. There are spots in Nevada, particularly in Gold Field, I think, that if they truck nuclear waste through Gold Field, there's a turn there, that if you worked on that corner, you would have your dose on a regular basis.

20 MS. JOHNSON: That's right.

21 Well, let me just talk for a minute about some of 22 the materials we used for outreach. We, for example, put out 23 a special edition of our newsletter to focus on the EIS to 24 prepare people for reviewing the EIS and the hearing that I 25 spoke about that occurred in December of 1999.

We also developed a comment form so that people could just check off some boxes and write some comments, fold this up, and send it into the Department of Energy to make it easier for people to participate. Well, on the back side, it's just the address and where it was being sent.

6 So, these materials proved to be very effective in 7 reaching people and communicating the concerns that the 8 county had about the project.

9 MR. WALKER: Let me just make a point that those 10 materials all had to be sent to the Department of Energy, and 11 they really by law had to respond in some form or fashion. 12 Now, of course, they grouped a lot of the comments and gave 13 some answers that were just kind of generic, but it still 14 forced them into realizing what some of the local concerns 15 were.

16 MS. JOHNSON: That's true. As it turned out, Crescent Valley is an area where many small parcels of land 17 18 were sold on a speculative basis. So, people throughout the 19 country own very tiny parcels of land in Crescent Valley. Ιt 20 turned out the Department of Energy really hadn't done a 21 thorough analysis of how many individual private landowners could be affected by the rail line, and ultimately, that was 22 23 one of the reasons why they backed off from choosing the 24 Carlin rail corridor, was because of the many land use 25 conflicts.

MS. CLANCY: What sort of response were you getting to the newsletter and the comment form? Were people getting concerned there in Eureka County? Were they worried about--I mean, obviously, from what you read, they were kind of concerned about radiation. But, was that most of the people, or, you know, what was the public sentiment at that time?

7 The public sentiment in Crescent MS. JOHNSON: 8 Valley was intense. In Eureka, it was less so during the EIS 9 review process. And, basically, as people got this kind of 10 information and then started to do their homework, they 11 learned more and more, as I read from the newsletter, and 12 they actually studied up on nuclear waste, on transportation, 13 on Yucca Mountain, and ultimately used a lot of that information very effectively in their comments at the 14 15 hearing.

16 MS. CLANCY: I'll ask you, too, what was the sense then of like did it feel inevitable, did people think, well, 17 18 you know, the Federal Government is pretty strong, is it 19 going to come regardless of what we say? Is it worth filling 20 out the forms? I mean, what was the sense of, I quess, the 21 powerless, how empowered did people feel in Eureka County? 22 MS. JOHNSON: The inevitability issue has been one 23 of the most challenging parts of the Yucca Mountain issue over the years. A little microchasm of that occurred in 24 Eureka County where at first, people felt like it didn't 25

matter and they were going to do it anyway, and there was 1 2 nothing they could do. But, then, as they got more 3 information, and as they understood more about the project and understood the weaknesses of the project, they became 4 5 more empowered, to the point where by the time we got to the EIS hearing in December of 1999, the standing room only crowd 6 with two sessions of testimony really spoke of all of their 7 8 concerns in a way that made it clear that they didn't feel 9 that the project was inevitable.

10 Part of Eureka County's outreach for its Public Information Office was developing a website. We had the good 11 12 luck of scoring the following web address, yuccamountain.org. 13 It was the brainstorm of the Great Basin Internet Service technician who was working with me to set up the site, and he 14 15 made the suggestion, and it was just perfect, and it enabled 16 us to have a great deal of outreach for the information 17 that's on our website. And, our website has served as a 18 resource for people in the county who want to learn more 19 about the project, and also research the project through out 20 extensive archives.

21 Okay, yeah, go ahead, you can tell us about the 22 website.

23 MR. WALKER: Yes, this is yuccamountain.org. This 24 is the home page of the website. But, to give you an idea of 25 the depth of information on this website, you know, it has a

section on licensing, which was a big part of the repository
 program. Of course, the repository would have to be licensed
 by the Nuclear Regulatory Commission, so there's lots of
 information about the licensing process.

5 And, then, of course, the website serves as a 6 vehicle to present information to people just generally about Yucca Mountain, and we have a section that includes all the 7 8 newsletters that were developed by the consultants and other 9 folks for Eureka County, and they are all presented here. Of 10 course, Abby did a lot of these newsletters herself. There's an entire section on transportation. Again, this is a major 11 12 facet of the project. And, so, there's lots of information 13 about transportation.

And, then, of course, because Yucca Mountain was a contentious Federal proposal in Nevada, there was lots of litigation involved. So, we dedicated a section of the site to litigation issues, lots of lawsuits involved.

And, of course, because the investigation at Yucca Mountain involved a lot of scientific activity, there's a lot of publications, critical publications that we put on the website. And, there are other things like photos and maps, there's a calendar, there's timelines, there's frequently asked questions.

And, one of the nice features of the website is a section called "What's New at Yucca Mountain," and one of the

1 things that we tried to do, and I think we've been

2 successful, is cataloging all of the press that's been done 3 on Yucca Mountain. And, there's a lot of press that goes 4 back, you know, 15 years and we kept active press clips, or a 5 page that links all the articles that are written about the 6 subject, you know, for people. And, so, this was kind of a 7 one stop place where you could come and learn, you know, all 8 the facets about Yucca Mountain, and stay involved with the 9 project. So, that is yuccamountain.org.

10 MS. CLANCY: So, during all that time that you were putting out a newsletter, and you were--fliers, all kinds of 11 12 things, did it seem as if this was a project that was going 13 to resolve itself in a certain way, or was it going to go on for a long time, or a short time, what was the sense you had? 14 MS. JOHNSON: There was a sense that it would never 15 16 end, that this would never be over. It just seemed as though 17 as the deadline slipped and as the Department of Energy made a promise and then extended the deadline, and it went on and 18 19 on and on, it just seemed like it would never end. It also 20 became a multi-generational project because what started 21 either in 1982 or 1975 or 1987, pick your date, you know, 22 we're a generation, or a generation and a half, or two

23 generations out from that now. So, it made it challenging 24 for doing public information because it's not like you 25 educate the public once and you're done. You have new

1 publics, and you have to keep doing it. You can't assume 2 that because we covered this before, we're done. It's a 3 constant evolutionary process.

So, the second part of your question, how would it 4 5 end, for a long time, I felt that the only way that it could end would be for a President to end it, just the way Reagan 6 7 did with MX, where he just stopped the project. It turns out 8 that President Obama has done something similar to that with 9 the Yucca Mountain project, which is essentially why we're 10 doing the Lessons Learned Project in the first place. But, as you know, the project is not over. It still is being 11 12 considered in the Nuclear Regulatory Commission licensing and 13 hearing process. It's being appealed in the courts. It's kind of like being on death row. The prisoner is condemned 14 to death, but may not actually die due to a series of 15 16 circumstances.

17 So, that's where we're at now. We've had a Blue 18 Ribbon Commission that the President commissioned, or 19 established to look at what should be done with nuclear waste 20 without considering Yucca Mountain. And, they have a 21 terribly difficult job to look at all of the options, and to 22 try to come up with some recommendations, and perhaps some 23 changes in the law.

24 One change that I think would be a positive is 25 instead of having the system the way it is, where Congress

allocates the money and the federal agency carries out the 1 2 alleged will of Congress to do the project, going to some 3 sort of more quasi public/private model like the Tennessee Valley Authority, where you have a governmental agency that's 4 5 run more like a business, where the funding isn't dependent directly on Congress, and where decisions can be made without 6 7 the legislative process being directly involved. That may 8 streamline development of a repository.

9 My belief is that many of the problems in getting 10 the Yucca Mountain project going and underway had to do with management, that the culture of the Department of Energy and 11 12 the management of the project were not ideal for siting a 13 repository. The Department of Energy does not have the 14 culture that the nuclear power industry has, or the nuclear power plants have, and so it was an extremely bureaucratic 15 16 process.

17 If the project were managed the way nuclear power 18 plants are managed, and admittedly, they are not perfect, but 19 I think that you would have had a more effective and direct 20 approach to getting the job done.

One of the things that the Department of Energy did in pursuing the project was what I called "getting to yes," which is a term that was coined by Richard Ure (phonetic) in a book about negotiations. But, what it means is in a negotiation you're trying to get to yes, and so you kind of

1 figure out how to keep getting there, no matter what. Well, 2 when you're doing science and when you're supposed to be 3 comparing things and making sure something is safe, getting 4 to yes isn't always the right approach.

And, so, in my observation and experience with the Yucca Mountain project, when scientific information was revealed that was detrimental to the success of the project, then it became a management matter. It would be sent over to management and to public relations to spin something so that it would end up being a positive, when in fact it should have been treated as a negative.

12 And, so, a lot of what's wrong with Yucca Mountain 13 is the lack of acknowledgement of its weaknesses. If those had been acknowledged all the way along, instead of hidden, I 14 15 think the project would have been managed better and at some 16 point, somebody would have said look, this is just nuts to 17 say that this repository is going to be safe, when it's going 18 to leak and the radiation is going to get into the water, and 19 the site is totally fractured, and there's earthquakes, 36 20 earthquake faults, and there's young volcanoes. Does that 21 sound like a safe site?

I also contend that you take that set of characteristics, and if you had said that it was in Vermont or Wisconsin or New Hampshire, that people would have said well, of course we can't do that. That's not safe. But,

because it was Nevada, Nevada is not a wasteland, people think that Nevada is a wasteland, and that it doesn't matter what you do to Nevada, we did not get, we as a state did not get the respect that we deserved. And, those are legitimate scientific concerns, and for decades Nevada's concerns were belittled and ignored because they do in fact think that we're a second class state.

1	TRANSCRIBER'S CERTIFICATE
2	
3	I hereby certify that the foregoing has been
4	transcribed by me to the best of my ability and constitutes a
5	true and accurate transcript of the mechanically recorded
6	proceedings in this matter.
7	Dated at Aurora, Colorado, this 19 <sup>th</sup> day of April,
8	2011.
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11	
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13	
14	s/ Mary Chevalier
15	Mary Chevalier
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18	Aurora, Colorado 80013
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