GWEN CLANCY'S

INTERVIEW WITH ABBY JOHNSON

AND

JOHN WALKER

EUREKA COUNTY, NEVADA
YUCCA MOUNTAIN LESSONS LEARNED PROJECT

held in

CARSON CITY, NEVADA

January 12, 2011

- 1 MS. CLANCY: My name is Gwen Clancy. Today is
- 2 January 12, 2011. We're in Carson City, Nevada. These
- 3 videotaped interviews are part of the Eureka County, Nevada,
- 4 Yucca Mountain Lessons Learned Project. Our interview today
- 5 is with Abby Johnson and John Walker. I'll ask each of you
- 6 to introduce yourself. Abby, let's start with you.
- 7 MS. JOHNSON: My name is Abby Johnson. I'm the
- 8 Nuclear Waste Advisory for Eureka County, Nevada. I've been
- 9 the Nuclear Waste Advisor for about 15 years, but I've been
- 10 involved in the nuclear waste issue personally or
- 11 professionally since 1983.
- I started with the nuclear waste issue when I was
- 13 with Citizen Alert, Nevada Statewide Citizen Action
- 14 Organization, and continued on because it interested me so
- 15 much, and ended up working for Eureka County, representing
- 16 their interests on the nuclear waste issue.
- 17 MS. CLANCY: Great. And, how about you, John?
- 18 MR. WALKER: I'm John Walker. I'm the long-time
- 19 webmaster for Yucca Mountain.Org, the website supported
- 20 Eureka County's oversight efforts dealing with repository at
- 21 Yucca Mountain, and the website has been ongoing for, I don't
- 22 know, most of 15 years, I think.
- MS. JOHNSON: Probably, yes.
- MS. CLANCY: Great. Thank you.
- So, Abby, why don't we start at the beginning.

- 1 When did you first become aware of the project?
- 2 MS. JOHNSON: I quess I first became aware of the
- 3 nuclear waste repository project when I was working with
- 4 Citizen Alert, because Citizen Alert had been founded because
- 5 of the threat of nuclear waste in 1975, when the Department
- of Energy, or its predecessor, came to the Nevada Legislature
- 7 looking for a place to put nuclear waste in Nevada.
- 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
- 11 a nuclear waste repository. And, I went to those hearings in
- 12 Salt Lake City on behalf of Citizen Alert, and essentially
- 13 got hooked because it was such an interesting issue, and
- 14 there were, even back then, so many flaws in the process that
- 15 it was very enticing to keep going, and it was clearly an
- 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
- 22 1980, had completed an Environmental Impact Statement on deep
- 23 geologic storage, or disposal of nuclear waste. And, based
- 24 on that foundation that this was the solution, to put the
- 25 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
- 6 people in eastern states as well as in the west. 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
- 11 meant to really solve a long-standing problem that had
- 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.
- 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
- 22 fake, and so it would take a lot of time for the Russians to
- 23 figure out which ones were which. They would be on a
- 24 railroad waste track in many of the valleys in rural Nevada.
- 25 It was a tremendous threat to rural life, and it was also a

- 1 project that the Federal Government was trying to force on
- 2 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
- 11 State of Nevada to do a comprehensive review of the
- 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
- 15 activist groups and environmental groups and the Cattlemen's
- 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
- 19 would be for the State of Nevada.
- 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.
- 4 MR. WALKER: So, Abby, there's this book here, "The
- 5 Nuclear Waste Primer," by the League of Women Voters, it
- 6 seems to me that a lot of Nevadans really got involved with
- 7 the Federal Government and with these major projects in the
- 8 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
- 11 when they were helping the public to understand more about
- 12 the nuclear waste issue. And, it's just really basic
- 13 information, but there's so much, it's such a complex issue
- 14 it really covered all the bases. I was involved with the
- 15 League in the early Eighties, and I'm still a member, and the
- 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?
- MS. JOHNSON: It did.
- MR. WALKER: Completely.

- 1 MS. JOHNSON: Yes.
- 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,
- 14 Jim has a cartoon in here that pretty much depicts what was
- 15 going on with the "Screw Nevada" bill, and at that point, I
- 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

- 1 nuclear testing. And, you know, we had the "Screw Nevada"
- 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
- 6 contamination and fear, and, so, the public saw that fear and
- 7 that contamination, and then we had the "Screw Nevada" bill
- 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--
- MR. WALKER: A Twinkie?
- 13 MS. JOHNSON: A Twinkie on the Nevada Test Site,
- 14 and a Twinkie at a nuclear repository, done by Nancy Peppin
- 15 (phonetic) in Reno, and it just is an indication of how
- 16 people were thinking about nuclear waste and nuclear testing,
- 17 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
- 24 got the Twinkie that sat on the Nevada Test Site from 1954 to
- 25 1987, and then we have the Twinkie after 10,000 years in a

- 1 nuclear repository, no change.
- 2 All kidding aside, Twinkies have a bad reputation
- 3 of lasting forever, and that's the same as nuclear waste.
- 4 The half life of nuclear waste is so long that the 10,000
- 5 years turned out to be legally inappropriate, and the courts
- 6 found that the appropriate time limit to keep nuclear waste
- 7 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.
- MR. WALKER: In actually ending with that standard.
- But, back to the reason people were afraid, and are
- 16 afraid, of things nuclear and nuclear waste, can be
- 17 demonstrated here where we had a test shot at the Nevada Test
- 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
- 23 any newspaper. This is the Eureka Sentinel. Eureka County
- 24 is a down wind county because when they were doing the tests
- 25 and the wind was blowing towards Las Vegas, they didn't do

- 1 the tests. When the wind was blowing to the north or to the
- 2 east, they did the tests, and there was down wind effects in
- 3 Eureka County. And, so, this is a 2007 newspaper article,
- 4 and it's doing outreach to find people who lived in Eureka
- 5 County during certain periods when there was testing, because
- 6 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
- 11 just going to block out Eureka County here and kind of show
- 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.
- MS. JOHNSON: Yes. So, it was airborne?
- 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

- 1 tests they did, and they did almost a thousand underground
- 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
- 4 continued to leak, and continue to leak to this day small
- 5 amounts of radiation. So, you know, people have concerns
- 6 about Nevada, and, thus, Yucca Mountain because, of course,
- 7 spent fuel has the highest amount of radiation of any
- 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
- 11 testing, as we've talked about, particularly the atmospheric
- 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
- 15 program, you know, the Department of Energy, their plan is to
- 16 bury all of the waste in Nevada, and it wouldn't get out.
- 17 But, that's really not the case, is it?
- 18 MS. JOHNSON: No, it's not. Basically, when I've
- 19 explained the project to people, I've explained to people,
- 20 especially back east who aren't familiar with it, it's
- 21 designed to leak, and it's just a question of when it will
- 22 leak, not if it will leak. And, the Department of Energy's
- 23 own graphic, this one is in 1998, shows exactly how that's
- 24 going to happen.
- So, what we have is a human receptor, a farmer in

- 1 Amargosa Valley, and he's got several ways to get dosed. He
- 2 can eat the radiation, like from the soil or from his hands,
- 3 he can drink the water, and he can also eat the farm animals
- 4 who have already been exposed and get another dose of
- 5 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.
- MS. JOHNSON: Yeah.
- MS. CLANCY: Okay, and can we just clarify
- 17 something. What is the acronym of the TSPA? This is from
- 18 the Federal Government.
- 19 MS. JOHNSON: This is it. Do you want me to say on
- 20 camera what this means?
- MS. CLANCY: Uh-huh.
- MS. JOHNSON: Okay, this is the biosphere processes
- 23 in the Total System Performance Assessment in the Viability
- 24 Assessment. And, all of those acronyms basically mean the
- 25 Total System Performance Assessment is like a giant database

- 1 of all the factors of Yucca Mountain. And, the Viability
- 2 Assessment was basically one of the attempts to run the
- 3 database and to see what the impacts of the project would be.
- 4 MS. CLANCY: The Federal Government was not
- 5 pretending that it--they were assuming that there would be
- 6 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.
- 10 MR. WALKER: Abby, we were talking about the total
- 11 systems life cycle, you know, and how the Department of
- 12 Energy really modeled radiation releases, you know, at the
- 13 Test Site and at Yucca Mountain particularly. And, that
- 14 assumes that, you know, Nevada was expendable, it was a place
- 15 where they could just throw it away. What do you know about
- 16 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
- 22 I had gone to that DOE hearing in Salt Lake City, I was
- 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
- 25 Denver, two hours, and I started to work on a bumper sticker

- 1 for Citizen Alert that would convey what it was that
- 2 basically was Citizen Alert's message at the time about
- 3 Nevada and about this perception that Nevada was a wasteland.
- 4 And, Nevada is not a wasteland. That ended up being the
- 5 slogan that Citizen Alert used. I designed it, but it was
- 6 Bob Folkerson with Citizen Alert who colorized it and
- 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
- 15 was--I just fell in love with rural Nevada. I was struck by
- 16 the wide open spaces, the basin and range topography, the
- 17 fact that other than the road I was on, it looked the same as
- 18 it had 200 years ago, and that was part of what started my, I
- 19 guess you'd call it a career of activism and involvement on
- 20 environmental issues and the nuclear issues.
- So, when Eureka County asked me to start helping
- 22 them on the nuclear waste issue, it was I thought a perfect
- 23 match, because I already loved rural Nevada, and I already
- 24 loved the basin and range topography, the sagebrush, and the
- 25 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
- 4 (phonetic), who is a modern day impressionist artist in
- 5 Eureka. He also teaches at the high school. And, the
- 6 painting is of the old Ruby Hill Mine, and it shows both the
- 7 beauty of the Eureka area, and the historic nature of Eureka,
- 8 which is an old time mining town ironically known as
- 9 "Pittsburgh of the West" from its early days for its
- 10 smelters.
- MR. WALKER: So, Abby, after the Nuclear Waste
- 12 Policy Act, Amendments Act of 1987 was passed by Congress,
- 13 singling out Nevada and Yucca Mountain as the only site to
- 14 put all the spent fuel and high-level waste in the country,
- 15 you know, that had a big impact on Nevada, and all that waste
- 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
- 21 were going to be at the end of a very large funnel, and that
- 22 all the waste, whether it came by truck or by train, would
- 23 all end up funneling into Nevada. But, at the same time, the
- 24 Department of Energy was much more interested in studying
- 25 Yucca Mountain to see if it was a suitable site than they

- 1 were in dealing with transportation issues, because if the
- 2 real information about transportation had been available to
- 3 people all across the country on the waste routes, it was
- 4 likely that people would be pretty upset to hear that nuclear
- 5 waste was going through their town or front yard, or
- 6 whatever. And, so, the Department of Energy always put the
- 7 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.
- MR. WALKER: Well, tell me, how did they plan to
- 15 get all the waste actually to Nevada? Were they going to put
- 16 it on trucks, on rails, I mean how was this going to happen?
- 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
- 25 Mountain repository as a choice is that there is no rail

- 1 transportation to the repository, so they would have to build
- 2 a rail spur from a main rail line to Yucca Mountain.
- 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.
- MS. JOHNSON: Yes. Well, this is a map from the
- 13 Draft Environmental Impact Statement in 1999, and this shows
- 14 the various routes that were being considered. The one that
- 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?

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

- 1 MS. JOHNSON: The other routes, there was a couple
- 2 in Clark County, but between the time that the route was
- 3 proposed and the time they started to get serious about it,
- 4 Clark County's exponential growth had precluded those routes
- 5 being practical any longer because they basically were in
- 6 areas that had now become suburbs of Las Vegas.
- 7 MR. WALKER: The urban area, the Las Vegas Valley,
- 8 I would think.
- 9 MS. JOHNSON: Yes.
- 10 MR. WALKER: So, that was the Nevada case with rail
- 11 lines. What about the national case? What would happen, you
- 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.
- MS. JOHNSON: Yes.
- MR. WALKER: So, what did that mean from a
- 25 transportation perspective?

- 1 MS. JOHNSON: Well, it meant that there were going
- 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.
- MS. CLANCY: Okay.
- 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
- 15 and sites that the nuclear waste would have to be transported
- 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
- 22 deals with the rail line sites, because if I'm correct, I
- 23 think that all of the waste wouldn't be shipped by one or the
- 24 other, there would be a shared shipping campaign. Some would
- 25 go by rail, if Yucca Mountain were to happen. Some would go

- 1 by truck. And, this is a map showing, again, all of the
- 2 sites in the Eastern part of the United States that would
- 3 have to ship to Nevada. And, as I mentioned earlier, there's
- 4 just a few reactors on the West Coast. So, that's kind of
- 5 the issue.
- Now, another point I wanted to ask you, Abby, is
- 7 how 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
- 11 routine. They do shipping all the time. Well, they do.
- 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
- 14 waste, spent nuclear fuel, as they call it, from those plants
- 15 3000 miles, or 2500 miles, or 2000 miles, not just once, but
- 16 consistently over a 50 year period is an unprecedented
- 17 shipping campaign that we have never experienced in this
- 18 country.
- 19 MR. WALKER: And, I think it's important to point
- 20 out that the nuclear power industry in the country produces
- 21 about 20 percent of the power, and that industry is not going
- 22 away, at least in the foreseeable future, so if Yucca
- 23 Mountain were to happen, the reactors would continue to burn
- 24 fresh fuel, create spent fuel, and that spent fuel would
- 25 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
- 3 more spent fuel produced than the current legal capacity of
- 4 Yucca Mountain to take that fuel, so a second repository
- 5 would be needed, or an expansion of Yucca Mountain, if the
- 6 repository ever came to be.
- 7 MR. WALKER: And, of course, that would require
- 8 legislation by Congress.
- 9 MS. JOHNSON: Yes.
- 10 MS. CLANCY: So, you've been talking about the
- 11 state, you know, and the Federal Government. So, how did
- 12 Eureka County itself come on, how did it get onto the radar
- 13 screen of Eureka County?
- MS. JOHNSON: Well, what happened was in the
- 15 provisions of the Nuclear Waste Policy Act, there are
- 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.
- 22 Two other counties who were very--who wanted to be involved,
- 23 Esmeralda County, Nevada and Inyo County, California sued to
- 24 be recognized as affected units of local government.
- 25 And, actually they won the lawsuit, and as a

- 1 result, the Department of Energy interpreted the court ruling
- 2 so that any county that is contiguous to Nye County, as well
- 3 as Nye County, was considered to be affected. And, Eureka
- 4 County is contiguous to Nye County. And, so, we were
- 5 designated as affected, as an affected unit of local
- 6 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
- 14 been primarily related to transportation, some air quality
- 15 and some just general concerns being a county in the state
- 16 that is subject to the project.
- 17 So, when we became officially affected, but, John,
- 18 I want to point out that there's other counties in Nevada
- 19 that are also affected by transportation.
- 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.
- 24 After Eureka County was designated as affected,
- 25 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?
- MS. JOHNSON: Well, we decided to use a newsletter
- 14 as the primary way to communicate with the public. And, I
- 15 have the newsletter from the fall of 1993, which in fact
- 16 shows the original route of the proposed Carlin corridor.
- 17 Originally, the Department of Energy was thinking that the
- 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.
- MR. WALKER: That is correct, they are.
- MS. JOHNSON: Good.
- MS. CLANCY: So, Abby, there you were as the kind
- 18 of a public information kind of person, Eureka County, right?
- 19 And, you were--what was the sense then from people in the
- 20 county? Did they care? Did they feel like it was an issue
- 21 really coming home? What was the climate like about this
- 22 topic in Eureka County at that time?
- MS. JOHNSON: Well, in the early Nineties when I
- 24 first started working in Eureka County, mostly people needed
- 25 information, and they were curious about the project, and

- 1 they weren't sure what the impacts would be. When they
- 2 learned about the rail line, there was more concern because
- 3 of the agriculture impacts in Pine Valley, and just a concern
- 4 about understanding the project and trying to understand
- 5 where the Department of Energy was coming from and what their
- 6 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
- 14 County that was really trying to help the Commission and the
- 15 citizens understand the nature of the project, what did the
- 16 people think? I mean, Yucca Mountain was 300 miles at least
- 17 from, you know, a lot of parts of Eureka County, how did they
- 18 see themselves being affected in any way?
- 19 MS. JOHNSON: Well, at first, it was just a kind of
- 20 a general program, just because we had the money and we knew
- 21 that there were going to be general activities to participate
- 22 in, and information to gather and disseminate. But, as there
- 23 became more clarity to the DOE's plans, especially the
- 24 transportation plans, and the rail lines were discussed more,
- 25 as well as the highway corridors, it became clear that

- 1 citizens in Eureka County could be directly affected by the
- 2 project, especially when they moved the proposed rail line
- 3 from Pine Valley to Beowawe and down through Crescent Valley.
- 4 At that point, people in Crescent Valley became
- 5 very concerned about the project. Many people moved to
- 6 Crescent Valley to essentially get away from the Federal
- 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
- 11 very upset.
- 12 When the Department of Energy held their hearing in
- 13 Crescent Valley on the Draft Environmental Impact Statement
- 14 in December of 1999, the Elko Free Press covered the hearing,
- 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.
- 21 Another person that participated was Jamie Gruening
- 22 (phonetic). She came with a parcel map showing how close the
- 23 rail line would come to her private land. And, she was
- 24 extremely concerned, how, how much and when would I be
- 25 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?
- 7 MS. JOHNSON: I'm sure most people don't know that.
- 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
- 11 who would have constant exposure like that. I often wondered
- 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.
- 15 MR. WALKER: Same with the trucking nuclear waste.
- 16 There are spots in Nevada, particularly in Gold Field, I
- 17 think, that if they truck nuclear waste through Gold Field,
- 18 there's a turn there, that if you worked on that corner, you
- 19 would have your dose on a regular basis.
- 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.

- 1 We also developed a comment form so that people
- 2 could just check off some boxes and write some comments, fold
- 3 this up, and send it into the Department of Energy to make it
- 4 easier for people to participate. Well, on the back side,
- 5 it's just the address and where it was being sent.
- 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,
- 17 Crescent Valley is an area where many small parcels of land
- 18 were sold on a speculative basis. So, people throughout the
- 19 country own very tiny parcels of land in Crescent Valley. It
- 20 turned out the Department of Energy really hadn't done a
- 21 thorough analysis of how many individual private landowners
- 22 could be affected by the rail line, and ultimately, that was
- 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.

- 1 MS. CLANCY: What sort of response were you getting
- 2 to the newsletter and the comment form? Were people getting
- 3 concerned there in Eureka County? Were they worried about--I
- 4 mean, obviously, from what you read, they were kind of
- 5 concerned about radiation. But, was that most of the people,
- 6 or, you know, what was the public sentiment at that time?
- 7 MS. JOHNSON: The public sentiment in Crescent
- 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
- 14 information very effectively in their comments at the
- 15 hearing.
- MS. CLANCY: I'll ask you, too, what was the sense
- 17 then of like did it feel inevitable, did people think, well,
- 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 guess, 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
- 24 over the years. A little microchasm of that occurred in
- 25 Eureka County where at first, people felt like it didn't

- 1 matter and they were going to do it anyway, and there was
- 2 nothing they could do. But, then, as they got more
- 3 information, and as they understood more about the project
- 4 and understood the weaknesses of the project, they became
- 5 more empowered, to the point where by the time we got to the
- 6 EIS hearing in December of 1999, the standing room only crowd
- 7 with two sessions of testimony really spoke of all of their
- 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
- 11 Information Office was developing a website. We had the good
- 12 luck of scoring the following web address, yuccamountain.org.
- 13 It was the brainstorm of the Great Basin Internet Service
- 14 technician who was working with me to set up the site, and he
- 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.
- Okay, yeah, go ahead, you can tell us about the
- 22 website.
- 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

- 1 section on licensing, which was a big part of the repository
- 2 program. Of course, the repository would have to be licensed
- 3 by the Nuclear Regulatory Commission, so there's lots of
- 4 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
- 7 Yucca Mountain, and we have a section that includes all the
- 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
- 11 an entire section on transportation. Again, this is a major
- 12 facet of the project. And, so, there's lots of information
- 13 about transportation.
- 14 And, then, of course, because Yucca Mountain was a
- 15 contentious Federal proposal in Nevada, there was lots of
- 16 litigation involved. So, we dedicated a section of the site
- 17 to litigation issues, lots of lawsuits involved.
- 18 And, of course, because the investigation at Yucca
- 19 Mountain involved a lot of scientific activity, there's a lot
- 20 of publications, critical publications that we put on the
- 21 website. And, there are other things like photos and maps,
- 22 there's a calendar, there's timelines, there's frequently
- 23 asked questions.
- And, one of the nice features of the website is a
- 25 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
- 11 putting out a newsletter, and you were--fliers, all kinds of
- 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
- 14 for a long time, or a short time, what was the sense you had?
- MS. JOHNSON: There was a sense that it would never
- 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
- 18 a promise and then extended the deadline, and it went on and
- 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.
- 4 So, the second part of your question, how would it
- 5 end, for a long time, I felt that the only way that it could
- 6 end would be for a President to end it, just the way Reagan
- 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,
- 11 as you know, the project is not over. It still is being
- 12 considered in the Nuclear Regulatory Commission licensing and
- 13 hearing process. It's being appealed in the courts. It's
- 14 kind of like being on death row. The prisoner is condemned
- 15 to death, but may not actually die due to a series of
- 16 circumstances.
- 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.
- One change that I think would be a positive is
- 25 instead of having the system the way it is, where Congress

- 1 allocates the money and the federal agency carries out the
- 2 alleged will of Congress to do the project, going to some
- 3 sort of more quasi public/private model like the Tennessee
- 4 Valley Authority, where you have a governmental agency that's
- 5 run more like a business, where the funding isn't dependent
- 6 directly on Congress, and where decisions can be made without
- 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
- 11 management, that the culture of the Department of Energy and
- 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
- 15 power plants have, and so it was an extremely bureaucratic
- 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
- 22 in pursuing the project was what I called "getting to yes,"
- 23 which is a term that was coined by Richard Ure (phonetic) in
- 24 a book about negotiations. But, what it means is in a
- 25 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.
- 5 And, so, in my observation and experience with the
- 6 Yucca Mountain project, when scientific information was
- 7 revealed that was detrimental to the success of the project,
- 8 then it became a management matter. It would be sent over to
- 9 management and to public relations to spin something so that
- 10 it would end up being a positive, when in fact it should have
- 11 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
- 14 had been acknowledged all the way along, instead of hidden, I
- 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?
- 22 I also contend that you take that set of
- 23 characteristics, and if you had said that it was in Vermont
- 24 or Wisconsin or New Hampshire, that people would have said
- 25 well, of course we can't do that. That's not safe. But,

- 1 because it was Nevada, Nevada is not a wasteland, people
- 2 think that Nevada is a wasteland, and that it doesn't matter
- 3 what you do to Nevada, we did not get, we as a state did not
- 4 get the respect that we deserved. And, those are legitimate
- 5 scientific concerns, and for decades Nevada's concerns were
- 6 belittled and ignored because they do in fact think that
- 7 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 $19^{\rm th}$ day of April,
8	2011.
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13	
14	s/ Mary Chevalier
15	Mary Chevalier
16	Federal Reporting Service, Inc.
17	17454 East Asbury Place
18	Aurora, Colorado 80013
19	(303) 751-2777
20	
21	
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24	
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