

ABBY JOHNSON'S

INTERVIEW WITH JUDY TREICHEL

and

STEVE FRISHMAN

EUREKA COUNTY, NEVADA

YUCCA MOUNTAIN LESSONS LEARNED PROJECT

held in

LAS VEGAS, NEVADA

1 MS. CLANCY: This is Gwen Clancy running the  
2 camera, and conducting the interview today is Abby Johnson.

3 MS. JOHNSON: I'm Abby Johnson. I'm the Nuclear  
4 Waste Advisor for Eureka County, Nevada. This is the Eureka  
5 County Lessons Learned video project, and today we are  
6 interviewing Judy Treichel with the Nevada Nuclear Waste Task  
7 Force.

8 Judy, tell me about your background, how you came  
9 to be in Nevada, and how you came to be with the Nevada  
10 Nuclear Waste Task Force.

11 MS. TREICHEL: Well, I came to Nevada in the very  
12 end of the Sixties because I had gotten married, and we lived  
13 in the Twin Cities in Minnesota, and it was still snowing and  
14 below zero at the beginning of April, and we decided there  
15 must be some other way to do this, and had friends in the Las  
16 Vegas area, so we came out here just to give it a try, which  
17 is what many people do when they leave other places. We'll  
18 just try it for a little bit.

19 So, let's see, it's 40 years later, and here I am.  
20 I've been divorced, but have three children who all live in  
21 Las Vegas, so that's how we wound up in the desert. And,  
22 when I first came, some of the few jobs that were available  
23 that my husband then and I could get were with Test Site  
24 contractors. So, during the time of below-ground testing, we  
25 began working at the Nevada Test Site, and I became sort of

1 alarmed at what was going on with--I knew that--I came to  
2 learn that there had been atmospheric tests where the--  
3 anything that happened with the bomb was just carried on with  
4 the weather, whether it went west or east, mostly it went  
5 east.

6           And, then, the testing went underground, but a lot  
7 of the tests vented, and I just knew that there were things  
8 that--something was wrong with this, and I guess I came from  
9 a family where my dad had been really, really adamant about  
10 banning the bomb, and the horrors of atomic war. So, I never  
11 was probably a very good fit for the Department of Energy,  
12 which was at that time the Atomic Energy Commission. And,  
13 worked there, and then I was--I went from that job to working  
14 at a labor union here in Las Vegas that still had ties to the  
15 Test Site, and I became more and more concerned about what  
16 was going on.

17           And, then, during the Reagan years, he--Ronald  
18 Reagan sounded very friendly with nuclear weapons, and that  
19 sort of thing, even though he and Gorbachev were talking  
20 about putting an end to that. But, he made that horrible  
21 gaff on the radio, saying the bombing begins in five minutes.  
22 And, at the time that he was, the assassination attempt was  
23 made on him, and Alexander Hague said, "I'll be in charge  
24 now," I realized suddenly that I had two small children,  
25 thinking oh, oh, I really think this country is going in the

1 wrong direction, and if I don't say anything, that's a bad  
2 thing.

3           So, I became very much opposed to the development  
4 of nuclear weapons, and certainly to any use of them, because  
5 we had already tried it in Japan and I didn't like the  
6 outcome there, so I was opposing that, and on top of that,  
7 then suddenly along came the idea of Yucca Mountain, and it  
8 was just natural that you would oppose having, as one person  
9 put it, a place where you were going to safely secure nuclear  
10 waste, and the Air Force was doing bombing runs over the top  
11 of it, and nuclear weapons were exploding beneath the ground,  
12 and somewhere in the middle, you were going to put nuclear  
13 waste. And, I'm not a scientist, but something told me this  
14 was not a good idea.

15           MS. JOHNSON: You've always used your common sense  
16 to identify the really fundamentally wrong-headed parts of  
17 the Yucca Mountain Project. It seems like sometimes common  
18 sense has been the last thing that has been applied by the  
19 federal agency.

20           MS. TREICHEL: Well, I said it was a little silly  
21 when government or industry scientists would stand up and  
22 talk in terms that perhaps the rest of the audience didn't  
23 understand, but certainly I didn't, and usually with a lot of  
24 this stuff, when you're talking about particularly safety,  
25 and you've been and are raising children, safety is kind of

1 in the front of your brain, and there's a lot easier ways to  
2 explain it, or explain pitfalls, which if you're raising a  
3 kid, there's loads of those. So, you can usually come back  
4 to an analogy.

5 MS. JOHNSON: With the Nevada Nuclear Waste Task  
6 Force, you've been in the forefront of asking sort of what I  
7 call the gee whiz questions, the common sense questions to  
8 very lofty agencies, commissions, and various scientists at  
9 the Department of Energy. Tell us a little bit about that  
10 experience of being on the front lines of common sense.

11 MS. TREICHEL: Well, the task force started out as  
12 a public interest organization, but there was already another  
13 Nevada organization that actually started with the  
14 introduction of the idea of storing nuclear waste here, which  
15 was Citizen Alert. And, Citizen Alert was a very active  
16 group that went out to recruit people to be members. They  
17 did demonstrations. They had sort of the usual grassroots  
18 kind of an organization. There was no need to reproduce  
19 that. But, what we did need was an organization that could  
20 kind of work on the bureaucratic side. So, I would go to  
21 meetings and be able to provide a voice of Nevadans in  
22 general, and then listen at the meetings to understand what  
23 was going on and be able to come back and tell people just  
24 across the board, whether it was a church group or a meeting  
25 of Citizen Alert or somewhere else, exactly what the

1 government was saying and what they had intended to do.

2           And, there were meetings where you would go and you  
3 would be sitting there, and then all of a sudden, it occurred  
4 to you that they were talking about health effects. And, the  
5 longer you listened and the more you looked at the materials,  
6 it was obvious that a health effect wasn't just like getting  
7 the flu, it was dying as a result of this project, and it was  
8 a person probably most affected, which would be in Amargosa  
9 Valley where the water went. Yes.

10           MS. JOHNSON: Yeah, and this is a graphic about it.

11           MS. TREICHEL: Yes, this is a person in Amargosa  
12 Valley, and he, in earlier versions, they had a wife, the  
13 smaller woman, and a child and a dog, who apparently have had  
14 a health effect, because they're not there anymore, and I  
15 just found that I could have quite an effect on a meeting if  
16 I raised my hand and said, "You're talking about a health  
17 effect, or a dose receptor. The dose receptor is most likely  
18 a Nevada farmer, and a health effect is a dead Nevada  
19 farmer." So, I think that should be kept in mind, and it  
20 always kind of had that drawback effect.

21           MS. JOHNSON: But, it also got the public's  
22 attention.

23           MS. TREICHEL: Well, yeah, and it was very  
24 interesting. The first time we saw this, the old picture  
25 with the family, a guy--it was presented in a meeting, and,

1 you know, we just looked at it, because here's all these  
2 doses that are coming in on these people and their house and  
3 their farm and their animals, and a guy from the Department  
4 of Energy who had been involved in putting this thing  
5 together said, "You know, I want to ask you something.  
6 You're from Nevada and I'm afraid this thing is going to  
7 offend Nevadans." You know, the only reaction you can give  
8 is, "You think?"

9           Because here's all of this stuff coming in and he  
10 said, "Well, I'm talking about the hat." Is this more of a  
11 stereotype that would be, you know, to think of everybody as  
12 a cowboy with a cowboy hat, and I just said, "I think the hat  
13 may be the least of the problems here."

14           MS. JOHNSON: Well, one of the things about the  
15 repository is that it's supposed to contain the waste. But,  
16 this clearly shows that the waste is getting out.

17           MS. TREICHEL: Right.

18           MS. JOHNSON: So, it's designed to leak?

19           MS. TREICHEL: Yes. And, I don't think the public  
20 ever had that idea. When the Department of Energy came in,  
21 they talked about studying Yucca Mountain. They said--they  
22 absolutely assured us that having it not be a good site was  
23 just fine with them. If all we want to find out is there's  
24 no wrong answer here, is the site is good and will contain  
25 the waste and will meet all of the rules, great. Then, we

1 want to build a repository. If it can't meet the rules, if  
2 it can't do what we need it to do, we walk and we're plenty  
3 happy to do that. And, that was an assurance that was given  
4 continually.

5           And, then, the more you saw about it, the more they  
6 were fighting safety standards and regulations and guidelines  
7 that they had because the thing obviously wasn't going to be  
8 able to meet them.

9           And, I've always thought it was crazy that you  
10 would go out and tell people we want to put this where you  
11 live, and there will be only a few health effects, which  
12 means only a few people will die. I cannot imagine that  
13 you've got any population anywhere that before you know  
14 anything about how the site will work, would say hey, sounds  
15 good to me. It's a crazy idea.

16           MS. JOHNSON: Let's move on to the next question.

17           MS. TREICHEL: Yes, that's fine.

18           MS. JOHNSON: Judy, we've been talking about the  
19 poster behind you that shows what would happen to a farmer in  
20 Amargosa Valley. Can you tell us a little bit more about  
21 what goes on in Amargosa Valley regarding agriculture and the  
22 contacts you've had out there?

23           MS. TREICHEL: Well, Amargosa Valley is a farming  
24 community, and it's home to the largest dairy in the State of  
25 Nevada. And, this is a T-shirt that the manager from the



1 Ponderosa Dairy made at the time that Yucca Mountain was  
2 being considered, and he was very much opposed to it because  
3 his cows, thousands of them, would be drinking the water,  
4 they would be eating the feed, the alfalfa that's growing out  
5 there. This is kind of a self-contained operation, where  
6 they grow the feed for the cows. They have the water. They  
7 do it all. And, about a third of the dairy, I don't know  
8 what it is now, but at that time, a third of it was organic.  
9 And, the manager, Ed Goodhart, thought that if word got out  
10 that they were sharing an aquifer with Yucca Mountain, a  
11 nuclear waste dump, that no one would want to spend the kind  
12 of money you spend for organic dairy products.

13           So, yes, this was a serious issue to them, and it  
14 was not just a silly fear. We were always accused by the  
15 government and the industry of having sort of hysterical  
16 housewifey kind of fears attached to this. But, he went to  
17 the bank where he had always done business during the time of  
18 his farming operation, and they told him that with the Yucca  
19 Mountain thing being looked at, any loan they gave him would  
20 have to be completely paid off by the time that was estimated  
21 for the opening of a nuclear waste repository.

22           So, that brought it right home, and it clearly  
23 showed Nevadans that yes, you could expect some kind of  
24 serious economic effects, whether the dump leaked or not,  
25 just the fact that it was there.

1 MS. JOHNSON: I know that there have been a lot of  
2 concerns from the State of Nevada and from Clark County  
3 especially about what's known as perceived risk, the stigma  
4 effects of even just having the dump in the state, or an  
5 accident that didn't release any radiation, but it was just  
6 an accident involving nuclear transportation. Can you talk a  
7 little bit about that?

8 MS. TREICHEL: Well, we've always thought that--  
9 we've been pretty well convinced that as a repository, Yucca  
10 Mountain wouldn't work. It would leak radiation. But, by  
11 the time the radiation leak from the canisters was carried  
12 off in the groundwater and down so that it came out of the  
13 wells at this guy's farm and surrounding areas, that would  
14 probably be a few hundred years.

15 The first thing you would have to worry about is  
16 getting all of that waste to Yucca Mountain. And, it would  
17 have involved a transportation campaign probably 30 years  
18 long, with trucks and trains coming there regularly, daily,  
19 on a daily basis, and the railroad tracks and the interstate  
20 highway run directly behind the Las Vegas strip.

21 So, you have people who come here as tourists  
22 primarily, who don't have to come here. When a family sits  
23 down and decides where shall we go on vacation, it's not  
24 necessarily going to be Las Vegas, unless they can be sort of  
25 talked into coming. But, they can always change their plans

1 and go on vacation somewhere else. And, if they have to be  
2 driving behind a dreaded nuclear waste truck, or if they're  
3 seeing these things on the railway that's running right  
4 behind the strip, and if anything goes wrong, you can't see,  
5 smell or sense radiation when it's happening, so it's going  
6 to be hard to convince them that there's really no problem.

7           And, I don't think people tend to believe the  
8 government or a wealthy corporation anyway when they tell  
9 them that there's nothing to worry about. So, certainly not  
10 here in Nevada, where that's exactly what they told us when  
11 they were setting off bombs in the atmosphere, not to worry.  
12 You've got to be really concerned if it's a Russian bomb.  
13 But, if it's just one of our tests, everything is fine. We  
14 have checked it out, and you don't have to worry.

15           So, sure, there would be a lot of worry. And, if  
16 you did have a release, dealing with a radiation accident, as  
17 we're now seeing in Japan at this stage, there's just nothing  
18 worse, it never goes away. It never gets done.

19           MS. JOHNSON: Let's move on to the next question.

20           MS. TREICHEL: Okay.

21           MS. JOHNSON: Judy, we hear a lot about the Yucca  
22 Mountain site either being safe or not being safe. In front  
23 of us is a notepad of different thoughts from the Department  
24 of Energy. This one says, "Yucca Mountain. The natural  
25 features of Yucca Mountain will work with the engineered

1 features to isolate the waste a thousand feet below the  
2 surface, and a thousand feet above the water table." That  
3 was certainly the plan. But, I'm wondering what you think  
4 about that plan? What's wrong with the site or what's right  
5 with the site?

6 MS. TREICHEL: Well, when the Department of Energy  
7 first showed up to do site characterization, we were told  
8 that it was the mountain itself. They were wanting to see if  
9 this was a really great piece of rock that could isolate the  
10 waste, and once it went in there, you dig a hole, you put the  
11 waste in, and it's never there again.

12 As you see, they came to believe that they were  
13 going to need some engineered barriers as well. And, as the  
14 project went along, the engineering became more and more and  
15 more important. And the fact that Yucca Mountain appeared  
16 engineered or designed to leak, as you can see from here,  
17 this was the processes in the Total System Performance  
18 Assessment when they were deciding how everything would work.  
19 You had doses and doses and doses.

20 So, no, I don't call that safe overall. Our  
21 expectation was that they were going to see if this thing  
22 totally isolated the waste, and, you had zero doses. And, if  
23 they found that that was the case, then that's what they  
24 would go with. But, that never was the case, and we saw that  
25 instead of the Department of Energy walking away, the things

1 that were leaving were the rules, regulations, and  
2 guidelines. They were continually either being redone or  
3 gotten rid of. So, that's the way it continued on.

4 But, over the years I've been asked to speak to  
5 many, many, many groups, particularly schools, and so forth,  
6 and I can be invited to almost any class, whether it's a  
7 government class and you talk about how the government made  
8 this decision, which we thought was completely unfair and  
9 just not democratic, you can talk about science, there's  
10 history, there's almost everything that Yucca Mountain fits  
11 into, and shows that this was a bad thing, a bad decision  
12 made in a wrong way.

13 MS. JOHNSON: Let's talk about something completely  
14 different. In the early 1990's, there was something called  
15 the Nevada Initiative, which as I understand it, was the  
16 nuclear power industry launching a public relations campaign  
17 in Southern Nevada to change the public's mind about Yucca  
18 Mountain. Can you tell us about that?

19 MS. TREICHEL: Well, the Department of Energy came  
20 in force to study Yucca Mountain about 1987, 1988, after the  
21 Nuclear Waste Policy Act had been amended. The thought was  
22 they had been either thrown out of or highly opposed  
23 everywhere they went around the country when they were trying  
24 to do a siting process. And, the thought was that Nevadans  
25 would just be okay with this thing because we seemed to be

1 accepting testing. And, we had a large work force at the  
2 Nevada Test Site, so it meant jobs, and so forth.

3 Well, when they got here, they found that wasn't  
4 the case. People didn't welcome this in. This wasn't  
5 national security, like building up a nuclear weapons  
6 stockpile. This was doing a favor for a very wealthy  
7 international corporation or series of corporations, the  
8 utilities. And, they just wanted to dump something, and we  
9 became the target for that dump. So, no, people did not go  
10 for it.

11 So, one of the groups that was sort of the lobbying  
12 end of the nuclear industry put together a thing they called  
13 the Nevada Initiative, where they thought they could win over  
14 the people of Nevada. And, they came out and they recruited  
15 some newscasters that were familiar faces to people here.  
16 There was a sportscaster and a couple of other people  
17 involved in T.V. news, and people were used to getting  
18 factual information from them. So, they thought, well, if we  
19 get these guys and we start spilling it out, well, before  
20 this ever started, a person who worked for another public  
21 interest group somewhere was able to get a copy of this thing  
22 called the Nevada Initiative, and gave it to us here in  
23 Nevada, and said, "Look at this thing that's coming."

24 And, it was almost unbelievable. It had their  
25 strategy where they were using sort of military language

1 about establishing a beach head, and getting to women that  
2 were in their thirties and early forties, because these were  
3 the people that could probably influence their husbands,  
4 certainly their children. And, it just kind of--being able  
5 to change the minds of people in order that they would see  
6 that this was a good thing.

7 I can't remember if benefits, if they were going to  
8 tout some sort of benefit for it, or whatever, but because we  
9 knew it was coming, we met it head on, and it became really a  
10 marvelous exercise for all of us, because it was such a joke.

11 And, one of the larger auto dealerships here were  
12 using the Yucca Mountain man in their ads. A couple of drive  
13 to work disk jockeys increased their ratings tremendously by  
14 doing spoofs about the ads that were running on T.V. for the  
15 Nevada Initiative. And, it was a miserable failure, very  
16 expensive failure, but didn't go anywhere at all, and  
17 probably solidified opposition, because people who had never  
18 heard of Yucca Mountain heard it now, and saw the  
19 ridiculousness of the hard sell.

20 MS. JOHNSON: Let's move on to the next question.

21 Judy, on the table here, we have a hat, male hands  
22 shaking, "The study is great. Now negotiate." And, then, it  
23 says, "Yucca Mountain." Can you explain what this is? And,  
24 does it relate to that Nevada Initiative you just talked  
25 about?

1 MS. TREICHEL: Well, before the Nevada Initiative,  
2 there was a group set up here called the Nuclear Waste Study  
3 Committee. And, each of the sites that had been named as a  
4 possibility for the nuclear waste dump had one of these  
5 groups set up, and it went through public relations people,  
6 or something, in each area.

7 And, I can't remember if it was before the Nevada  
8 Initiative, but certainly during and after. Anything called  
9 Nuclear Waste, where there was a promotion of Yucca Mountain,  
10 was just immediately opposed by people. So, they suddenly  
11 stopped calling this the Nuclear Waste Study Committee, and  
12 just called it the Study Committee, which I always felt was a  
13 little hazy, call yourself, I mean, it almost begs any  
14 question around.

15 But, they came up with these hats for a meeting,  
16 when they were trying to encourage union people and the trade  
17 unions particularly to join them and promote the Yucca  
18 Mountain project with them. In some cases, with people who  
19 were out of work, they were somewhat successful, but not with  
20 Nevadans as a whole.

21 And, so, this was their attempt at getting  
22 something done, and this committee just kind of got less and  
23 less and less effective, and finally just sort of died out.  
24 It went from being very well financed, where you could make  
25 hats and you could make all kinds of stuff, and they were



1 being financed by the nuclear industry, and it finally  
2 occurred to the smart--the sharp pencil people that they  
3 weren't getting anything for their money. So, it sort of  
4 died out.

5 MS. JOHNSON: Let's move on to the next question.

6 Judy, you've been attending the meetings of the  
7 Blue Ribbon Commission on America's Nuclear Future for about  
8 a year and a half now, since they started meeting. Just last  
9 week, they released some subcommittee recommendations. Can  
10 you tell us what they are thinking and whether you think  
11 they're on the right track?

12 MS. TREICHEL: Well, at the time in the beginning  
13 of 2010, about a year ago, the Department of Energy decided  
14 that they were not going to do Yucca Mountain, so they put in  
15 a filing, a petition, I guess, to the Nuclear Regulatory  
16 Commission to withdraw their license application. And, they  
17 just said Yucca Mountain is unworkable, we're not going to do  
18 that. And, they set up--the Secretary of Energy set up a  
19 Blue Ribbon Commission to decide what they should do instead  
20 of Yucca Mountain.

21 And, they've been meeting to get public input, and  
22 they do have three subcommittees, and those committees have  
23 not actually put out so that you can see their whole report,  
24 but they did, a spokesperson from each committee did a  
25 presentation at the most recent meeting last week to say what

1 they had heard, and the sorts of things that would be in  
2 their reports when they come out at the end of the month.

3           One of the things they are adamant about, and we  
4 could see this shaping up as time went along, was the  
5 necessity of having a willing host, a volunteer site, which  
6 certainly Yucca Mountain and Nevada had not been. And, it  
7 was clearly not a volunteer site, since way back in 1989, and  
8 there have been legislative moves before that time, but in  
9 1989, there was a law passed, a bill passed saying that waste  
10 could not be imported or stored, high-level waste, in the  
11 State of Nevada. And, then, this is the pen that Governor  
12 Miller used to sign that bill. And, it was considered a very  
13 big deal in Nevada, and it made a banner headline in the  
14 newspaper.

15           And, Nevada has never changed. There have been  
16 polls done state-wide since then, and the opposition has  
17 always been somewhere between 70 and 80 percent opposed.  
18 Those who are not necessarily in the absolutely opposed  
19 column, in many cases, just think it's inevitable and  
20 probably silly to put up a big battle about it because it's  
21 going to happen. If the government wants to do something,  
22 they just will, which I don't agree with.

23           But, the Blue Ribbon Commission, number one, thinks  
24 that if you have an away from reactor interim storage site,  
25 like a monitored retrievable storage, it would have to be at

1 a willing site, and if you have another repository, you're  
2 going to have to find a community within a state, and they  
3 both have to agree that this is something they want to do.

4           They also were encouraged by some that they should  
5 recommend reprocessing to make the waste--some people try and  
6 call it recycling, which it's really not, but to melt the  
7 waste down to reuse parts of it. They don't seem to be going  
8 for that.

9           So, I've been pleased, except that they do seem to  
10 be on the verge of advocating interim storage, finding one or  
11 more sites where they can move the waste away from the  
12 reactors to store it in a consolidated centralized site.  
13 And, I think that's probably not a good idea because the  
14 waste is safest where it is now, which is at the reactor  
15 site. If it comes out of the storage pools as soon as is  
16 possible, that's one of the problems we're seeing now in  
17 Japan, some of the big waste worries that you have there with  
18 the Fukushima plants, are the fuel pools that are above the  
19 actual reactor site. And, when there were explosions within  
20 the building, the explosions went up and the pools were  
21 damaged. And, they've got an incredibly horrible mess.

22           One of the things that I'm upset about is the  
23 Fukushima situation is being used by the nuclear industry  
24 particularly to say ah, well, we should go to Yucca Mountain.  
25 Yucca Mountain is the closest we are to a repository. We

1 don't want to have what's happening at Fukushima happen here.  
2 And, that's a bogus argument, because waste has to go in the  
3 pool for at least five years after it comes out of the  
4 reactor, it's that hot and that radioactive that you have to  
5 wait at least that amount of time.

6           After five years, yes, I believe waste should  
7 definitely come out of the pools, and it should go into dry  
8 casks at the--

9           The one thing that the country knows how to do as  
10 far as nuclear waste is concerned is to put the waste out of  
11 the reactors into dry casks that sit outside of the reactor  
12 building. They don't need any human intervention. They are  
13 cooled naturally, and the waste is kept in a safe  
14 configuration there. That, we know how to do.

15           We weren't doing much in the way of dry casks when  
16 Yucca Mountain first started, so the big fear at that point  
17 was that the nuclear industry would have to shut down if the  
18 waste couldn't be taken out of the pools. Well, now, we're  
19 able to do that. And, it can stay there, and some people  
20 believe that there is a danger also in putting waste all in  
21 one spot, whether you have a repository or an interim storage  
22 site or whatever. This way, you have those dry casks,  
23 they're at the place where the waste was generated, and it's  
24 just the safest thing we can do right now.

25           And, we should never be making long-term decisions

1 because we think we have an emergency and we've got to do  
2 something. And, that's generally the way that they have  
3 tried to make this thing sound. So, that well, we have to do  
4 this. It may not be good, but it's better than that. And,  
5 you've got to take that out of it if you're going to make a  
6 rational good decision.

7 MS. JOHNSON: It's interesting that at one point,  
8 the nuclear industry said they had to have Yucca Mountain  
9 absolutely right now, because the waste was building up all  
10 over the country. And, then, later when their political  
11 fortunes changed, they changed, too, and said well, we don't  
12 really need it right now. We could do more dry cask storage  
13 and manage it successfully.

14 MS. TREICHEL: Right. And, there are a lot of  
15 things that go into these philosophies that they adopt.  
16 Sometimes, it's just because there was a change in management  
17 or new people come in. And, we have seen, I think we have  
18 worked through eight Secretaries of Energy, I don't know how  
19 many directors of the program, and each time, it was always  
20 forget what they said. This is a new day we're doing things,  
21 we're all going to get along now. Everything will be fine.  
22 And, of course, it just comes back to being the same old  
23 thing.

24 But, we were told for a very long time you could  
25 not introduce nuclear power into this. We were only talking

1 about the waste. This was not an argument about whether or  
2 not you should have nuclear power. It was just to deal with  
3 the waste. And, then, when things changed, it was oh, oh,  
4 nuclear power is absolutely required to get us--to avoid  
5 climate change and global warming, we have to have nuclear  
6 power, ergo, we have to have waste disposal.

7           So, that's been one of my pet peeves. Nobody has  
8 ever defined the problem. I don't know what problem they are  
9 trying to solve. If the problem is nuclear waste, I would  
10 guess it's like a leaky sink in your kitchen. You turn off  
11 the water first, and then you deal with what's going on after  
12 that. But, you were never able to say well, maybe we  
13 shouldn't have nuclear power. That's finally starting to be  
14 discussed now, since Fukushima, and it's dreadful that you  
15 have to have a disaster like that, but we do and we're here,  
16 and several countries, like Germany and Japan itself, have  
17 decided no new nuclear power here. And, I think that  
18 discussion is going to be carried on louder in the U.S. than  
19 it is right now.

20           MS. JOHNSON: Over the years, you've seen many  
21 reversals of fortune on the Yucca Mountain Project. I think  
22 at one point, you characterized that it's sort of like  
23 watching a daytime soap opera, because it goes from extremes  
24 to extremes. Can you talk about that a little bit?

25           MS. TREICHEL: Well, it was like a soap opera,

1 until they decided not to do it anymore. But, you could  
2 almost always be gone for a while, come back and pick up  
3 right where you were. The players may have changed, various  
4 things may have stopped or started, but it was always just  
5 sort of this relentless march toward the final goal.

6           And, I always thought that we would win in the end,  
7 but I wouldn't have bet a lot of money. But, I really  
8 thought that because so many things were wrong with it, that  
9 we eventually would prevail in the end. And, that's the only  
10 reason I stayed on with this. I did it through a generation.  
11 My children were very small when I started, and now my  
12 grandchildren are not small anymore. So, it's been a very  
13 long time. And, you give up a lot to be able to do this  
14 stuff. And, it's very difficult because you don't have  
15 money.

16           I figured out that over the course of this thing,  
17 the Nevada Nuclear Waste Task Force that I'm with operated on  
18 one-ten thousandths of the money that the Department of  
19 Energy got each year. They were getting about a million a  
20 day. We were operating on, which would be about 350 million,  
21 we operated on about 30,000 per year, to their 350 million.

22           So, it was very difficult, and the only way we  
23 could do it was by being flexible, by being inventive, by  
24 having a lot of friends, like the cartoonist, the editorial  
25 cartoonist at the two papers have been wonderful. They have

1 done some marvelous cartoons. Some of them, we have gotten  
2 the originals and we were able to auction them off. You  
3 know, we sort of operated on a bake sale economy rather than  
4 the huge amounts of money that the nuclear industry and the  
5 government have. So, it's been very hard.

6 MS. JOHNSON: Finally, I think I want to ask you  
7 about the challenge of inevitability. You just touched on  
8 that a little bit. But, I want to have you explain the  
9 culture of inevitability that you were constantly struggling  
10 against.

11 MS. TREICHEL: Well, as I told you earlier, we came  
12 to Las Vegas from Minnesota because the weather was just too  
13 tough for--my husband at that time did outside construction.  
14 So, it was a very difficult climate for that. And, we came  
15 with the idea that we'll see how this goes, and if we don't  
16 like it, we can go back or we can try somewhere else. That's  
17 generally the reason people come to Las Vegas, is they need a  
18 job, or there's been problems where they are, there's either  
19 environmental problems or economic problems, or something,  
20 and they leave to try Las Vegas. So, they don't have ties  
21 here. This isn't where their grandparents lived. They don't  
22 have extended family.

23 And, it's very hard to get people to get involved  
24 in an issue that's so long-lasting. You're talking about  
25 something that went on now for 30 years at this point, and



1 we're talking a million years in the future for a repository  
2 site. So, to go out and continually keep telling people this  
3 is really important right now, this is the time you've got to  
4 show up.

5           And, I had my kids leaning on their friends to try  
6 and get people out, promising people if you just do this, you  
7 don't have to come to my funeral, just show up now at this  
8 time. And, we were successful in getting some decent crowds  
9 when there was a really important time about this.

10           But, to have membership or to have people really  
11 take this on as a long-term issue that they were going to pay  
12 attention to was virtually impossible. So, when you would  
13 hold a meeting, or you would hold an event, you always held  
14 your breath until at least the first couple rows were filled  
15 with people. But, we have had no-shows, and it's been very,  
16 very tough.

17           And, an example of that, at one time Greenpeace,  
18 the international organization, came in here before they were  
19 very disgusted at what the Yucca Mountain Project looked  
20 like, and they were here for probably a year, with various  
21 activities, and then they just said, "We generally are  
22 effective when there is a threat or a project, and you go in  
23 and you do a big splash and it either succeeds or it fails,  
24 but that's what we can do for you. And, there's nothing like  
25 that about this project, so we wish you a lot of luck. But,

1 we're going to go on to saving some seals, or something."

2 MS. JOHNSON: Let's move on to the next question.

3 Joining us now is Steve Frishman, the long-time  
4 technical and policy consultant for the State of Nevada's  
5 Nuclear Waste Project Office and Agency for Nuclear Projects.

6 Steve, there's a couple of meetings that you and  
7 Judy attended on behalf of or with Eureka County. One of  
8 them was a workshop in Crescent Valley to help residents of  
9 Crescent Valley prepare for the Draft Environmental Impact  
10 Statement hearing. Can you tell us a little bit about that?  
11 And, this is the flyer that we used, just to refresh your  
12 recollection.

13 MR. FRISHMAN: Yes. One of the things we thought  
14 was important to do was to help people understand, first of  
15 all, what an Environmental Impact Statement is, and more  
16 important, we get people comfortable with the public process  
17 that's involved with an Environmental Impact Statement. So,  
18 you know that you can make comments. You know that you don't  
19 have to read a thousand pages to get there. You can pick out  
20 something, just one issue that's important to get on the  
21 record. And, it's sort of an intimidating process unless you  
22 know ahead of time that your comment is as good as anybody's  
23 comment.

24 So, what we did was held a workshop in Crescent  
25 Valley that was remarkably well attended. I was really

1 pleased to see that it was a real representation of the  
2 community. And, it included people who were, you know,  
3 environmentally concerned. It included people who had  
4 connections to mining. It included Native Americans. And,  
5 whether they agree on many other topics, they all were very  
6 much in agreement about needing to be effective in their  
7 commenting to the Department of Energy. Primarily, they did  
8 not want a rail corridor coming through Crescent Valley.

9           So, now, what's the most effective way to get that  
10 message across? And, we held exercises and had small groups  
11 telling people it's okay to just say no. And, telling people  
12 where they could look in the Environmental Impact Statement  
13 to find just a paragraph that they might want to talk about.

14           So, overall, it was very effective, and it  
15 contributed to the Department of Energy getting barraged by  
16 comments on this Environmental Impact Statement. They,  
17 overall, in the course of the hearings that they held, there  
18 were over 12,000 public comments that the Department had to  
19 categorize, had to respond to, and it convinced the  
20 Department that yes, there is really big interest over this.

21           And, one of the things that the Department was  
22 constantly trying to do was tell people that their comments  
23 were not in scope. Meaning if you just say I don't like  
24 Yucca Mountain, well, that's not in scope because it's not a  
25 question whether you like it or not. So, what we were trying

1 to do is get people to say just enough to where the  
2 Department could not say you're out of scope. And, that way,  
3 people are confident that what they're saying actually has  
4 some meaning. And, I was sort of amazed at how people caught  
5 on once they understood what the process was. So, I saw that  
6 as a very successful undertaking.

7 MS. JOHNSON: We had transcripts--we have  
8 transcripts from the actual public hearings that the  
9 Department of Energy held, and I've looked through them in,  
10 well, preparing for this project, and I can say that the work  
11 that was done at that workshop is definitely reflected in the  
12 quality of the comments that we got that night, and that day.  
13 We had standing room only that night for the hearing in the  
14 Crescent Valley Town Center.

15 MR. FRISHMAN: That's what we were hoping for.

16 MS. JOHNSON: It worked.

17 Steve and Judy, the three of us went to a meeting  
18 that the Nuclear Regulatory Commission held in Beatty,  
19 Nevada. It was about setting the radiation standards for  
20 Yucca Mountain, what was an acceptable dose, I believe. Can  
21 you talk about that meeting, and your recollections of that  
22 meeting?

23 MR. FRISHMAN: Well, the Nuclear Regulatory  
24 commission has, first of all, made it very clear that you  
25 can't have a repository that doesn't leak. And, so, the

1 radiation standards are set to set some level of exposure  
2 that they say is acceptable. And, this has been  
3 controversial throughout because the idea of geological  
4 disposal is that the waste stays where you put it  
5 underground. And, this is a regulatory recognition, that  
6 safe in the regulator's mind means somebody is going to get  
7 an exposure to radiation.

8           So, in this meeting, they were trying to explain  
9 why the standards are considered safe by them. And, the  
10 standard is largely based on the--on an average person, and a  
11 question came up that was very interesting. There was a  
12 proposal for what we considered to be a fairly high dose to  
13 be acceptable, and the question came up about is this the  
14 dose to sort of the most resistant individual, which is like  
15 a, you know, 20 to 40 year old male, and the question came up  
16 did you consider that young people, children and pregnant  
17 women, are more susceptible to radiation dose damage than the  
18 standard sort of tough guy. And, the answer was no, and we  
19 don't need to.

20           And, this sort of flabbergasted everybody, we're in  
21 the name of, sort of defending against those who are  
22 concerned about radiation dose, they just say one size fits  
23 all and we say it's safe, so, therefore, you must say that  
24 it's--or, must accept the fact that we say it's safe.

25           MS. TREICHEL: Well, one of the outlandish things

1 was the fact that you were probably going to get a dose  
2 through drinking water, and they said that kids don't like  
3 water. Children don't tend to drink much water, so,  
4 therefore, their dose would be somehow equivalent to this  
5 standard man. And, the audience just plain didn't buy it.

6 MS. JOHNSON: Wasn't there also a confusion between  
7 the radiation standard for the Waste Isolation Pilot Project  
8 in New Mexico, and the radiation standard for Yucca Mountain?  
9 I recall wondering why the same standard wouldn't apply to  
10 both repositories.

11 MR. FRISHMAN: It was primarily because you had,  
12 essentially, a different view at a different time for one  
13 repository versus the other. And, statutorily, they're not  
14 linked. Regulatory linkage is not there. So, they set out  
15 on their own, and it was at a time when there was real  
16 concern about a safety standard for Yucca Mountain, and what  
17 we say the Department of Energy and NRC and EPA doing was  
18 essentially saying that Yucca Mountain is the standard. And,  
19 whatever we think Yucca Mountain is capable of in terms of  
20 releases, then that's what the standard is going to be.

21 For the Waste Isolation Pilot Project in New  
22 Mexico, the standard was set and pretty well understood, and  
23 it was set based on being consistent with other NRC and EPA  
24 standards. Yucca Mountain was out on its own.

25 MS. JOHNSON: I want to move on and ask you a

1 question about your experience in the many times that you  
2 have toured Yucca Mountain. I know you've gone probably  
3 hundreds of times on tours to and through and into Yucca  
4 Mountain. Can you talk about your experiences and  
5 observations about doing that?

6 MR. FRISHMAN: I think we have been a few hundred  
7 times, and with all kinds of groups from media people, from  
8 Japan and Italy and all over the world, to school groups, to  
9 trade groups, to university students, and even Congressional  
10 staffers and members of Congress themselves.

11 And, the Department makes sort of a show about it.  
12 There is really nothing that they do that tells you about the  
13 real science of site characterization. You get to see a  
14 tunnel boring machine, which is a monstrous piece of  
15 equipment that built a 25 foot diameter tunnel for about five  
16 miles through Yucca Mountain. You get to see the ventilation  
17 system in the tunnel, which is sort of standard mining  
18 equipment. You get to see the rail that's used for  
19 transporting people and equipment in.

20 But, then, you get a little bit of a lecture in one  
21 little side tunnel that talks about how they were trying to  
22 see how, you know, fluid would move through a fault, because  
23 there's a fault right near where this little side tunnel is.  
24 But, it's mostly impressive to people just because it's a  
25 monster engineering job, and you have a lot of building in

1 it. If you didn't know what it was, it looks pretty much  
2 like other--the entrance to another big mine. So, it's sort  
3 of a gee whiz type thing.

4           And, it was kind of interesting, at one point, we  
5 were with a group of Congressional staffers who, part of the  
6 tour is to go up on top of Yucca Mountain, and on a clear  
7 day, you can see over 100 miles, and you can see the mountain  
8 ranges around, and the Congressional staffers were being  
9 lectured to about what a great place this is for nuclear  
10 waste, and I overheard a few of them, sort of in the back,  
11 discussing what a beautiful place this is. Why would you  
12 want to screw it up with nuclear waste. So, the whole  
13 premise was sort of failing.

14           But, the tours were very popular. They, for a  
15 while, were actually running monthly tours that people could  
16 sign up for, and it turned out that, you know, anecdotally,  
17 we found out that there were people who were actually taking  
18 the tour every month, and that was back when they were giving  
19 out free lunches with the tour. So, it became sort of an  
20 event, and the Department of Energy, you know, kept track of  
21 how many people went, trying to prove the popularity of Yucca  
22 Mountain. And, they had this what they always claimed was an  
23 unscientific survey where they would ask people what they  
24 thought of Yucca Mountain when they got on the bus in Las  
25 Vegas, and then ask them what they thought of Yucca Mountain



1 when they got back off the bus, after the tour.

2           And, they would give us these miraculous numbers  
3 about how many of them changed their mind and what a great  
4 science project this was, and so on. It was a public  
5 relations thing. And, sure, there were people who were  
6 interested in seeing it for many different reasons, but  
7 nothing on the tour was actually convincing about whether it  
8 would be safe for nuclear waste or not.

9           One of the things that got us on those tours so  
10 often was that we occasionally would be told by people who  
11 went on a tour what the tour leaders were telling them about  
12 Yucca Mountain. And, we were sort of indignant about the  
13 extent to which they were misrepresenting what was going on  
14 there.

15           So, through a period of time, and some fairly tough  
16 negotiations, we got the system put together to where if the  
17 tour group, or a representative of the tour group, asked that  
18 we go along, then the Department of Energy could not say no.  
19 So, that's how we got onto a lot of tours. And, we found  
20 that our presence on the tour sort of kept the Department of  
21 Energy from misleading people about what was going on there.  
22 And, it was because we weren't shy about interrupting them  
23 when they were telling people things that were absolutely  
24 false. And, they got kind of used to it, and it got to the  
25 point where it was almost a joke with some of the regular

1 tour leaders, where if we were at a time when we weren't  
2 antagonistic towards each other, we would be able to sort of  
3 joke well, do you want to give your story, or should I give  
4 your story, because we knew each other's story that well.

5 But, overall, just our being present made a  
6 difference in what people were told. And, we thought that it  
7 was sort of an obligation to keep the Department of Energy  
8 from misleading people about what was and wasn't going on  
9 with Yucca Mountain, and, the question of what would make it  
10 safe and what would not make it safe.

11 MS. TREICHEL: Some of the ones that were my  
12 favorites were when some of the officials came. At one  
13 point, we went with the Chairman of the Nuclear Regulatory  
14 Commission, and at another point, the Director of the  
15 Civilian Radioactive Waste Program from headquarters, and I  
16 was always very irreverent. Steve had to sort of be somewhat  
17 respectful. And, as a representative of the people, I didn't  
18 feel that I needed to put on any kind of a show. And, I  
19 remember when we had the tour for the Chairman of the Nuclear  
20 Regulatory Commission, we were all sort of staged in the  
21 tunnel, and placed in places, because they were making film  
22 to show her taking this tour and taking a look at the site  
23 first-hand.

24 And, they would tell you, "I would like you to  
25 smile. I want you to take that hat off. I'd like you to do

1 this or that." And, I thought it was so bizarre that they  
2 would use us as props in this whole thing. And, at one  
3 point, I was sitting next to the Director of the Radioactive  
4 Waste Program, and we were in the train, and the conveyor  
5 belt was pulling the rock that was being dug out ahead of us  
6 out of there. So, the train is going by and you're getting  
7 this stuff falling on you, and rock is these little pokey  
8 things that were hurting. And, so, I told him, I said, "This  
9 is insane. Here we are being hit with this stuff." And, at  
10 various points, you would see terrible faults in the rock,  
11 and so forth, and I could point those out, and he was kind of  
12 rolling his eyes.

13           But, it was really fun because the staff that was  
14 there to conduct the tours, unlike when school kids would go  
15 and they were being given a bunch of baloney from these  
16 people, or when other tours would go and it was this hard  
17 sell, the tour guides on these tours were very nervous and  
18 very much worried about what their bosses would be saying.

19           But, that incident when I was with Dan Dreyfus  
20 sitting in the train and the stuff is falling on us, was part  
21 of what made Steve and me eligible for a class action suit  
22 that was being put together for people who were exposed to  
23 enough silica within the mountain, primarily the miners, but  
24 anybody that was there a certain number of times, and we had  
25 exceeded that number of times, was encouraged to join this

1 suit in case you would ever get silicosis.

2 And, the case eventually was settled and ended when  
3 the miners were paid off a certain amount of money. I don't  
4 know that it was disclosed. But, there were, what, two or  
5 three people who died and there were a few who had silicosis,  
6 who would be dying, and probably have now.

7 MR. FRISHMAN: And, there was one who--many of the  
8 miners had worked in other mines, but there was one person  
9 who had never worked underground except at Yucca Mountain,  
10 who within about four years of when he worked there, came  
11 down with silicosis. And, so, there's no claim that you got  
12 it someplace else

13 And, at one point, the miners almost walked off the  
14 job, because during their lunch breaks, you know, they were  
15 staying with the mining equipment, and they had what they  
16 called a lunchroom as part of the trailing gear on the tunnel  
17 boring machine, and the dust was so heavy inside their  
18 lunchroom, that they were literally eating dust while they  
19 were eating. And, they threatened to walk off the job, and  
20 then things started cleaning up a little bit, but not much.

21 MS. JOHNSON: And, is that because the Department  
22 of Energy is self-regulating for mine regulations?

23 MR. FRISHMAN: The Department of Energy made an  
24 agreement with the Mine Safety and Health Administration that  
25 MSHA would only be advisory, and the Department of Energy did

1 not want them regulating. And, they made a case that this is  
2 not a mine so, therefore, you don't have jurisdiction. And,  
3 MSHA went for it.

4 MS. TREICHEL: Well, I think it was money. They  
5 wanted to make time in that tunnel. They had all these signs  
6 up all the time, and we were getting notices, or the State  
7 was getting notices periodically about how many meters they  
8 had gone, or how many feet they had gone in how much time,  
9 and every one of those minutes and every inch of that tunnel  
10 cost a whole bunch of money. And, they didn't, I guess if  
11 you provide respirators to miners who are in there, you have  
12 to pay them, what was it, a dollar additional an hour.

13 MR. FRISHMAN: A dollar and a half an hour.

14 MS. TREICHEL: And, they were slowed down. It's  
15 hard to work in all of that, and it's hot. So, they just  
16 decided to do it the quick way and see if you could get by  
17 with it.

18 MS. JOHNSON: Steve, Judy, thank you very much for  
19 your time.

20 MS. TREICHEL: You're very welcome. It's a  
21 pleasure.

22 MS. CLANCY: And, from behind the camera, this is  
23 Gwen Clancy again. And, we will be using this footage in two  
24 ways, one to take excerpts to put on the website, and also as  
25 full length DVD versions of the total interview. And, those

1 will be for archival purposes for researchers. So, we want  
2 to know if we have your permission to use the footage in  
3 those ways.

4 MR. FRISHMAN: Yes.

5 MR. TREICHEL: Yes, you do.

6 MS. CLANCY: Thank you very much.

7 (Whereupon, the interview with Judy Treichel and  
8 Steve Frishman was concluded.)

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TRANSCRIBER'S CERTIFICATE

I hereby certify that the foregoing has been transcribed by me to the best of my ability, and constitutes a true and accurate transcript of the mechanically recorded proceedings in the above matter.

Dated at Aurora, Colorado, this 23<sup>rd</sup> day of June, 2011.

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