CONSENT-BASED SITING PUBLIC MEETING

Boise Centre

850 West Front Street

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FULL TRANSCRIPT

Mr. Jim Hamilton. Good afternoon, and for those of you joining us in a later time zone, through the webinar, good evening. Welcome to Boise, and to the seventh in a series of public meetings the Department is hosting on its Consent-Based Siting Program. Thank you all for being here today. My name is Jim Hamilton; I'm an advisor to the Department as part of its Consent-Based Siting Team and my role today is to simply help us all have an open and productive conversation.

To start off with, we have a few housekeeping issues. First, from a personal safety perspective – emergency exits are behind you, and to your left and to your right.

Second, you should all have an information packet that you received when you checked in – it looks something like this. Does anybody **not** have one of these packets? If so, raise your hand, and we'll get you one.

Great. There is one – can we get one over there, please?

Inside this packet you will find a copy of today's agenda; speaker biographies; a contact sheet for further information; content of the informational posters you saw on your way in; sample themes and questions for the facilitated small-group discussions – and I'll talk more about those a little later. An information booklet describing the Department's waste management approach – looks something like this. And a meeting evaluation form.

And for those on the webinar, this information is also posted on the Department's website.

Now the goal of these meetings is to engage in a dialogue around consent-based siting of nuclear waste management facilities. And to that end, we've designed today's agenda as follows.

We will first hear from our keynote speaker, Mr. David Leroy, the former Nuclear Waste Negotiator. Following Mr. Lee Roy will be John Kotek, the Acting Assistant Secretary for the Office of Nuclear Energy; he will then be followed by four panel members who will share their thoughts. We will have a question-and-answer session lasting about 45 minutes, and a quick break.

Following the break, there will be facilitated small-group discussions to dig more deeply into the issues you've heard about consent-based siting. There'll be a report-out session from these small-group discussions, and then we'll wrap up with a public comment period and some closing remarks.

This public meeting is being streamed live, and a copy of this stream, along with a meeting transcript and a report summarizing your input will be posted on the Department's website shortly.

We hope to cover a good deal of ground today. We look forward to your collective interest and your active participation.

Again, thank you all very much for being here this evening. And to get things going, I'll turn it over to Mr. David Leroy, for our keynote address. Mr. Leroy. [Applause].

Keynote Address

Mr. David Leroy. Assistant Secretary Kotek, Governor Andrus, distinguished panel, ladies and gentlemen, friends of nuclear waste.

I'm most pleased to be included in this DOE initiative to consider a design to implement a consent-based siting process in the United States. John – it's serious work. When I led that charge, as you lead this one, I had brown hair. The national media bestowed upon me certain titles. Three of my favorites were "The Monarch of Muck," "The Sultan of Swill" and the New York Times called me the "The most unpopular man in America." I bequeath any of those that you prefer to you. [Laughter].

On June 11, 1993, I completed my service as the United States Nuclear Waste Negotiator. For three years prior to that, it was my task to create a process where the public was not only involved, but had a controlling vote, in making decisions about the siting of nuclear waste facilities. In that role, I was guided by three principles.

Number one, nobody wants nuclear waste.

Number two, nobody wants nuclear waste.

And number three – you guessed it – nobody wants nuclear waste.

On the other hand, there were three corollary principles that *are* worth mentioning as well.

First, NIMBY – Not in My Backyard – is a worldwide phenomenon.

Secondly, NIMBY is not bad. It's not good. It's normal; it's human.

And third, NIMBY can be made to work for siting instead of always against it.

Consider this. Public concern generates attention. Public interest can lead to learning. Public understanding can lead to comfort. And public acceptance can lead to cooperation in siting these kinds of facilities.

The most sensitive issue worldwide for nuclear power is the end of the fuel cycle – the management of nuclear waste – because worldwide the greatest amount of friction in the public and the sharpest local focus is found there. I believe that a properly-designed consent-based siting program for waste facilities can be a catalyst for positive national dialogue and that a collection of positive national dialogues can build a bright and proper future for nuclear power worldwide. It is for that reason that the consent-based initiative in this country is very important.

In 1992, Congress adopted a law which created a nationwide survey to try to find two deep geological repository locations for spent fuel from commercial reactors. One was to be located in the East, and another in the West. That nationwide search, which began with more than 20 scientifically appropriate candidates, very swiftly fell apart over the politics of nuclear waste. Significant public outcries erupted at all of the targeted sites all over the nation. Various locales began to drop off the potential site list as their protests were successful, until finally, some five years later, the program was in shambles because the premise of a nationwide, politically-balanced, scientifically-sensitive, objective search had been destroyed. NIMBY prevailed.

Therefore, in 1987 Congress revisited the Policy Act and selected just one candidate for the initial site characterization for a repository – Yucca Mountain in Nevada. As you would predict, the State of Nevada, it citizens, and political leaders have been vigorously fighting that location ever since.

However, also in the 1987 Act, Congress created a separate parallel siting process that created the Office of the Nuclear Waste Negotiator. It was to be led by a presidentially-appointed individual who would contact the 50 sovereign states and the 565 recognized sovereign Indian Nations within the borders of our country to determine under what conditions – if any – those states or tribes would be willing to volunteer to host either a permanent repository or a temporary facility for the storage of commercial spent fuel.

A volunteer facility would relieve even then the storage problems that the United States was experiencing at on-site reactors. When the White House contacted me to request that, on behalf of the President, I take this position, I heard of the challenge facing the Office, and my first reply was, "You've got to be kidding me. Nobody wants nuclear waste."

But the more I studied the job, the problems of our nation, and the need for a new process of involving the public in reaching positive decisions, the more excited I became about undertaking the mission.

After preliminary correspondence to the jurisdictions, on October 7th, 1991, the Office issued a call for Expressions of Interest to the various jurisdictions. It was widely assumed that we would get no response. The fact is, that within the first 48 hours, our first Indian tribe applied. Within the first month, our first state-based jurisdiction applied. Over time, there were more than 30 jurisdictions within the United States which expressed a significant interest in participating in discussing this program. The activities of the Negotiator subsequently became most focused on nine sovereign Indian Nations, which applied for advanced grants to study the process of possibly hosting the temporary facility. And we did not have any significant interest expressed by volunteers to host the permanent repository.

However, as I left the office, it was entirely possible that siting negotiations *could have* been begun with one of those volunteers and the United States Congress before the end of 1993. Unfortunately, that did not happen.

But we did learn some lessons.

Number one, from my view, based on interactions with – and negotiations, and waste-management agency information from around the world – a voluntary process of siting these facilities has become a worldwide norm and a worldwide necessity.

Number two, I still believe that the NIMBY syndrome can be made to work *for* siting with proper involvement in the process.

Number three, a principal barrier to the siting of these facilities is distrust in centralized governments and government agencies, regrettably including the Department of Energy.

Number four, political leaders at all levels will be pressured to exercise early preemptive vetoes over the process and must always be given devices to be insulated from the process to avoid that type of pressure.

Number five, national grants or other study monies to let people make their own independent research and evaluation are necessities.

Number six, site tours of existing facilities are one of the best ways that average citizens as well as political leaders can understand what these facilities are, and how safe they are.

Seventh, special attention and working press protocols must be emphasized from the outset to create media understanding and the accurate delivery of communication.

And eighth, whether the political conditions are correct anywhere in the United States for the voluntary siting of nuclear waste facilities remains an open question.

These processes and decisions will take time if we are to reverse 50 years of nuclear fear which grips our citizens – in other words, sometime we must slow down to speed up on issues relating to nuclear waste.

John, as you attempt to advance the principle of consent-based siting toward successful emplacement, I see four critical issues.

- Number one, the definition of "consent;"
- Secondly, the question of who may veto an initiative;
- Third, the package of benefits available to volunteers;
- And fourth, the agent driving the action.

First, the definition of "consensual." Because consent between two parties cannot be finessed, you either have it or you don't. One line in the DOE explanatory materials which would concern me gravely if I were a perspective volunteer is found at Page 11, Point 2, where it reads "Nations and states will want to retain some unilateral ability to withdraw, at least up to a point." In my view, short of a final agreement, such volunteers must always have the ability to withdraw. It's understandable that national agents want as much certainty as early as possible. It's understandable that they would like to avoid – just as we did – spurious or insincere initiatives, and it's certainly possible that some taxpayer dollars may be wasted on

initiatives that would not go anywhere. But you simply cannot cram down consent. Our 1990s definition had eight points. They are:

- The process must be truly voluntary;
- Requests for information and preliminary discussions are not viewed as a commitment to proceed further:
- All dialogs are terminable at the will of the host any time, for any reason, or for no reason at all;
- All discussions should begin with the thoughtful evaluation of issues concerning health, safety and the protection of the environment;
- There are no irrelevant issues;
- A perspective host is entitled to achieve an equity for helping to solve national problems and the means of achieving that equity and should represent the concerns, needs, and desires of the host, and next-to-last;
- The process must encourage broad public participation and seek to consider credibly the views of all affected stakeholders, and finally;
- The success of the process is possible only through full participation.

I'm pleased to recognize that though these tenets may have worked in the 1990s, the science of local community volunteerism has advanced greatly since then. Obviously, a simpler definition of consent can be now achieved, but it must be truly voluntary and respect the needs and wishes of the perspective host throughout the process, not just to a point.

Number two. The question of who may veto an initiative – we struggled in the Office of the Nuclear Waste Negotiator with how all the moving parts might fit together when a tribe within state boundaries or when a locality within state boundaries indicated some interest in possibly exploring the siting of a facility. We determined that tribes, as sovereign nations, should not have their initiatives vetoed by states or other interested parties. We determined, however, that localities, since they likely needed to necessarily cooperate with chief executives, the governors of states, and the legislatures of states and things such as control or amendment of state laws, transportation corridors, multijurisdictional benefit packages – that as to localities – governors and legislatures *would* have such a veto. We also concluded that as to both tribes and to localities, that individual congressmen or individual senators, though displeased, would not have such a veto. We've lost some promising initiatives to statewide vetoes.

Nevertheless, as things have advanced in this country – as transportation of waste; as a proven safe history of national control of interstate highways and other transportation corridors has continued to be successfully defended and advanced in the courts – perhaps it is no longer necessary to give vetoes as liberally as we did in this process to any person other than the locality involved in presenting. As volunteerism of this type is advanced, perhaps external vetoes can be restricted.

Third, the benefits package. You note in the materials that the Blue Ribbon Commission found that we need not be limited to financial options and we certainly would agree with that. Indeed, we always assured prospective volunteers of two points.

Number one, we would talk about safety first. And benefits last.

And secondly, they could propose their *own* benefit package to us, which we would meaningfully consider.

By those two rules being on the table, initially and at all times, we achieved two advantages.

Number one, we avoided the allegation of bribing some entity – any jurisdiction; all jurisdictions.

And secondly, we created a deep-seated self-interest among those jurisdictions that were contemplating possible volunteerism because they began at a relatively early stage, not just hearing what was in it for them, but possibly designing uniquely and locally and personally what they might achieve should they be interested in continuing in this process.

And as we had dialogue with up to 30 jurisdictions, we found various suggestions of a very wide array that interested possible volunteers. Infrastructure improvements, including highways, railroads, waterways. Environmental improvements, including the cleanup of existing air, water or waste problems. Public school assistance. Higher education programs. Health care programs. The proposed co-location of other federal projects or the expansion of federal projects. General economic development programs. A transfer of ownership of federal properties. Tax subsidies and property-value protection programs. Public recreation improvement programs. Direct financial assistance. And local employment or products-purchasing agreements and to that our Office added any other benefit, equity assurance or assistance desired by the host and deemed a proper part of a reasonable agreement by Congress and the Executive.

Finally, fourth, the agent driving the action. The concept of Congressman Morris Udall in 1987 in the amendments to the Nuclear Waste Policy Act was that the DOE would not be properly situated to be the change agent – the proposer, the salesman, the activist – on this project. Instead, he proposed in the amendments that the Negotiator would be an Undersecretary-level person appointed by the President consulting with the Secretary of Energy; Senate-confirmed, but would report directly from an independent post to the Congress and to the President. The specific authority of the Negotiator was to present **any** consent-based proposal, not to the DOE, but to the Congress and to the President directly.

We were an independent agency. With permission, we sited ourselves here in Boise in the West, in part to be more proximate to those areas of rural land that might be better situated to be prospective hosts.

So the question that I did not find addressed in the DOE materials to date is: Who will drive the action? Will that be someone within or without the Department; will it be a Negotiator's Office or something else?

In summary, I would simply say that the bottom line in the politics of nuclear waste is that perception becomes the reality. In siting facilities which affect the public, it's the public's perception – that of the average citizen, the housewife, the working man – which most influences ultimate outcomes. The hard science must continue, of course, to advance and to strengthen the technical aspects of nuclear generation, but a parallel and corollary soft science must continue to evolve to make people more comfortable with

nuclear power and siting decisions. Open, broad, voluntary public participation by local citizens and local politicians on the siting of controversial facilities is the best way to win that support.

A final word of warning – of caution.

In re-creating consent-based siting, you will necessarily be dealing with politicians. Like NIMBY, a related concept is in play, NIMTO – meaning Not in My Term of Office. In 2006, I wrote a paper called "Political Life and Half-Life: The Future Formulation of Nuclear Waste Public Policy in the United States." In it, I observed government by popularly elected officials serving two-, four- and six-year terms is ill-designed to address public policy related to highly unpopular and long-lived nuclear waste. Predictably, many politicians duck, run and cover when controversial waste issues are on the table. A consent-based process should be more palatable; more capable of finding congressional and elective and executive support than any other process has yet been.

Yet here we are, long in the shadows of the Obama Administration, with much work left to be done.

John, congratulations on the efforts – congratulations to the Secretary that you have proceeded as far as you have. As did some members of Congress in 1982 and 1987, hopefully you'll be able to find a few key persuasive legislators who will stand tall and not think small on this key issue.

Perhaps unfortunately, perhaps fortunately, the consent in consent-based siting must first be found in the Congress. We need some heroes. Thank you very much. [Applause].

Mr. Jim Hamilton. Thank you, Mr. Leroy. We will now hear from John Kotek, the Acting Assistant Secretary of the Office of Nuclear Energy. Mr. Kotek.

Mr. John Kotek. Thanks very much. Before I make my remarks, we do have a welcoming address from Secretary Moniz that we'd like to play, so if we could cue that up.

The Honorable Dr. Ernest Moniz, United States Secretary of Energy. [Recorded video]. Hello, and welcome. The meeting you're taking part in today marks an important step toward resolving a challenge that I've been working on for many years. Back in 2010, before I became Secretary of Energy, President Obama and Secretary Chu asked me to serve on the Blue Ribbon Commission on America's Nuclear Future and tasked the Commission with recommending a new plan for dealing with spent nuclear fuel and high-level radioactive waste. Currently, this material is stored on-site at reactors, or at DOE sites, both operating and shut-down, around the country. This system of managing this material is less secure and less permanent than either an interim storage facility or a geological repository. The effort to build a repository at Yucca Mountain made clear that building a repository in a community or state that did not agree to host one was not workable.

With that in mind, the Commission set out a path that we hope will enable the United States to find locations where we can store and ultimately dispose of spent fuel and high-level waste securely and safely. Today, and at meetings occurring around the United States, we hope to hear from you about what a fair and open consent-based siting process should look like. Your input will be essential to the Department of Energy's future approach to seeking a community or communities that agree to have a federal interim storage facility or repository in their area.

To be clear, the Department is not yet considering any particular locations for siting these facilities; rather, we are gathering feedback about how the process of locating such facilities should look going forward. That process will be important to removing spent fuel and high-level waste from on-site storage at nuclear plants and from DOE sites.

Moving forward with a workable plan is also critical to ensuring that nuclear power remains an option for low-carbon electricity in the United States.

I look forward to hearing from my colleagues about this meeting, and others occurring across the country. Again, I want to thank you for coming out today to share your feedback about how a consent-based siting process should work.

Moving Forward with Consent-Based Siting

Mr. John Kotek. Great. Thank you all again for being here. I'm John Kotek. I'm particularly pleased to be here in Boise because this is my hometown. I live here in Boise – have lived here with my wife and kids for about five years and continue to do so, even though I'm working this job in Washington, D.C.

Why are you hearing from someone from the Energy Department on this challenge? Well, in 1982, as the Lieutenant Governor said, the Congress assigned responsibility for developing a nuclear waste repository to the Department of Energy. Since that time, as the Secretary alluded to, there have been a series of efforts – actually, expanding back before 1982 – to develop facilities for both storage and disposal of wastes. None of them have worked. We're trying to reset that program, building on the Recommendations of the Blue Ribbon Commission on America's Nuclear Future, in using a consent-based siting process. Alright?

We're here tonight to get input from you all on the *design* of a consent-based siting process. We are not yet at the stage where we're talking about siting or looking for specific locations. The reason we're here in Boise in particular is because here in the state of Idaho, I think we've got more experience dealing with issues of nuclear waste both at the state level and at the national level than maybe any other state. So there's very valuable knowledge and experience in this room and we want to tease out; we want to learn from.

At some point in time, we will get to the point where we're talking about what we call willing and informed host communities, tribes and governments. We're not there yet. There may be people here tonight that want to speak out either for or against Idaho playing a role, but you're welcome to say those things if you want to, but that's not what we're here tonight to do. We're here tonight to work on the design of a process.

My role here tonight is to describe just a little bit about where we are, how we got here, and what we want to do going forward. Those of you who are familiar with this issue know that we have spent nuclear fuel and high-level wastes stored in locations around the country, including here in Idaho, that had been generated as a result of commercial nuclear power production; research and development activities or national defense activities, principally.

On the commercial nuclear side, we've been generating nuclear electricity in the U.S. for about 60 years. As a result of that generation, we've produced about 75,000 metric tons of spent nuclear fuel that require disposal. If you need a visual on that, picture a football field stacked about 20 feet high with spent fuel – that's the material that we're talking about. As a result of that, we get just shy of 20% of our electricity, carbon-free, from nuclear power each year, right? But those wastes remain hazardous for a long period of time and must be safely managed and disposed.

Why is this stuff a problem? For those of you who are not immersed in the details of nuclear power, suffice it to say that in a nuclear fuel assembly, and we've got a mockup of one over here by the posters if you had the opportunity to see one. Inside their fuel rods are uranium, and uranium atoms used in the process of generating nuclear power get split – the uranium is radioactive, it's very mildly so, but when you split the uranium, you generate some very radioactive materials we call fission products. Those generate a lot of heat, and a lot of radioactivity, and as a result they need to be kept cool in the short-term and isolated from people and the environment over the long-term. Okay?

So here's a picture of what a fuel assembly looks like. A typical reactor has somewhere between 200 and 500 assemblies in the reactor core depending on the design and an assembly is about 12 to 14 feet long, again, depending on the reactor design. Okay? I mentioned this material is very hot when it comes out of the reactor, so what we do is, what commercial utilities do, is they first put it into wet storage, and a pool that looks like something like the pool you see up there on the top left. After the fuel has cooled down enough, and as those pools fill up, the fuel is moved into dry storage, like the casks you see sitting on pads in the lower right. Roughly speaking, about two-thirds of the fuel at reactors around the country is in pool storage; about one-third is in dry storage, but that percentage is going up, as pools fill up and we need to make better use and more use of dry-storage capability.

On the government-generated waste side of things I mentioned earlier, from nuclear-weapons activities, from research activities, the nuclear Navy and other activities have generated spent fuel or high-level wastes that are in storage at locations around the country. In Idaho we've got, ballpark, about 300 metric tons of spent fuel from Navy activities, from DOE activities, and others. We've also got things like calcine waste and liquid waste that are left over from the reprocessing of fuel in Idaho. So we've got a stake in this – in seeing a solution to this challenge.

So again, just to kind of sum up, about 75,000 metric tons of spent fuel at reactors in the United States growing by about 2,000 metric tons a year, and then large volumes of high-level wastes, 12 million cubic feet of high-level radioactive wastes, that we need to develop a solution over the long-term.

Where is this stuff? It may be hard to see this map, but I think we have the map on one of the posters over here if you're interested in seeing, but on the order of 40 states around the country either have commercial reactors or DOE sites, or both, that play host to these materials, so it's an issue that we as a nation have a stake in seeing resolved.

A particular focus for us in the DOE program is dealing with fuel from shutdown commercial nuclear reactor sites. There are 13 shutdown commercial sites plus a 14th reactor in Colorado that we refer to. These are locations where there has been power production, over years, maybe decades; but the reactors have since been shut down and in some cases everything is gone – the reactor has been decommissioned; it's been torn down; the turbine hall is gone; the administration building; everything is gone, except for

the spent fuel. So you've got a spent fuel storage pad with guns, guards and gates on an otherwise reusable piece of real estate.

This is one example of the growing federal liability associated with this challenge. The Department of Energy, under the Nuclear Waste Policy Act, was supposed to start accepting spent fuel from utilities in 1998. That obviously hasn't happened. As a result, utilities have been successfully suing the Department for damages to recover some of the costs that they incur in storing this fuel. The government pays out several hundred million dollars a year from something called the Judgment Fund. Thus far, the government has paid out about \$4.5 billion already. The total estimated liability is projected to be well over \$20 billion over the coming decades. This is money that just comes straight out of the Treasury. It doesn't come from my program or from the Department of Energy. Straight out of the Treasury. If you're a taxpayer, you're paying that. Okay? That's one of many reasons we would like to get the process going so that we can start fulfilling the obligation to accept fuel, and we think the shutdown sites make the most sense as a starting point.

The cost issue is one of several reasons why we think we ought to act now. The fact is this material, either the waste from commercial reactors or the waste resulting from defense activities, was generated for our benefit, alright? Whether you agree with it or not, the fact is, our society made a decision to go forward with nuclear weapons production, the nuclear Navy and commercial nuclear operations. We created this mess and we ought to do something about it and we should not just pass it on to our kids.

The money, at least on the commercial side, to address this challenge, has been collected. As you may know, there is a one-tenth of a cent per kilowatt-hour charge that for decades was levied on nuclear-generated electricity. This has resulted in a balance of more than \$30 billion in something called the Nuclear Waste Fund that's part of the Treasury. The money is there to really begin dealing with this issue. Let's deal with it now, is our take on the issue.

And then finally, we have the technology and the resources to deal with this. I'll talk a little bit later about other countries that are ahead of us in this area. But suffice to say we think that the technology is at hand to protect people and the environment from this material over the millennia that are required. It's a question of, as the Lieutenant Governor said, of working through and finding the sort of political and societal courage to address the challenge, alright?

A little bit about the history in our approach. I won't try to go through all this. This is an eye chart right now. And again it's on our posters back here. But if you're interested in the history of how we got here it may be informative and frankly if you're interested in learning more about the history, now where's Tom Cotton? Tom, raise your hand. There he is – back there. See this guy. He's been working on this issue for a long time and he knows the history – great guy to get to know if you're interested in learning more, but there have been several attempts over the years, even stretching before the Nuclear Waste Policy Act, of imposing a top-down, federally-driven solution on an unwilling host state. None of them have worked. That's a big part of the reason why we're trying a different approach now. Okay? And it's a big part of the reason why the Blue Ribbon Commission recommended that we use a consent-based approach for siting new nuclear waste management facilities.

We're also attempting to learn from other countries who are ahead of us. So, you'll see, Canada, Sweden, Finland, France – all have very active repository programs. The Finns are the furthest along; they have

identified a site using a consent-based process; they've submitted that site to their regulator and the regulator has approved it and they're about to enter into construction for their site. The Swedes are not far behind; the Canadians and the French are a little further back. The Canadians are closest probably to us in that they are in the early stages of implementing a consent-based siting process where they've sought interest from communities that might want to learn more and ultimately serve as a willing and informed host community. When they put out their Call for Expressions of Interest, they got – I forget how many responses – I think it was 21 or 22; and they are now working seriously with nine communities to look and see if they've got potentially the right geology for a disposal facility; so we've seen examples how a consent-based siting process can work in this area. That's not to say it's worked everywhere. There are other examples of consent-based siting processes stalling out in countries. But I don't think there's any country that's as far along with their repository program as these folks that hasn't used a consent-based process. Okay?

The knowledge of what's going on overseas and the understanding that a top-down process doesn't work really informed the Recommendations of this Blue Ribbon Commission. And part of the reason that I'm here is that I was asked to serve as Staff [Director] to that Commission back in the year 2010, and did that for a couple of years, and then when Secretary Moniz decided that he wanted to try to restart the program, he asked me to come back. So I've been doing this for about 18 months, trying to figure out how we get a process started – how we design a consent-based siting process to ultimately lead to new storage and disposal facilities in the US.

The things that we're trying to do are really implement what's really embodied in this Administration's Strategy, so if you haven't looked at it, I would encourage you to. What you'll find about in the Strategy is that we've got a vision for what we call an integrated nuclear waste management system. And we envision the system that may contain what we call pilot interim storage facilities, which initially would be focused on accepting spent fuel from the shutdown reactor sites. A full-scale consolidated interim storage facility or facilities that provide greater capacity and flexibility within the nuclear waste management system. A permanent geologic repository or repositories for disposal of spent fuel and high-level waste, potentially including a separate repository for defense wastes only, and then of course, the transportation infrastructure to move spent fuel and high-level radioactive waste, whether it be by rail, truck or barge.

So the Strategy, again, calls for construction of consolidated interim storage facilities, both pilot and full-scale facilities, to provide flexibility to give us the ability to begin accepting waste to begin addressing the federal liabilities associated with this material.

The transportation system is going to be essential. That's one of the things that I know can be a source of great concern. We know that a safe, dependable transportation system is a necessary link for the operation of any integrated system for managing and disposing of spent fuel and high-level radioactive waste. Fortunately, we do have a lot of experience in moving spent fuel – the Navy has been doing it the most, most recently. But also we've got a lot of experience in dealing with transportation of radioactive wastes down to something called the Waste Isolation Pilot Plant in New Mexico. There've been more than 10,000 shipments of radioactive waste down to that facility and more than 5,000 of which came from here in Idaho. Those are shipments that are coordinated very closely with state and tribal entities responsible for emergency preparedness and so we've got a system that is succeeding and that we can build on here, but we still know that this is going to be a very important thing for us to get right in that it's going to

require us working very early and very proactively with these state and tribal entities that are responsible for training, for emergency preparedness, and for helping us safely execute the shipments.

For those of you who haven't seen one before, during transportation, the radioactive materials, of course need to be packaged safely just in case there is an accident, so we use packages like this one that contain an inner canister that holds the waste and that go through a series of tests whether it's crashes, fires, or punctures, to ensure that these materials can be safely transported across the country. The Nuclear Regulatory Commission would be responsible for licensing casks like this to ensure that they meet safety standards, but again this is going to mean working very closely with the regulatory authorities to ensure that we can get that piece of it right. And then of course, all roads ultimately lead to a deep geologic repository. Every foreseeable approach to the nuclear fuel cycle, whether you believe in closing the nuclear fuel cycle or reprocessing the fuel or just direct disposing it, requires a means of disposal that assures very long-term isolation of wastes from people and the environment. No such facilities have yet been put into operation, as I mentioned. Finland is closest. But every nation that's developing this disposal capacity plans to use what we call a deep mined geological repository which involves carefully prepared and packaged radioactive waste being placed in excavated tunnels in formations such as salt, hard rock or clay and what you do is you count on a series of barriers, both the natural barriers presented by the repository environment, but also engineered barriers – the disposal package, the waste form itself and other barriers that you might build in to ensure that you can adequately protect people and the environment from this material over thousands of years.

So that's a little bit about the issue. So, what's the path forward? What we are looking for is, again, the ability to work successfully and collaboratively with community stakeholders and governments at the local, state and tribal levels to develop this integrated nuclear waste management system. Of course, in doing this, our goals are to ensure safe and secure operations, to build and maintain trust among stakeholders and the public and adapt our approach based on the lessons we learn as we go forward.

We're at this stage of the process now where we are engaging the public and interested parties on what should the elements of a consent-based siding process be. So what we're going to do today is you're going to hear from me, and hear a range of perspectives on this issue from our panelists, and after the Q&A session, we're going to break folks down into smaller groups and we're going to ask you talk it out and help us understand what do you think are the things that you think we need to be focused on as we develop and design a consent-based siting process?

So we started by posing a series of questions. How can the Department ensure that the process of selecting a site is fair? What models and experience should we be looking at as we design this process? Who should be involved in the process for selecting a site, and what should their role be? And then what information and resources do you think would facilitate further participation in this process? And then what else should be considered?

So we want to get your input helping us answer those questions and others. And this isn't the only format we are using. We're going around the country – this is the seventh of eight of these types of meetings. We've done other public meetings. We're getting comments and input through our website. When folks want to meet with us one-on-one, we have smaller meetings. We've got a range of inputs coming into us that we've asked to be submitted by the end of July. We will then use that information to develop a couple of deliverables.

So first will be a report on what did we hear? What are the major themes that have come out of these interactions with you all and all the other inputs that we've gotten? We'll put that out as a draft and ask for feedback from folks – did we miss anything? Do we mischaracterize something? And then we will put out a draft of what we call a consent-based siting process, right? Again, we'll want to get feedback on – did we get that right, does this look like something that's workable to you all? So we've got a couple of things that we want to try to get done by the end of this year.

Looking ahead to next year, of course, we would hopefully be implementing this program. One of the elements we think of successfully implementing a program like this is giving states, tribes and local governments and potentially others access to resources so they can go out and get their own expertise, and have their own experts assess, you know, the various aspects of this challenge so they can determine whether they might want to be involved in discussions with the government going forward. So we've asked Congress for about \$25 million to fund a grants program, alright? An initial phase of a grants program, so communities can get access to resources. This is something – it's in our Budget Request to Congress. The Senate is basically giving us what we asked for, and the House hasn't in their versions of the Appropriations Bill, so it remains to be seen whether we get the okay to go forward with this, or with the implementation of the process more broadly next year, because again Congress has a very important role to play in this. But I just wanted you to know where we are and what we've asked for and we'll see what comes out of the process with Congress.

And then, finally, of course, what we're going to do with this is – this would be the framework that we design that we use to begin engaging with communities, potentially tribes and state governments, to work towards developing willing and informed host governments that will ultimately play host to either storage or disposal facilities and help us solve this problem.

So, we thank you for being here tonight. If for some reason there is something that you think of after tonight's meeting, or whatever, that you want to get to our attention, we've got a website and an email address here so you can get your information to us.

I really appreciate your being here. Appreciate the rest of the panelists being here and looking forward to what you all have to say. Thanks. [Applause].

Perspectives on a Consent-Based Process

Mr. Jim Hamilton. Thank you, Mr. Kotek. We now have the privilege of hearing from four panelists who each brings a rich perspective to the issue of consent-based siting. Each of them will offer their own thoughts on the challenges ahead and we will proceed in alphabetical order.

We'll first hear from Beatrice Brailsford, the Nuclear Program Director of the Snake River Alliance; followed by Talia Martin, the Tribal/DOE Program Director for the Shoshone-Bannock Tribes; then Gary Petersen, Vice President of TRIDEC Federal Programs, and we wrap up with Jennifer Schneider from Boise State University.

I'm not going to read their biographies – they are all in your information packet. But we are all privileged to have them speak to us today. And to start us off, I turn it over to Beatrice Brailsford. Ms. Brailsford.

Ms. Beatrice Brailsford. Thank you. First of all, the Snake River Alliance is Idaho's grass-roots nuclear watchdog and clean energy advocate. We were founded in 1979 and I'm very proud this evening to be one of the members participating in this process.

Because of where I work, and where I live, I normally think of nuclear waste in an Idaho context. So I'm going to focus on what we've learned here over the decades. But I do want to acknowledge that it is a welcome step forward that the federal government has recognized that the effort to force nuclear waste on an unwilling community has crippled the entire nuclear waste program, so thank you for that.

And I certainly also want to acknowledge that someday, someone will have to consent to living near a disposal site that will ensure that highly radioactive material is removed from the human biosphere.

But some cautions.

Right now there is no certain framework for how we're going to go forward; no certain guidelines; there are no technical standards for what sort of site we might be picking. So right now if you're thinking about consenting to participate in this program as a host of nuclear waste, you are perhaps consenting to storing an unspecified amount of waste for an unknown period of time. And I will tell you that that is familiar to us here in Idaho, except perhaps the part about being asked.

I think the most important thing – and John is certainly correct that DOE can learn a lot about nuclear waste from coming here to Idaho – most of our nuclear waste happens to be yours. But what I think the most important thing that we can learn from Idaho is the importance of non-consent.

If you're asking someone to say "yes," and someone says "no," you have to hear that; you have to recognize it and you have to respect it. Non-consent is a very important part of a consent process.

A very short amount of history about what we've seen here since I said I was going to talk from an Idaho context. Ever since the Idaho National Laboratory was founded, we have seen waves of nuclear waste coming into this state. Certainly, we're familiar with the plutonium-contaminated waste that came in by the train-load from Rocky Flats. John noted that for this current context, that we have more than 300 metric tons of spent nuclear fuel at the site now. And it really has come from all over. It's come from commercial reactors; the nuclear Navy; it's come from domestic research programs; it's come from foreign research programs. Research reactors.

And over the years, as more and more nuclear waste came to Idaho, Idaho's starting to push back. We all, I think, are familiar with some of the efforts some of our political leaders have made over the years. I want to flag a couple.

One is in 1974, the Department of Energy decided to come to Idaho and ask if perhaps Idaho would be a likely site for a vault – an aboveground vault – in which commercial spent nuclear fuel from around the country would be stored. The governor assigned a Blue Ribbon Study Commission to look at that question. The Blue Ribbon Commission went around the state and asked communities in Idaho what they thought of the plan. The Commission went back to the governor and said Idaho does not want commercial spent nuclear fuel. And recommended instead that Idaho suggest to the federal government that commercial spent nuclear fuel be stored at the reactor sites until there was a permanent disposal site available.

And then of course, in 1995, the State of Idaho won a very important lawsuit – I take pride in noting that the Snake River Alliance provided some of the grass-roots attention to that lawsuit. The 1995 Settlement Agreement – its most important provision in this context was that it bans commercial spent nuclear fuel from coming to the state. The 1995 Settlement Agreement went up before the voters of Idaho – all the voters of Idaho. In 1996, in a ballot initiative, half the folks – the people opposed to the initiative – the Alliance was one of them – went under the banner "Stop the Shipments." The people who supported the Settlement Agreement went under the banner "Get the Waste Out." So in 1996, everyone in the state of Idaho voted essentially to express deep reservations about nuclear waste in the State of Idaho, both what was here and what was set to come in.

I think one of the things that's most important about the initiative other than – and I'm going to talk a little bit more about how strong that shield has been. And how strong that statement of non-consent has been; and how much difference it has made, both here in Idaho and across the country.

The 1996 Initiative demonstrated that everyone in this state has a stake in what happens with nuclear waste here. We have a stake in what happens at the Idaho National Laboratory. That reiterated an earlier decision when the Superfund Program – you know INL became a Superfund Site in 1989. In the early days, the Environmental Protection Agency – part of the Superfund process is learning who's got a stake in the cleanup process. Whose skin is in the game in terms of the pollution. And I was on the original Citizens Advisory Board. We looked at that question and we decided everyone in the state of Idaho has a stake in what happens at the Idaho National Laboratory.

So I think it looks as if that's about as much time as I've got. I want to have people go away with two very important things to remember.

Nuclear waste should be stored just like the Blue Ribbon Commission – Idaho's Blue Ribbon Commission – said in 1974. Nuclear waste should be stored as safely as possible; as close as possible to its point of generation until we have a final repository. That's one.

And the second is Idaho is a non-consent state. Thank you. [Applause].

Ms. Talia Martin. Welcome everyone, I'm very excited to be here and I appreciate the invitation as well as the opportunity from DOE to be at a forum where we can be honest and open. And I come here from a tribal perspective rather than any comments that I say would reflect the Council or our leadership.

I'm a tribal member of the Shoshone-Bannock tribes. I'm also a tribal staffer, and so I do have some experience, although limited, based on the experience here on the panel.

I've only worked on-site DOE on Shoshone-Bannock tribal interests for a short amount of time, and to be exact, a little less than a year. However, the Shoshone-Bannock tribes have a long-standing Agreement with the Department of Energy since about 1994. However, the INL has been there since the 1950s.

Since 1994, we've been providing the tribal INL Oversight Program. And my function as the Director of that INL Oversight Program exists primarily because there is a national laboratory on the original ancestral lands of the Shoshone-Bannock tribes.

My predecessor, the late Willie Preacher, who worked on the site as well as worked as the tribal liaison between DOE and the tribes and again as the Director for the INL Program has worked for decades on these nuclear energy issues and now the torch has been passed to me.

In this position, we provide a tribal perspective to the policies impacting any tribes as well as the Shoshone-Bannock tribes in nuclear energy. And we serve as key advisers to our leadership – the Fort Hall Business Council on Nuclear Energy Waste, such as other issues like transportation and shipment of spent fuel and high-level radioactive waste.

So the tribes have been very involved and are very aware of the issue, however there are many misconceptions, just like in other communities around us.

And just to put it into a little bit of context of what the tribes' position is, the INL Reservation resides on the original ancestral lands of the Shoshone-Bannock tribes. So the original ancestral lands were those lands that were originally inhabited by the Shoshone-Bannock, so that's where we hunted and gathered. And now our current homeland is the Fort Hall Indian Reservation which is about 30 miles southeast of the INL Reservation.

So we were established under the Fort Bridger Treaty of 1868, which provides us that legal enforcement we need to exercise our sovereignty to provide the protection over our ancestral lands and people, as well as our culture. And so the key word here is "protection."

Physically, the location of our permanent homeland, and within our original ancestral land, is surrounded by industrial, private as well as governmental sources of what the tribes would call "poison," or contamination to our natural and cultural resources. So in the North of our Reservation, we have the INL site where there is a temporary – hopefully temporary – storage of nuclear waste, and in the East we have, in our own very mountains, selenium contamination from phosphate mining, and we have phosphorus and arsenic contamination from phosphate processing in the South.

But we know we don't live on an isolated island and we know that there are communities that are adjacent to our boundaries they also face the same issues as we do.

We also have a transportation corridor that runs through our Reservation, so it goes *directly* through our homeland. And unlike some of these communities, this is our permanent homeland and it would be impossible to move every individual as well as our natural and cultural resources to another place, if they were in danger. And to another place would be culturally significant for our tribal legacy, hopefully.

In retrospect, though, we see these sources were initially placed and eventually surrounding our homeland, and original ancestral land, our elders were not always privy to that information that would help them make a well-informed decision. And of course, there are always socioeconomic factors that played out an overwhelming role in the decisions that resulted in impacts to our land and resources.

So now, my generation – what some people call the Millennials – has inherited these consequences and are now faced with similar decisions to make. And these issues are also concerning consent-based siting. So in that respect, during a consent-based siting process, we will demand a more active role from DOE to provide more information, as well as communication, to facilitate the best decision possible so that the future generations don't inherit even *more* problems than currently exist.

And like many other communities of minorities and diversities, DOE will have to find the miracles of busting down those cultural barriers, whether it be language or something else, that exist between the government, the states and the tribes.

However, we do recognize the progress that the government has made towards better understanding and working with the tribes, and we see these implemented through Executive Orders and DOE policies and other federal agency policies that promote coordination, collaboration and communication with the tribes.

However, there is one thing that I'd like to remind DOE is that notification is not communication. And I say this, because consultation and communication between the highest level of government, and the tribal leaders is the key to the tribes' fully understanding what consent-based siting entails, if anyone volunteers, whether it's a county, or a state – volunteers a host site on our original ancestral land.

So the message I bring to you today is that the Shoshone-Bannocks have always maintained there will *not* be a national repository on their original ancestral land. However, as a staffer for the tribes, I am committed to function as an advisor to the leaders and the membership with DOE to inform and engage in these types of activities that impact our natural and cultural resources with the strong intent of protecting future generations' inheritance.

So I look forward to the rest of the evening, and engaging in other conversations, and in hearing your perspective as well and again, thank you for your time. [Applause].

Mr. Gary Petersen. Thank you. I'm Gary. And I want to thank DOE for inviting me to this meeting. I have to point out something you can't see down there. Talia was looking at print that's about that big [uses thumb and forefinger to show tiny type] on her iPhone right here, and she was doing that all the way through. Compliments to you.

Ms. Talia Martin. It's a Millennial thing.

Mr. Gary Petersen. It's a Millennial thing. So let me start and just say it's not surprising to anybody in this group – and I know several of you in the room – the 1982 Nuclear Waste Policy Act, NWPA, is still the law. Yucca Mountain remains the only legal, high-level waste site authorized by Congress.

NRC completed and released the Yucca Mountain Safety Evaluation Report only after being directed to do so by the U.S. Court of Appeals for the D.C. Circuit. An Extraordinary Writ of Mandamus issued on August 13, 2013. That NRC report, when finally released, after much delay, clearly confirmed that Yucca Mountain *is* a safe nuclear repository.

Interim storage sites. I completely agree that one or more interim storage sites in this United States is *extremely* important to us. We can no longer continue to store spent fuel at some 75 different sites alongside our rivers, our streams, and our oceans.

Let me also be clear – and it hasn't been said tonight – nuclear power plants are the *only* energy producers that pay for their waste products as they go. And for complete site restoration when they are shut down at the end. This does not happen with coal plants, gas turbines, solar, wind or even hydro-dams.

The NWPA requires DOE to store the spent fuel from civilian reactors. The 100 or so operating nuclear power plants have been paying \$750 million a year – *each* year – into the Nuclear Waste Fund. This Fund

has collected over \$30 billion and with legal requirements, still unmet, for DOE to collect the spent fuel and put it into a long-term storage facility. DOE has now paid back \$5.3 billion to some of those utilities for legal claims for DOE's failure to meet its legal obligations. The best estimate to this date is that DOE will probably still be on the hook for some \$24 billion to those utilities that have been paying \$750 million a year. Ratepayers are the ones who have been paying the \$750 million into the Nuclear Waste Fund.

Taxpayers, however, are on the hook for the federal Judgment Fund, which pays claims against the government.

A note: the House Subcommittee on Environment and Economy held a hearing just one week ago today on federal, state and local agreements and economic benefits for spent nuclear fuel disposal. Both Full Committee Chairman Fred Upton and Subcommittee Chairman John Shimkus, clearly outlined the authorities granted by the NWPA and that the House of Representatives' focus still remains with Yucca Mountain. No other alternative has been approved by Congress. Congress has given no authorization for DOE to seek out any other site in the U.S. Nor provided any express authority for DOE to proceed, formally, with new appropriations for a consent-based site, whether it be a pilot interim storage site or an interim storage facility.

Hanford is effectively an interim storage repository. With never a single vote of the local population. Hanford has some of all of it. Like Idaho, we have spent commercial nuclear fuel; we have weaponscomplex waste and even Navy submarine and cruiser-ship reactors. And Hanford has the dubious honor of being an interim repository for at least the next 50 years. The waste treatment plant is now scheduled to start in 2034 - 2034 - eighteen years from now. And operate for some 30 years.

So, consent-based – local, state, tribal – recognize please that any pilot interim or permanent repository requires both EPA and NRC approval, normally a 15 to 20 year long process. A substantial part of that NRC review has already taken place at Yucca Mountain. This federal regulatory review is required before – or may be in parallel with – what is called local approval – citizens from city councils, county commissioners, the governor, state legislature, etc. In a 20-year period, almost all of these elected officials will change out. The same is true of an Administration. We could well see at least five Secretaries of Energy over the next 20 years. What we have recently seen in the Dakotas was a proposed deep borehole test – no contaminated material – shows just how difficult it is to reach consent-based.

I'm not saying it's impossible. But I am saying it's improbable. Because of the continual change within DOE and the prime contractors as well as the turnover in elected officials – governors typically only run for 4 to 8 years – to me the *only* way for DOE and Congress to reach some kind of consent-based support from a local community is through a long-term contract. Such contract would have to include financial support to the community and to the state, all the way through construction, licensing and operation. And then, when the politics change – and they will – and the community and/or state chooses to opt out, as we've heard from David, the contract must be repaid to the government in full. If they opt out.

I've worked around things nuclear since 1965. I'm not a kid. I'm 75 years old. I've been in and out of places like Chernobyl. I've been on two nuclear power plants that started up. I'm a firm believer that nuclear power *is the only way to go in the future* if we are to have carbon-free energy. I recognize clearly that nuclear is a must for our nation. This subject is not about nuclear science, nor is it about hazardous

waste science, it is about political science. And with that I turn to my next speaker, Jen – we're already over but...[Applause].

Professor Jen Schneider. Yeah, it's going to be tough. But I want to just underscore the historical significance of the consent-based siting experiment that you're a part of tonight.

So the motivation for consent-based siting, as *I* understand it, has to do with the historic shift in the way we think about public involvement in controversial decision-making areas, particularly in environmental and natural resource management contexts.

The former – and I think still dominant model – of science and technology policy and decision-making was, is, very top-down, and centralized, as we already heard, and it was communicated in a particular way to affected publics. We call that old model – or I guess maybe the persistent model – the "Decide, Announce, Defend" model. The great acronym DAD. In some management scenarios, what we in my field called "normal scenarios," that sort of Decide, Announce, Defend approach may work okay. And so a normal scenario would be something where there's not a lot of disagreement about values or about evidence.

In other scenarios, particularly where there is widespread disagreement about values or courses of action, – we call those post-normal environments – Decide, Announce, Defend does not work so well. So consent-based siting is an attempt to intervene in a post-normal process.

So these new models of public engagement, whether it's consent-based siting, or stakeholder engagement, – it goes by a bunch of different names – these models at their best mean that groups and citizens are brought together for real shared governance, not just lip service. And we see this in lots of natural resource management contexts, so there are models of it in forest management, for example, or water management, around the world. Some successful, and some not.

But as we've heard, there are significant challenges for consent-based siting or stakeholder engagement around nuclear waste. And I think that's for a couple of reasons. We haven't seen stakeholder engagement really meaningfully implemented in energy-production contexts, at least in United States. It's also very hard to pull off stakeholder engagement efforts on a large scale, because context matters. It's hard to pull off when the problems are not just local, but also national. And when things have high-levels of technical complexity – not because communities can't understand it – communities have proven themselves very good at mastering technical complexity, but because in those environments, benefits often accrue to those who already have technical expertise.

So, in my view, consent-based siting – and this process we're all part of tonight – is an attempt to try stakeholder engagement at the nexus of these three very tough areas:

- A problem of national significance and with some perceived urgency; I suppose we could argue about that;
- It's a highly technical subject area and;
- It's at a large scale, happening across the country and in diverse communities.

So I think these are really good things to keep in mind as we deliberate about what this means. And I think it's good to keep in mind that we haven't really tried something like this at this scale in the United States. So it's an experiment on a grand scale in a post-normal environment and what that suggests is that policy responses or the sort of steps we take will most likely be clumsy. They're going to be messy. And probably will lack ideological purity.

So I think those are important tenets to keep in mind as we discussed what consent-based siting might look like for our fellow citizens. [Applause].

Facilitated Public Discussion with Panelists and Acting Assistant Secretary John Kotek

Mr. Jim Hamilton. Thank you Dr. Schneider. And thank you very much to all the panel members. Great perspectives and input. Can I ask for a round of applause for all of them, please? There was a lot of meat there.

So now we're going to open the floor to questions....[Speaking to audience member: Just give me a second]...from the audience to any of the panel members.

For those on the web stream, I just want to say that if you have a question, you can type it into the webinar and it will find its way up to me as well.

For those in the audience, as we begin the question-and-answer session, all I ask is that – we have two wireless mics that are going to be floating around. So raise your hand; we'll get you a mic. Simply if you could identify your name and affiliation – that would be great.

But before we start, there are two parts of this meeting. One is the question-and-answer session, now; and one is the public comment period, later. If you have a public comment – save it for later. If you have a question for the panel members, use the opportunity now to ask them questions. There is a lot of horsepower up here, so if you have questions of the panel, we want to hear from you. That would be great.

So, with that understanding, who wants to begin?

I'll do my best to get you in order. [Pointing] So I've got the first gentleman over here – can we get a mic to him please, Matt? And then you'll be number two. Alright.

Mr. Brent Marchbanks. Alright, you asked for my name and my affiliation. My name is Brent Marchbanks. And I'm a carrier of 2,000 rads of radiation.

That's my affiliation.

Acting Assistant Secretary for Nuclear Energy John Kotek: You folks tried to sneak used fuel rods into the State of Idaho. The only way most of us learned about it was from the Snake River Alliance. When former Governor Andrus filed a Freedom of Information Act request for information about how that process occurred, you forced him to go to federal court rather than simply complying with those requests.

Can you tell me how a consent-based process of any kind squares with those sort of under-the-cover-ofnight policies.

Mr. John Kotek. What you're touching on there, of course, is consistent with what we've heard through our process and what we heard through the Blue Ribbon Commission process too, which is that there's this fundamental lack of trust in DOE, in particular, and large government agencies as a whole.

One of the things that you'll find in the Blue Ribbon Commission Report and in the Administration's Strategy is a recommendation to actually stand up a stand-alone, single-purpose organization to deal with this challenge as a way of trying to – you'll never start with a completely clean sheet of paper, right? – but at least as a way of getting a fresher start than we might otherwise have if we continue on with the program in DOE.

That, of course, takes congressional action. And it's been four years plus since the BRC Report was issued and three years plus since the Administration's Strategy was issued and there hasn't been much in the way of movement – there been some bills introduced in Congress, but nothing certainly passed, and so we're trying to move forward with laying the groundwork for what we think a consent-based siting process ought to look like, but we think the implementation going forward – the most effective way of doing that would be with a standalone organization with assured guaranteed access to funding, particularly that Nuclear Waste Fund that I mentioned earlier, so the organization has the ability to make and keep commitments – has the resources to make and keep commitments. So that's been our recommendation.

Ms. Beatrice Brailsford. And I will add that nothing that John said would preclude the Department of Energy from responding more appropriately to Freedom of Information Act requests.

I think it is certainly a source of some concern that the Department of Energy is moving forward under the old guise and I understand that there is some effort to create this new entity – this new nuclear waste management entity – within the Department of Energy so that if – if – Congress acts, the new entity can simply be moved out of the agency.

I am worried that at the end of the day the new agency is going to look just like dad.

Mr. Jim Hamilton. Thank you. Second question? Right over here?

Ms. Terry Thatcher. Terry Thatcher. I'm from Idaho Falls and I'm a citizen of Idaho.

I have a question about the word "pilot," being applied. Pilot interim spent fuel storage. And I'm wondering if that is a weasel word to get around the Idaho Settlement Agreement stipulation that Naval spent fuel at the INL would be among the first things shipped to an interim storage facility. So did the word "pilot" weasel you around that, or did the announcement of the search for a separate defense site weasel around that – or have you not weaseled around that at all?

Mr. John Kotek. I'm assuming that was directed at me.

Ms. Beatrice Brailsford. The word "weasel." [Laughter].

Mr. John Kotek. I'm working up to "the most hated man in America" there; I'm not there yet.

So, on that one, no. In fact that's the first I've heard that line of thinking. What we were looking at was a facility you could get started quickly that may not have the full range of cask-handling facilities, maybe a hot cell, maybe an R&D component associated with it that you might build into a larger-scale facility, so that was the reason for the distinction between pilot and full-scale.

Ms. Beatrice Brailsford. And I think the original plan was that the spent fuel from shutdown reactors would go to the pilot facility. I will note that that inventory is growing because more and more nuclear reactors are shutting down and I didn't notice this meeting, but I've seen in other meetings – the chart in other meetings has said pilot "facilities," plural, and that's been something that I too have found a little puzzling.

Mr. John Kotek. I think we've always made it clear that we're interested in one or more – the Secretary's view on this has been the more flexibility you can build into the system, the better chance we have for sustaining success over the long-term, so.

Jim Hamilton. Okay, great. I've got a third question here in the pink shirt.

Ms. Liz Paul. Thank you very much. I'm Liz Paul, I'm on the Board of Directors of the Snake River Alliance and I do want to thank everybody for coming. The Snake River Alliance sort of ripped the veil of secrecy off of what was going on at the Idaho National Lab many decades ago just so people like all of us could be part of these decisions. And thank you very much to the panelists.

I don't want to put Talia on the spot – or make her too nervous – but I do have a question for her.

We heard some discussion already this evening about "veto authority" and that the entity that might consent – unless they're out in middle of the Pacific, or something – they don't stand alone; that they are surrounded, of course, by other communities and nuclear waste doesn't go by transporter magically from one location to another. It travels through many locations. And with the tribe being located so close to the Idaho National Lab, although we know that we are not a consent state, for example, anyway, what do you think about veto authority? And both for the tribe specifically, but in general. Beatrice said that the initiative that went along – the whole state was a stakeholder if something was going to happen at the Idaho National Lab. Can you address that question, especially because you are on the transportation route?

Ms. Talia Martin. Sure, no, I appreciate the question, actually. We've, as tribes, we get together and we discuss some of these issues and as we know, it's happened more than once where the state has had more of a trump card when it came to some of the interests the tribes have had, such as in Skull Valley, and other areas, so we pose that question amongst ourselves first, and I don't want to say this is the reflection of the collective ideas we've had, but when it comes to that in Idaho and the Shoshone-Bannock tribes we will fully, and absolutely – I would use the strongest word possible – but we will absolutely use or exercise our sovereignty rights in this case.

And what I've always said is what may happen in Indian Country will reverberate throughout. And so we won't stand alone as a tribe, but we will have ideas; and you know we're not the only tribe in Idaho, as you know, and so we do have some type of support system, as well as ideas that come from them as well.

So in terms of the state veto authority, you know, we've made some strides in actually working more with IDEQ, the Idaho Department of Environmental Quality, and other areas, and as we both know – Beatrice and I – there are many commonalities and agreements that we have, and so I am fully hopeful that our leadership, as well as the state's leadership can come together on some of those agreements, and so I don't see it as a huge problem.

But the one thing I do want to say is no matter what community volunteers, throughout this country, you are on someone's original ancestral lands. So whether it's Shoshone-Bannock's, the Miccosukee's or the Seneca's, you will have that voice and opinion and we will all stand – you know, we all might not agree as tribes, but we will have ideas and a voice together. And I'm hopeful of that – that's me being optimistic.

Mr. Jim Hamilton. Thank you, Talia. Another question, I've got you in the green shirt here for the next one; and then you in the back there, so if we could get a microphone up here, Jennifer. I also have a question from the webinar that I'm going to read in a minute.

Dr. David Monsees. Hi, I'm Dr. David Monsees. I'm Treasurer for the Snake River Alliance. As a sociologist, I am concerned with terms which may seem precise, but which aren't. The "public," a "community," "stakeholders" – I think those need to be really well-defined and this particular state – I'm really concerned – if you consider the governor or the legislature to actually speak for the public as they would in a democracy, this state, like many other states, is a corporatocracy. And those people have vested interests, some of which involve dark money, and they shouldn't be listened to as much as a plebiscite from the public. And I would like to hear from the panel what they think the community of interest should be.

Mr. Jim Hamilton. I'm going to put Jennifer on the spot, and we can go this way.

Professor Jennifer Schneider. Only my mom calls me Jennifer – I keep getting – I'm so surprised when I hear that.

You're absolutely right. And speaking of weasel words, sometimes these words get used as weasel words, so I think precision is important. And I also think we have to acknowledge that there are significant power differentials, always, happening in these systems. You mentioned dark money and we certainly see that operating in other energy industries and nuclear is probably no different.

And at the same time, we have to figure out a way forward. And so this process of thinking about representation, and thinking about how "voice" is used; what we mean by "veto power," "withdrawal," how we create opportunities for protests – this is a key tension in this whole process, because at the end of the day, DOE needs sites. Right? They are not doing this for their health because they just want more democracy. They want sites to be chosen. And so that's intention with a process – where a community may say no. Right? I don't know that there's a way around that. I think that's what I was trying to get at with my opening remarks.

Mr. Gary Petersen. If I could, I'd like to add Yucca Mountain – I keep coming back to Yucca Mountain. The area around Yucca Mountain is in favor of Yucca Mountain being a repository. But after you get outside of that immediate area, you find that there is no consent approval. And so the definition that you just asked for is critical – it's critical – to know what is the community. Is the community – the cities? Is it the governor? Is it the senators? That description becomes extremely important as

you move forward with any site, whether it's WIPP in New Mexico or whether it's Yucca Mountain, or whether it's Idaho Falls. I mean that community description is critical.

Ms. Talia Martin. You know I think that there's so many complicated layers – it's such a difficult question to answer. But within our own organization, when it comes to the Council that represents the membership, we have our own disagreements, but there's trust. There is some trust between the membership and the Council and the representatives when they make these decisions. And we discussed a lot of the things behind closed doors at annual meetings and it's just a difficult question to answer right now but I know that in this case if it did come to Idaho, or this question was posed here, we would have to really come back to our Counsel and trust that they will do the right thing when it comes to the counties and the state of Idaho, so it's pretty complicated, thank you.

Ms. Beatrice Brailsford. And yes, thank you for the question. I guess I agree with Jen in terms of how – there has to be as much clarity as possible, but – and we're going to have to work at that – we're going to have to try to figure out what is a community. I would say in Idaho we have already said that more than once. And I think that's probably why our shield against commercial spent fuel is stronger than that of other – you know, we're not the only state that has said no, but we are the state that has said no in such a kind of an organized, robust sort of way.

I will add that there's all the political boundaries and some of the, you know, two of the big waste sites in the United States hug one boundary – one in one state, and one in another. I think we have to remember that.

But I think we also have to look at the questions like "watershed." Is watershed a community? John Wesley Powell thought it was. He used the word "community" when he was describing watersheds.

And then Jen, you said that the Department of Energy needs to move this material and I think we should remember when we're looking at interim storage of spent nuclear fuel – spent nuclear fuel is already in interim storage; it is in interim storage, by and large, at the reactors, most of which are East of the 100th Meridian; they are near large metropolitan areas or they hug the West Coast. They are licensed by the Nuclear Regulatory Commission. Moving spent fuel doesn't necessarily solve an environmental problem – it adds its own cost; its own risks. And I think the main risk, the number one risk, and it's why you hit a wall – it will never move again if it moves once. And what will happen, is a community will be burdened in a way it hadn't bargained for. As important to the rest of us, we will have put various very dangerous material in perhaps an inappropriate location.

Mr. John Kotek. In response to your question actually, frankly, that's really one of the things that we want to try to tease out tonight and get your input on. As you look at the history of nuclear waste management in the United States, we've seen examples here in Idaho – we had a Governor and an Attorney General sign on to an agreement, and enough folks expressed concern about it and it wound up on the ballot, right? It was a statewide referendum.

On the other hand, you have the state of New Mexico where you had – there was never really a yea or nay vote statewide in New Mexico, but they wound up hosting the WIPP site – the Waste Isolation Pilot Plant.

So we've seen it work different ways in different parts of the country. We are very interested in your thoughts on how we ought to – on what mindset we ought to bring to that discussion as we design our process, so. Interested in hearing your thoughts tonight.

Mr. David Leroy. That's an insightful comment – definitions do count. Simply put, from a practical point of view, it's easiest to define "community." Community ends up being that entity with which you are negotiating, whether it's a city or a county, a group of counties, a state, a tribe – that would be, I would guess, the community.

The other term you mentioned, however, is much more amorphous. "Stakeholders." "Affected Stakeholders." That would be where you would have to make sure that you were sufficiently inclusive – that the process was honest and represented true local agreement. In the case of most communities, it would be up to them to define not only the stakeholders – subject, of course, to suggestions from the outside – but also the process by which you would affirm stakeholder votes "yes" or "no."

Perhaps one community would be, as you suggested, very distrustful of its state legislature. Perhaps another community in a different locale would be very trustful of a state legislature. So, I think "communities" is easy. I think "affected stakeholders" is much more difficult. But the community itself should take the lead in defining that breadth, and whether plebiscites are part of that breadth.

Mr. Jim Hamilton. Thank you, I've got a question in the back – right there. And then I'm going to read one from the webinar. [Pointing] And then I've got blue shirt over there, then black shirt here. How's that? Okay.

Ms. Kerry Cook. Thank you. My name is Kerry Cook. Once I moved to Idaho in 1980, I immediately became a member of the Snake River Alliance because I was so worried about the water. The Alliance educated me that it wasn't radioactive waste over here in Boise – so I got a little bit smarter on that and found out where it was. And they've made me smarter all these years, and I'm grateful for that.

I have a question that – you know, I have read the booklet a couple of times and it is something that I have not seen addressed. I don't think anyone on the panel can answer it, but I kind of like to ask Talia and Beatrice to offer what they think. And that's – yes I did read the part about how the Department of Energy feels confident in the casks for transportation, but I didn't see a whole lot in the fact that our nation's roads and railroads and bridges are falling apart. And they are grossly underfunded. And Congress does not seem to want to do anything about that. And hasn't for a number of years. And it doesn't look like it's going to change. To me, I suppose, it's kind of mind-boggling to think that we might be talking about something that would require massive movements of heavy materials long distances probably on roads that apparently our government and our Congress, which I guess means the people, are not particularly interested in maintaining. Thank you.

Mr. Jim Hamilton. Who wants to go first?

Ms. Talia Martin. I'll go ahead and go first.

I want to go back to when you first said about the water. I would have to definitely bring up the fact that water, especially the Snake River Aquifer, is one of our cultural resources – it's not a natural resource, but

it's cultural, because it's spiritual to us as well. And you know so that's something that our Council reminds us all the time, so I definitely have to bring that up.

In terms of the maintenance through the transportation corridor. Through our Reservation, it's either the road, the I-15, or the rails. And that's been a long controversial issue as far as who maintains it. Is it the counties? Is it the states? And you know, I'm not well-versed in that issue, in that area; however, we bring it to their attention and we have our own Department of Public Safety that does actually a really good job in emergency preparedness and that's something where we have a very, very large group of individuals in law enforcement, and fire department, and everything that get together and talk about some of those issues, so I haven't – on the Reservation specifically – we haven't had much negative feedback on the maintenance of the road, however the fact that there will be an increase of shipments, especially once WIPP opens up, and once we are able to find a permanent repository.

This is a great question that you posed. And I appreciate that.

Ms. Beatrice Brailsford. My understanding is that most of the shipments –long-distance shipments – if spent fuel is to go from one interim site to another interim site will be by rail. The Department of Energy will use the roads to get to a rail.

But you raise a very good point about the infrastructure that these shipments will be going through, no matter how they're being shipped. And certainly, also, you know – that's right now the contention is that people along the transportation routes do not have the right of consent or non-consent. And I am interested in exploring that and then Talia mentioned everything that goes through the Reservation and I know that here in Idaho, at least in the early days, our emergency responders got a lot of training getting ready for the WIPP shipments, and then it took so long for WIPP to get open, that the training would have to be revised and they would be trained again. But I've had more than one emergency responder note that with all that training – training was a lot cheaper than providing emergency response equipment and that some of the responders – that's what they felt they we're lacking in.

Mr. John Kotek. If I could just add one thing to that while we're on the transportation subject. If you want to understand a little bit more about what the things we do to ensure that these transports can be done safely. Where is Melissa? Melissa Bates from my office – she actually moved back from Idaho Falls to D.C. to help us with this program, and so she would be a great one for you to talk to at the break if you want to understand a little bit more about the things that we do to ensure that the road or rail or barge if we have to use that – it is up to the task.

Mr. Jim Hamilton. Thank you. Now I have a question from the webinar for Mr. Kotek.

Considering that Waste Control Specialists' application has been filed with the NRC, why were no hearings or public meetings like we're having tonight held in Texas or New Mexico?

Mr. John Kotek. We heard that same comment – we had a meeting in Arizona and some folks came and voiced that concern. We're not looking at sites right now. What we're out doing is – we're getting input from folks like yourselves on how this process ought to be designed.

Going forward, if in fact there are efforts to locate facilities in those states, then I'm sure there will be opportunities for public participation in those states, but that's just not the point in the process where we're at right now.

Mr. Jim Hamilton. Okay, great. I've got you up there in the blue shirt; black shirt – nope – you're good, thank you.

Mr. Tim Andreae. My name's Tim Andreae. And I'm a concerned citizen. I guess Jen mentioned that this is messy and I think being human is messy in itself – there's no way around human imperfection. Just like the recent accident that happened at WIPP, that no matter how much regulation there is, there is this margin of human error. And the more handling is done, the more the possibility of human error. So there's been an explosion at WIPP and now it's shut down. I don't know if there's a time that it's supposed to be open – that that is – that there is a set date that it's going to open up again.

But I guess considering human imperfection and considering the fact that as far as I know you're talking about finding an interim storage place. You're talking about moving more waste than has ever been transported before. So it seems like you're suggesting doing something that we haven't actually done. Things that we have even done before – accidents happen. So what I'm asking is how do you account for human fallibility in the face of such a huge task?

And I guess even more so, how can you – I guess who shoulders that risk, really? Where does that responsibility land? Knowing that humans are imperfect?

Mr. John Kotek. Thanks for that. On this question of moving materials around, as I mentioned, we do actually have a lot of experience moving spent fuel – the Navy's moved a lot; there's been a fair amount of commercial spent fuel moved over the years in the U.S. and abroad.

You always have to plan for, you know, what could go wrong, and then how you do you protect against that? And so there's an extensive set of design requirements, and then testing requirements that go into developing transport packages; and the railcars, and the buffer cars and the escort cars and the other things that will be required, assuming we do most of the shipment by rail as Beatrice mentioned earlier, there is also extensive consultation and cooperation that needs to occur with state and tribal agencies responsible for emergency preparedness and response.

In fact, we're right now in the process of working with a company on the design of a rail car that will then undergo this series of tests to ensure that whether it's a crash or a fire or a drop or a puncture or something that the cask can withstand the types of accidents that we would be concerned about during transport. So again, that's another thing you can chat with Melissa about if you want to understand a little bit more about kind of how that works. Where is Rob Howard? Rob can probably help you with that. Rob's in the back. Another guy, if Melissa's tied up, you could chat with and get more details on the specifics there. But yeah, that's something that we absolutely have to take seriously.

Professor Jennifer Schneider. Can I...?

Mr. Jim Hamilton. Yes, I was going to ask if you wanted to follow-up.

Professor Jennifer Schneider. Well, I might just read in between the lines a little bit with your question, and say that that's the key question that I think this room should consider when we deliberate. It's a key question – who bears the risk?

And there's a lot of frustration. If you talk with nuclear engineers at the reactor level; or you talk with oil and gas people who work on fracking; they often will assure you that it is totally safe, right? I mean, that can be frustrating as a concerned citizen.

But at the same time I think there's this fact that not moving them also has some risks. They may primarily be financial, or political, or intergenerational; but I think we should be clear that — and I'm not advocating one position or another — but I just think we have to be clear that we are making choices, even if we choose to keep things on site the way they are. And so as long as we're having that discussion, I think in an overt way — that's what matters here tonight.

Mr. Jim Hamilton. Alright. Thank you, I've got black shirt here – I just want to make a note to those on the webinar that we're trying to get your questions as well, but we're giving preference to those in the audience, so thank you for your comments, and keep them coming.

Mr. Gary Richardson. My name is Gary Richardson. I'm a citizen. I have a deep relationship to nuclear issues. I wanted to address my question to Mr. Leroy.

You served for three years as Nuclear Waste Negotiator – and I think Congressman Stallings followed you for another six or eight years – so it's about a decade of experience you had in this very process and I'm sorry I got here a little late, and you may have covered this, but you said there were 30-some entities interested, but it all fell apart.

I think we need to look in detail at that decade of experience – I mean you're modeling a process that's already been tried. I saw the editorial in The Statesman this morning that was touting this as something new. It's *not* something new. It's *not* something new. It's something we've already tried and failed at. And I think very important is knowing why it didn't work then, and how do we design around that?

Mr. Jim Hamilton. Thank you.

Mr. David Leroy. Gary, thanks for a great question. I deliberately left that pregnant possibility of exploring this hanging in my original remarks and I'm glad to have the question.

The original Nuclear Negotiator's Office was sunsetted after five years spanning from 1987 to 1992. I was appointed ultimately in 1991. We got the Office extended for two more years. My successor was Richard Stallings, a Congressman from Idaho, a most able man, and as I mentioned in my remarks, we had 30 inquiries that were superficial or were somewhat interested. That pared down to about 20 that were fairly interested – and pursued some. We had nine tribal organizations that actually engaged in advanced studies with federal monies.

One or two states were sincerely interested, and while the governors never pulled the trigger, they would meet with us, but didn't quite get into the game and we had a couple of localities that were very interested, but as I mentioned, we gave governors and legislatures vetoes and in two instances governors did issue those vetoes.

What happened when I left the Office, and Mr. Stallings was appointed, was I think indicative of that problem about short political terms and 10,000-year waste terms. The process of building a rapport with a locality on a voluntary program is highly personal. And though Representative Stallings, the second Negotiator, attempted to pick up those pieces, they were not able to keep those things alive for long enough to allow the Congress, or to encourage the Congress, or to permit the Congress, to once again extend the Office.

So the fact is that we had initiatives that were ongoing with the Office expired. Regrettably. I was not present and was not called by either the Negotiator's Office or the Congress to know what difficulties were engaged and not surmounted during that process. We had a Democrat President; we had a Democrat Congress and we had a former Democrat Congressman who I would have hoped would have been able to extend the office, but it didn't happen.

So the summary answer to your question is, yes we did have a decent experience of a considerable term. Yes, it did look promising, but we did not fully play it out, unfortunately, in part because we couldn't find enough heroes in Congress to continue the Office.

And that's why I cautioned that we need some heroes now.

Mr. Jim Hamilton. Thank you. I had a question over there [Pointing]; and then, purple shirt over here. I'm sorry – okay, third, I've got you.

Admiral John Grossenbacher (Ret.). My name is John Grossenbacher. I was the Director of the Idaho National Lab for 10 years. I've lived in Idaho for about 12 years. And I'm a concerned citizen.

And my question is really for Assistant Secretary Kotek and Dr. Schneider.

Finland. Sweden. France. And I guess Canada is the slowest; but have all made progress in this area. They're reasonably well-developed countries. Representative governments. What can we learn from them? What have they done to make progress in this area that we can learn from and adopt?

Mr. John Kotek. The short answer is a lot. For one example – the question was raised earlier about benefits. How do you work with a community? And what we've found in these other countries is that it really needs to be up to the community to define what they think is in their own best interests.

You know, folks have heard me say before that any community that is going to be willing to go down this road is first going to be able to convince themselves that this can be done in a way that is fully protective of public health and the environment. Period. Right?

After that, the second question is can we do this in a way that leaves us better off as a community for having gone down this road? That can look very different in different places, and so the example of Finland, when the nuclear waste agency there began working with the local community, they asked the local community, "What's your biggest concern?" Their concern wasn't, you know, we want to lower our taxes or something, it was our home for our elder residents is too far from downtown and it's falling apart and we need a new one. So the waste management organization decided – agreed to lease that facility from the community that owned it, and built the community a new facility downtown so they could have

a better facility closer to the people. That established the basis for trust and a longer-term working relationship that allowed them to succeed.

So that's one example of don't presume to go into a state or a community or a tribe and know what's in their best interest. Listen to them. But I could go on all night about that, though.

Professor Jennifer Schneider. Yeah, I didn't know about that particular example. That's really interesting. That's more of a transactional sort of social-license-to-operate model.

I guess I was going to talk more about the – in those countries, which are considerably smaller than ours, there are strong histories of civic engagement; there are cultures of civic engagement; and they also – almost all of them – maybe with the exception of Canada – have mechanisms for citizen oversight of science and technology. So those countries, and other northern European countries in particular, sort of started the idea of the "citizen jury," where citizens would get together and debate science and technology policy and make recommendations that policymakers listen to.

So in some ways I think it's that sort of model that we are trying to replicate here on a much grander scale. Or DOE is trying to.

Mr. Jim Hamilton. Okay, great. Thank you. [Pointing]. Purple shirt – here; and then red jacket there – I think I've got that right.

Mr. Ryan Kotek. My name is Ryan Kotek. I'm a student at Carroll College and also an interested citizen. And my question is just for the panel in general. I don't think there's anyone in particular that I want to address.

On this issue of the paranoia surrounding nuclear waste and nuclear waste disposal that, you know, dates all the way back to the Cold War era. I think the representative from the Snake River Alliance had mentioned a statistic from 1974 – correct me if I'm wrong – with which she drew the conclusion that Idaho was a non-consent state.

I'm wondering at what point we begin to take away, you know, statistics that are 42 years old and perhaps encapsulating both greater education and greater awareness of what nuclear waste is actually going to do to a community – how that's going to get us forward to a place like Finland, which despite spending time as a Soviet satellite state, still managed to be far ahead of us in terms of their own nuclear-waste disposal.

So I guess the question is sort of two-pronged. First, how do we better educate the general population in terms of recognizing what the real dangers of nuclear waste are versus what the third-party propaganda surrounding it is? And then secondarily, how do we sort of get towards a solution where these communities can feel that they are going to be, you know, fairly compensated for taking on this nuclear-waste burden, because it is a burden, regardless of what side of the issue you stand on.

Mr. Jim Hamilton. Alright, just before you all answer, I'm just going to do a little quick time check. If you can keep your responses to about a minute, that would be great – each.

Mr. Gary Petersen. So if I may, I'd at least like to open the avenue.

Any time you have nuclear waste, like you do at Hanford or Idaho Falls or Paducah or places like that, you're going to have incidents – coming back to the gentleman over here who said that all humans have failures. So Hanford – Hanford has vapors issues. Those issues come to the attention of the news media, and there are many things going right with how DOE is handling cleaning up the nuclear waste site; but the media itself is looking for what I call "bad news" not "good news." And so the media will expound on the bad news.

I'll give you a quick example. The Governor of the State of Washington, Jay Inslee, met a couple of us in my office, in our conference room, and he was talking about leaking tanks. And we were talking about [the fact that] there are other things along the Columbia River that are much more risky on the Hanford Site than are the leaking tanks, which are out in the central portion of the site.

And at the end of the conversation – 45 or 50 minutes – the Governor said, "People in Seattle understand leaking tanks. They do not understand when you talk about K Basin Sludge or a Waste Site called 6-1810 or a building called 324," which is 100 yards from the river that has some of the highest contamination on the site.

And so, it becomes political. And the media plays that up, and so that's what the public sees. It's unfortunate. But we have tried and tried. We talked to, you know, Rotaries; we talk to Kiwanis; we talk to Chambers of Commerce; and the bad news is the news that hits the press, not the good news.

Mr. Jim Hamilton. Anybody else want to jump in? Jen, and then Mr. Leroy.

Professor Jennifer Schneider. Sure. So I'm a professor at a public university, and believe strongly in public education.

That said, I maybe disagree with your supposition, which is that giving people more information will make them agree. So I think we can have more public education about nuclear power and nuclear waste, and people may *still* disagree because we have different values about how to power our nation and what to do with the waste that that power produces.

So we call that the "deficit model;" the idea that if we could just solve the deficit of public understanding, we'll be able to move forward with policy solutions. But politics is required in a democracy, and again politics is messy. So it's uncomfortable, but I think the messiness is part of the movement forward.

Mr. Jim Hamilton. Mr. Leroy and then Beatrice.

Mr. David Leroy. Thirty seconds on your prong one – how do we address public education?

That was precisely the process that we designed into the Negotiator's efforts in the 1990s. Our first offer to these related jurisdictions – and what they came back to us, initially seeking – was \$100,000 for a grant to allow the entity to hire its own experts; explore its own issues, concerns and questions related to the proposition of hosting such a facility.

The second phase of that was a \$200,000 grant; later amended and increased to \$300,000, and it was that process through which we began to move jurisdictions.

So the point of your question – public education – is best, and it's also the best place to start with finding a voluntary and consenting jurisdiction.

Mr. Jim Hamilton. Thank you. Beatrice or Talia?

Ms. Talia Martin. I think I can be pretty quick.

Just like any community, tribes are limited in resources, and so the agreements that we have already in place where there are advisors such as myself for administration of these agreements. Use them to your advantage, because we're the ones that need to bring back that information and be able to educate our own community; our own membership to that level hopefully that can help, or at least intrigue them to learn more or understanding more.

Mr. Jim Hamilton. Alright.

Ms. Beatrice Brailsford. And I will say I agree fully with Jen that at the end of the day this is a political process and political processes are messy.

The event in 1974 that I was describing was an historical, political event. It wasn't a radiation leak, or something.

It's probably wise when we go forward trying to seek consent – and frankly, when we try to design a framework that is supported by enough national consensus to, you know, get a law passed – that we don't characterize others' concerns as "paranoia." That's probably just good advice I'd like to give us all. That we don't dismiss anyone's concerns.

And finally – and I can't remember what part of your question it was because it was a long time ago now – but I think when we get to a point where we're looking at helping people understand the costs and risks of anything they might be contemplating – I think we have to make certain – or I would suggest that we make certain – that people are encouraged to look at the costs and benefits of a whole range of alternatives. Because we might look at something – I might decide the risk of this is too great. But, looking at something else, it might be a greater benefit for my community, even if the risk is about the same.

So I can't remember what part of your question it was but that was – look broadly.

Mr. John Kotek. And just a quick comment on the messiness question that has come up a couple of times.

Anyone who is interested in learning some more about this, I recommend a book called *Nuclear Reactions* by a guy named Chuck McCutcheon. If you haven't read it – it's about the opening of the WIPP Site. If you don't read anything else, read the chapter that starts with Governor Andrus telling the federal government you can't bring any more waste into Idaho, and the role that that played in sustaining the momentum to get WIPP open, but it's a fascinating read – it shows you that it's anything but a linear process.

Mr. Jim Hamilton. Okay, great. And the last question here in the red shirt, please.

Ms. Eileen Thuesen. Eileen Thuesen. I represent myself. I've lived in Idaho for more than 30 years. But only became a member of the Snake River Alliance about two days ago when I heard about this meeting.

I'm quite alarmed because this discussion is even taking place. I guess my question is for Assistant Secretary Kotek. Idaho has already made itself clear that this is a non-consent state. Is it your hope to change that status?

Mr. John Kotek. Maybe you missed my statement at the beginning of the night. We are not at the stage where we're looking for interest from states, tribes or local governments. We are at the stage where we are designing a process.

When we do get to the point where we're looking for states, tribes or local governments to engage – that will very much be a conversation within a state. We're looking for willing and informed host states. The way we want to see this work is that they take the initiative and bring their interest to us. So that's what we're driving towards.

Ms. Eileen Thuesen. I understood that and I did hear that. But that there would even be a discussion of a process in this state *towards* consent is what I'm concerned about. I'm not asking about site selection; I'm just asking about whether it's the DOE's hope that Idaho will eventually become a consent state.

Mr. John Kotek. We picked here because of the state's long history of dealing with these issues both at the state level and at the national level. We just thought it was a great place to come and hear some really informed voices, and I think you've heard a bunch of them here already tonight.

Ms. Eileen Thuesen. Thank you.

Mr. Jim Hamilton. Okay. This concludes the question-and-answer session. I want to ask again that we give a round of applause for the panelists for sitting on the hot seat. [Applause].

So the operative word I've heard so far is "messy," and that also relates to my ability to keep this on track timewise. We are 20 minutes beyond our schedule, alright? So I'm just trying to value everybody's time for the rest of the evening. So here's what we're going to do.

We're going to go on a break. That break was supposed to be 15 minutes. Now the break is going to be 10, alright? The restrooms are out to the side; to the left.

When you come back from that break, you're going to be going into small-group discussions and the goal of those, again, is to dig deeper on the issues that you've heard today and other issues that you may want to talk about around consent-based siting.

So to make this happen quickly and effectively, look at your blue folder. On your blue folder you're going to see a number. That number is going to correspond to a number on the tables, so when you come back from your break, all we ask is that you sit at the table with your number.

These small groups – as I said before – are to help you get a little – wait! Don't leave yet! Don't leave yet. These are important instructions. You're going to dig deeper. You're going to have independent facilitators to help you explore these issues. I want to ask them to raise their hands so you know who they are. Raise your hands, facilitators.

Their job is to help you have a productive and positive conversation around these issues. At the end of this 60-minute or maybe 55-minute small group discussion, there is going to be a report-out session – and those summaries are going to find their way into a report at the end of the day that the Department will issue.

There is an information sheet inside your packet that gives you probing questions to start this discussion, but it's entirely directed by you, and how far and deep you want to dig.

So, for the folks on the webinar, as we learned before, multiple small-group discussions do not make for good television, so we're going to pause the webinar. We're going to resume it in a little over an hour. We want you back here in 10 minutes – please. If that works for you.

That's it. We're adjourned. Please come back in 10. Thank you very much.

Small-Group Discussion Summary Session

Mr. Jim Hamilton. Who's going to go first? Table 7 is going to begin our report-out session. Okay, we're going to start with Table 7 and were going to keep going. Alright, fire away. Thank you.

[Facilitator 1: Ms. Janice Neitzel.] Hi, I'm Janice Neitzel; I'm at Table 7. Here's what we came up with.

One important point is that Idaho is a non-consent state, and that needs to be understood and respected before we come up with a consent-based siting process.

Looking at the history of Idaho's decision is important and informative to the process.

Our next point is that transparency needs to include laying out all of the options with all the pros and cons, even if there are options that some think are not viable. This would help gain trust, and is respectful of all.

Our next point is that we need to look at more than just the social side of site suitability. We need to look at technology, transportation and all the other pieces in the plan.

Another good point that we thought was important to share is that a tiered approach with all stakeholders is needed. A small entity should not be able to make the decision. The decision needs broader consent.

Our last point are the steps to the consent-based siting process.

Number one is defining the objectives. Interim storage; geological repository; what other things.

Our step two is investigating stakeholders based on these objectives. For example, assessing familiarity with the issues and a proclivity for being for or against it.

Our third step of the process is strategic development of informed consent. Thank you.

Mr. Jim Hamilton. Thank you Table 7. Who's going next? Table 3? Alright, Table 3.

[Facilitator 2. Mr. Frank Scarpaci]. Good evening, my name is Frank Scarpaci and I'm with Table 3.

So the first point that was brought up is that a broader enumeration of stakeholders is needed – that needs to be included in the process. An example that was given: we have 300,000 people who drink water from the Snake River Aquifer. So they need to be taken into consideration.

The next was around site suitability. We should start with site evaluation for safety and suitability first, and then move to consent.

The next point was it is important to learn from other countries and from their experiences – so that needs to be included in the process.

It also takes a broader statewide consensus – it's not just the local communities that are involved in the process. It really does require the full state participation and the state support, but also the political support of the adjacent states as well.

Next, waste should stay where it is until a permanent repository is located – we didn't have complete agreement on this, but that was brought up.

Next, as far as the process, we need to make sure that we are broadening the process to include expertise and public involvement in communications. So some of the examples that were given were pulling in experts to help in designing processes – pulling those folks in.

But also making sure that the process has the technical depth that is needed; and again, it's related to process.

And folks that will help us with definitions – what the definition of a "stakeholder" and "community" and so on and so forth – making sure that that's clear.

Involve social scientists as well; and also, for example, experts around risk communication. There you go.

Mr. Jim Hamilton. Thank you very much Table 3. We're going over to Table 2? Alright.

[Facilitator 3. Ms. September Spore.] Yep. Here we go. So we had a really lively group, but also one that was very much in alignment.

We spent a lot of time talking about outside people that we could trust that would be involved in panels of scientists and subject-matter experts to really give some reliability to the whole process.

When we looked at everything that we talked about as a group, what we kind of came up with is sort of this high-level thing that hadn't been spoken of explicitly, but was implicit in our conversation. At the end of the day, we have a lot of different variables that lead to transparency and a sense of independency.

We're talking about transparency on what a community that is giving consent, or is considering giving consent; is allowed to be involved in and to understand and do; we're talking about transparencies with regard to incentives; transparencies with regard to panels that might be involved in helping to assess the scientific viability of a potential site; transparencies into the technical requirements – you know, what you really need for a good site; transparencies on risks and benefits; the process that we would actually go through as well as the geology that's needed; transparency in terms of what does consent really mean, so that everybody's really clear about that; transparencies with regards to the legal agreement and the

milestones and recourses they would be allowed or embedded inside the consent; and these oversight transparencies and constant oversight in terms of the processes it goes through.

And at the end of the day, what the group sort of decided as they looked at this whole chart was yeah, we're after transparency and independency; the sense of it, but really for the purpose of getting back to trust.

So all of those things were important, but for the purpose of getting it all the way back to trust, yeah? There we go. Thank you.

Mr. Jim Hamilton. Thank you very much. Table 6.

[Facilitator 4. Mr. Stuart Smith.] Good evening, Stu Smith with Leadership Strategies. So one of the most interesting things around Table 6 is not only did we have a discussion around consent-based siting and what it would take to achieve consent, but we experienced it. So I asked the group to reflect on what you see at the table is what you're going to see in the larger group.

So as the table talk about this need for inclusion, it was really around defining "community" and "stakeholders," but it was really even deeper than that, and understanding people's stated interest and maybe the interests that weren't seen.

And so there were some proposals here about the process needing to be very well supported – to be in person, to be face-to-face, and to allow people to come up with different and disparate points of view; respect those points of view and manage that in a consent-based process.

And we pointed out in our table group where we saw those conflicts, and asked how we could deal with those.

And the other thing – it has to do with trust and transparency – and it really is around how do you build trust and keep trust? And one of the challenges that the group offers up in consent-based siting is the fact that because of past performances of the Department of Energy and other organizations involved in the past, that the past performance is impacting trust. And so I asked, "Well, how do you address that?" And so trust is gained by performance. Trust is gained by meeting commitments. And the group was emphatic about the fact, you know, my dad used to say, "Fool me once..." you know how the adage goes, right? And so DOE or the organization has to build and maintain trust and credibility.

The other piece was that it's not a local issue. It's not a regional issue – it's a national issue. So how do you have a national conversation? And there were a lot of complexities to that. And we asked the group what examples are there where we've addressed a national issue? And someone offered up the eradication of polio. And then we got into an interesting conversation around how much does the public participate in a process like that, and how much do people have to make decisions that are good for a larger group of people? What is the balance between gaining consent and making decisions?

We also talked about the fact that there are some missing pieces in the framework right now. And so it's kind of difficult to gain consent when you don't know what the framework looks like. So the recommendation is that DOE, or the agency responsible, complete the framework first, and then engage folks in the process. And one of the examples was, "Where are all the criteria for decisions?" How would

a community know they should step up and say we'd like to get involved in this, if the framework was not complete?

And then again obviously along with the transparency – getting the transparency literally down to the grassroots, right? At the lowest level possible to gain consent; and this established criteria just went along with that so that's a reflection of this group's conversation.

Mr. Jim Hamilton. Thank you Table 6. Table 5?

[Facilitator 5. Mr. Chip Cameron]. Hi, I'm Chip Cameron and we had a lot of passion at Table 5. Not a lot of agreement although we did have one point that we agreed on, but I feel like I should tell you about what some of the passion was on. No agreement.

Stop making radioactive waste. Okay? People were talking about that a lot. And like I said – there wasn't a consensus on that.

Second thing – there's a concern that DOE is here in Boise talking about consent-based siting because they want to put something in Idaho. Even though that was contrary to everything that was said by John Kotek about what was going on here. This is a low-population area, and they're trying to put the waste here. Okay; again – no agreement on that, but there was a big concern.

Also, a concern that a consent-based process is just not feasible. Not something that should be done. Again, no consensus on that.

What there was consensus on is that there is no trust in the Department of Energy. Examples were given – the change in Administration – the reversals of policy because of that were given, and that there should be a new, independent agency to shepherd this consent-based siting, or siting process, through. And that there would be a board – not true-believers on the board – but industry representatives; they probably are true-believers, in solving the problem. That local interests should be represented. And how you do that would have to be examined. But local interests should be represented.

There should be a lot of science-based expertise in this independent agency, and like Table 6, one of the most important things that should be done is that – what would an acceptable site look like? Establish those standards – those criteria. So that you know that going in.

And there are a lot of things that are captured in the notes, and that will be captured in the report-out; the one thing that was said that we really couldn't get much traction on is that communities are gullible. Okay? My question to the group was how do you make sure that communities are not gullible? How do you protect them? I think that's a big issue here. But I think there was more concern that we're coming to Idaho with the facility. So, we didn't really get into that, but it was a great suggestion.

And that's Table 5.

Mr. Jim Hamilton. Thank you Table 5. Table 1?

[Facilitator 6. Mr. Bill Olsen.]. Good evening, my name is Bill Olsen, I'm also with Leadership Strategies, representing Table 1.

I was delighted that they dug into some areas that I hadn't heard in some of the previous meetings. And they kind of dug deep.

The first one here – we actually did a little listing of criteria or considerations and we kind of went back and forth on those. But what really came out of this is that it must *both* address the science and it must address the community. And they really felt strongly that that needs to be handled separately. The science, the geology, the topography; is it seismically qualified? What's the watershed? What's the aquifer? How does the water flow? What's the wind? All these things being science-related.

On the other hand, the community – what's the economics? What's the social justice? What's the historical content in that area? Have they been supportive of this in the past or not?

So these being different – science versus community – but they both need to be addressed, and they both need to be weighted very heavily. Alright?

The next one – it's kind of an interesting one – this is a total new one that I've heard. It's almost like what came first, the chicken or the egg? And this is which *should* be first in this process. And by that – should this be, as has been suggested by the executive panel, that this is the community self-selects and volunteers – "We want to be a site." And so then they again go through the process. Or, should it be at some national level that the whole country is assessed – here's the locations that are even possible – that they are scientifically possible – that they would even begin to be qualified, and then they invite people in those locations to do that.

So where should this start? Should it start from the self, from the community, or should it start from some national level of assessment that invites those who might be possible candidates?

This next area here – I've just written down "new agency." We've heard very strong comments on this before, across the board there was only one person who stood out – everyone else said there needs to be a new agency. This went back to trust. Not only trust right now as to the Department of Energy, but a trust of the process and even trust in what's being said right now about the consent-based siting process. Is there a process at all? And so many people felt very strongly that this needs to be new. It needs to be independent. And it needs to be approved by Congress, in fact. So it really needs to be established. And then the trust can be established.

Lastly, we are creating something here. There is awareness that there is no current template or a draft process for consent-based siting. So part of the process was once that template is created – maybe that's a year from now, I don't know – but once that template for a consent-based siting process is established, it has both content and the process for establishing consent. That template needs to then be shared with the nation. Public comment. National approval. That was from Table 1.

Mr. Jim Hamilton. Thank you Table 1. Table 4?

[Facilitator 7. Mr. Wayne Pendle.] Hello, my name is Wayne Pendle with Leadership Strategies; I facilitated the table discussion with Table 4.

The first two words that were spoken at our table were "trust" and "transparency." And there was a lot of energy around that, and a recognition that a non-DOE entity would be the engine that needs to drive this new consent-based siting process.

Probably the greatest source of not disagreement, but discussion, came and there was certainly not consensus over this, but how are we defining what a community is? We heard from our panel group, but this group took a little deeper dive and said that's why a macro-consent-based siting process may not be possible. Because of the inability to define what a community is.

There was some agreement around the idea that a community equals those who bear the risk. And then, there was a discussion as to how you determine who those are. And what does risk mean; and how do we assess that? So, I think the realization was it's not solvable in a roundtable, and may never be solvable with some of the discussion through this process, so that was interesting.

Some examples that were given as to how we could leverage some models. One came right here in this state around the Idaho Settlement Agreement. That there was enforceability to that, so in a consent-based siting process, the agreements made between the community and the entity need to be enforceable. There needs to be milestones. There needs to be financial repercussions for meeting or not meeting some of those standards.

Which really leads to this last point here. That the community itself – however that's being defined – needs to be the one that sets the standards. There may be some national scientific ideas, but that local community – to truly be an informed host – needs to be the one that sets that.

And one example that was given about how a community can become informed for a potential host site was a tribe in Utah where they were trying to determine what to do with some chemical waste. They were then provided funds which they [used] to independently hire non-DOE, independent, third-party scientists to come and review what was taking place. That data was then presented to the tribe. They took that, and made some decisions moving forward.

So that was asked about models and examples – one example about how those funds could be used to truly make an informed community, however that's defined. But no consensus was reached around how to define it and that may be the root cause of some of the delay in designing this consent-based process. Thank you.

Mr. Jim Hamilton. Thank you Table 4. Table 8, thanks.

[Facilitator 8. Ms. Susan Nurre.] Hi, I'm Susan Nurre and I facilitated the group at Table 8.

And I'm going to start at the bottom of the chart, because one of the first things we started talking about is what is "interim?" What does that mean? Is interim a period of time or is it until something else happens; are there going to be any final dates or could interim end up being permanent?

And we also talked about having an independent evaluation of the need to transport the spent fuel from the reactor sites to some other location – to an interim site. To make sure that that is really the right thing to do.

And then we had – similar to the other tables – we talked about trust. And the need for transparency. And it's not just with the DOE. We actually said it's not just the DOE – we slam them a lot, but...we talked about the fact is its contractors; its private agencies and its trust and transparency around the science. Get third-party evaluators to look at the science. It's also around the information. Several times people said, "Where did you hear that?" "That's not what I heard." So there was disagreement on information on this topic. So who's controlling that information and how do we make sure that it is accurate and obviously accessible?

Also with trust – the federal government has promised – many of you talked about this – they've promised and they've not kept their promises. So we need to have the flexibility that if they don't keep their promises – you guys said – that there are repercussions or consequences.

Something else: There is always new information. There is more modern and current information; we need to learn from the past; we need to stay up with the future and again we just need to be aware of what's out there so that we are making the best decision.

And we did talk about the non-consent status of Idaho, and that that needs to be valued. It may change at some point in time, but the people who have voted non-consent, that needs to be valued.

The other thing we talked about was the critical need for education and communication. And the statement was made that the DOE has been doing a bad job of this for 60 years – oh, the entire industry – thank you for that correction. Including Congress and everybody involved – thank you for that correction; have been doing a bad job for 60 years, so it's much worse than I stated it at first.

And communication and education is much more than just fliers. It's more than just notification. It's got to be two ways. And one of the examples that we were given was of an information system that's used in Europe that actually allows people to log on and make queries – it's available to universities and libraries – and that might be something that would make sense to help, again; you've got to make sure that you trust the information, but that would help people – anybody that's interested – learn more; get that education and then be able to inform consent or inform non-consent. That's Table 8.

Mr. Jim Hamilton. Thank you Table 8. So as you heard previously, the synthesis of all of this – the small-group discussions and the report-outs – are going to find their way into a summary report that will be on the Department's website shortly.

Public Comment Period

So we're now going to go into the public comment period of this meeting. Right now I've got five people who signed up on the public comment sheet. If there are any more, by all means let me know. But we're going to start with these five. Okay? We're going to do 3 minutes a person. Okay, they'll be a mic up here in the front and we will go in order.

To help this along, we have Tim in the back – he has two pieces of paper. One yellow, and one red. For those of you are giving public comments, when Tim holds up the yellow piece of paper, you have one minute left; when he holds the red one up, it's time to pass the mic to the next person.

So, thank you in advance for your cooperation. In order I've got Tami Thatcher; Richard McPherson, Kara Colton, Rebecca Casper, and Rod McCullum. So if I could have Ms. Thatcher come first. The microphone is right up here. Welcome.

Ms. Tami Thatcher. I see that trust was a common issue that came up and it has to do with the history – the long history – and so I'm going to belabor that point and maybe other people will talk about other things.

But the history of the Department of Energy testing weapons over the Marshall Islanders and telling them that it were safe or it wasn't intentional that people were there; testing over the Nevada Weapons Test Site; and in Idaho, few people know the INL historical dose evaluation. The governor requested it in 1989. It was published by the Department of Energy in 1991 and the CDC – a completely different branch of our government – promptly issued a review of that document in 2007 and it found that the doses were 10 times higher in some cases, but it said no problems; no worries; no cancers.

Well, why is the thyroid cancer rate in Bonneville County the highest in the country? So when you're hoping another agency isn't going to be influenced by the long tentacles of the Department of Energy, I've got news for you.

We've got two-thirds of INL's workers who have submitted illness claims. Two-thirds of those workers have been denied. They said "cancers just happen. It wasn't because you worked at INL." And you have new science showing workers have elevated cancer risk at 100 millirem per year. Their dose allowance is 5,000 millirem per year.

So the Department of Energy ignores new science; there's a long history of even other agencies – we still don't have all the data on the weapons testing and the health effects in this country; we're waiting on that and those tests were conducted in the 1950s and 1960s.

So there has been a lack of transparency – historical about the damage that they have caused, and there is still a lack of transparency now and there's a huge scientific integrity issue. As I study U.S. Geological Survey Reports and CERCLA reports and I find huge disparities. And the answer from the USGS is that, "We don't read CERCLA reports." There are huge problems with scientific integrity. There are huge problems in transparency. And the history of not trusting the DOE – there's a lot of firm ground for that and there's also a lot of firm ground for not trusting agencies influenced – indirectly, invisibly – by the Department of Energy. So keep those things in mind. Thanks. [Applause].

Mr. Jim Hamilton. Thank you Ms. Thatcher. Richard McPherson and then Kara Colton.

Mr. Richard McPherson. Thank you, and I'm glad you are holding these meetings around the country. They are needed badly.

Interestingly, I've been attending meetings like this since 1975 when I attended the Sundesert Nuclear Power Plant hearings in California. Heard some of the same people saying the same things; different names; different faces.

In 1988 I received a phone call – I was living in Hong Kong – the U.S. State Department said if we asked you would you represent the United States in the International Atomic Energy Agency? "Who is this really?" Because I'm the most unlikely person to go represent the United States anywhere.

Anyway, I did it for four years – it was a result of Chernobyl. And there were six nations involved; special funding; we had lots of support. We did not have a lot of misinformation; we had good data; good information – lots of it – we had lots of people going through helping us.

I would like to leave you with a couple of thoughts. Two of the big ones were – we studied the United States, Canada, the UK, France, Germany and Japan for information education.

I'll just talk about the United States. This was in 1989-1993. Our bottom line was that the United States, as a nuclear industry, including the United States Congress – everybody else involved in the industry – had done a very poor job in educating the public. It actually had done a pretty good job at transparency. But not educating the public.

As result, people had misinformation; other people who wanted to provide misinformation were providing it and were providing it in such a way that they were far more effective than whatever the nuclear industry, Congress or whatever, was doing.

So the one thing that this country does need, is it needs better education about energy and especially about nuclear energy. Too much misinformation out there. Thank you.[Applause].

Mr. Jim Hamilton. Thank you very much Mr. McPherson. Kara Colton followed by Rebecca Casper.

Ms. Kara Colton. Good evening, my name is Kara Colton and I am with the Energy Communities Alliance. We are the association of local governments and communities that host or are adjacent to the Department of Energy's federal facilities. ECA members play a key role in supporting the country's national security efforts with the understanding that the legacy waste from the Cold War was going to be cleaned up and disposed of in a safe and timely manner in a geologic repository. However, as the political stalemate in Congress continues, we have become de facto storage sites. Cleaning up this waste must be a national priority. ECA appreciates the efforts by Mr. Kotek, Mr. Griffith, and all of their colleagues at the Department of Energy and we want to offer the following comments.

We support moving ahead with the Yucca Mountain licensing review. Not only is it the law, but the site has been analyzed and studied and many taxpayer dollars have been spent on the site. Science, not politics, should be the basis of decision-making and there are certainly lessons to be learned at the very least.

With the current impasse, however, ECA does support looking at consent-based siting options in parallel in order to move this waste out of our communities as safely and as expeditiously as possible. We support a consent-based siting approach that ensures decisions are based on sound science and meaningful collaboration, where interested communities, states or tribes volunteer and we do believe that they're out there, and that they're able to decide on their terms what they would want to host in a nuclear facility in a process that's got flexibility, transparency and adaptability.

But we are concerned about the timeline and whether or not there is a sense of urgency around these issues that there needs to be. We believe that DOE can move forward more quickly by providing some more specific information so the potential host communities and states can understand how and when the process will move forward and what resources will be made available to them. This guidance includes information on suitable disposal mediums; it includes DOE, the NRC and EPA beginning to develop scientifically-based health and environmental standards; model state laws and regulations to guide the siting process; we think DOE can develop an initial list of the types of incentives and compensations that they would be offering to host communities and local governments for taking on this national mission. We believe DOE can identify the steps needed in a consent-based siting process and the order in which those steps can be taken. We believe DOE can continue to work with local governments and other stakeholders to define the components of consent. We agree that there won't be one-size-fits-all, but how does DOE envision that consent would even be measured? This kind of guidance can be provided now and it would not compromise the fairness or inclusiveness of the process.

Along with finishing the Yucca Mountain licensing review, Congress needs to pass legislation to modify the Nuclear Waste Policy Act to allow other sites to be considered for interim storage or permanent disposal, but allow Yucca Mountain to be included in those alternatives.

And last, but certainly not least, funding. Congress and the Administration should move quickly to provide resources and funding for education, outreach, feasibility studies and R&D aspects for waste management and disposal. DOE should ensure that this funding is used to assist potential host communities and their local governments or those involved in waste management, disposal missions to educate the local community and to hire independent, third-party scientists and engineers.

And finally, the federal government should provide funding to all the communities that have become de facto storage sites for legacy defense waste or commercial spent nuclear fuel to offset the impacts of those communities having those wastes on-site for longer than originally envisioned.

Again, thank you for the conversation tonight and the opportunity to comment. [Applause].

Mr. Jim Hamilton. Thank you Ms. Colton. Rebecca Casper followed by Rod McCullum.

The Honorable Mayor Rebecca Casper. Good evening. I wish to begin by thanking Assistant Secretary Kotek and his staff for making this kind of a dialogue possible, not just here but throughout the country. It's much needed.

My name is Rebecca Casper and I serve as the Mayor of the City of Idaho Falls. I am also a member of the state's LINE Commission. I represent a community that is highly experienced with nuclear research and innovation. We understand spent nuclear fuel and legacy waste. And my interest here is currently as one who wishes to see the development of viable sites so that we can hasten the removal of wastes from my community, or the areas surrounding my community. I also want to see the development of sites to relieve the pressure and take that commercial waste, so that we can move forward with the development of innovative nuclear power programs such as this small modular reactor opportunity that we have and in order to be able to develop that clean, green, baseload power, we need to be able to find a place to store that waste.

We're here tonight, in this situation, having this discussion, in this moment in U.S. nuclear history primarily because of failure. Failure to build a repository; failure to secure legacy and commercial waste streams; failure to secure sufficient funding; failure to make progress on untangling this vicious cycle of commitments, shortcomings, lawsuits and recriminations.

This we know. But in our haste to blame the federal government for these shortcomings, perhaps we in the larger nuclear community have also failed. We have failed to educate. We have failed to inspire. And to fully grasp the bigger national and global scope of the problems that we need to solve.

My own opinion regarding consent-based siting processes tends toward a model that recognizes our federal system and that respects the role of states and particularly local governments in siting matters. I also advocate for a siting methodology that does not unduly power a single individual in that process. The damage – financial, scientific, and otherwise – that a single individual can create is staggering. We must adopt a system that offers checks and balances in the form of a way to override a veto when the will of the state and the local majority is clear.

I believe we have sufficient scientific data and storage technology right now to safely and adequately address the waste storage problem. I believe – as Gary mentioned earlier – that the challenges we face are almost entirely political in nature. I believe a nation like ours, with a highly educated citizenry and a high degree of resolve can solve this problem. We can solve any problem if we put our minds to it. I believe we could free up the billions of dollars that are currently allocated to fines and court costs if we could formulate a consent-based path forward. I believe that with tailored incentive packages, many localities will step up.

As an educator by profession, and as one who works with citizen education every single day, I am very confident that coordination between state, local and federal governments – with informative outreach efforts – into our communities – with that we can improve the levels of both public understanding and public acceptance.

Armed with facts, and not fear, people can feel safe and even recognize the remarkable opportunities that might come with having a premier federal storage facility in their backyard. I'm equally confident that the many benefits to universities located near an official storage site will result in still more innovation and opportunity, particularly for young people. Better science. More data. And appropriate policy will flow from those kinds of collaborations.

A few years ago, my own city sent a youth delegation to France to tour waste processing sites and to study waste storage. Those young people returned more-informed and even enthused for the possibilities inherent in having a more robust nuclear program in our country. I just noticed I missed my signal; I apologize. Thank you. [Applause].

Mr. Jim Hamilton. Thank you Mayor Casper. I've got Rod McCollum, Admiral Grossenbacher followed by Gary Duarte. Alright, Mr. McCollum.

Mr. Rod McCollum. I'm Rod McCollum. I'm with the Nuclear Energy Institute in Washington, D.C. We represent the owners and operators of the nation's 100 commercial nuclear power plants that provide 20% of our electricity and release no greenhouse gases.

Our country celebrated its 240th birthday earlier this month. That doesn't just mean we are old. That means we have lasted 240 years as a nation. Not just a nation – not just any nation – but the strongest nation that this world has ever known because of the rich experience and history we have had with representative democracy. A representative democracy that can truly take the interests of its citizens and turn those interests into actions. They can make decisions. They can do the hard work that it takes to make this a great nation.

At our nuclear power plants, we work within those processes, those regulatory processes, those political processes. We engage with our communities. We make and meet commitments. We live our safety culture. In a sense, everything we do is about earning consent so that we can continue to operate. We have been successful. We are extending the licenses of the plants we have that are profitable. And this is something of which we are very proud.

Those same processes where we've been earning consent throughout the nuclear industry for decades. Those processes are already underway. Again, these are processes that our representative democracy has crafted over 240 years of experience – the licensing processes and the engagement processes of the states and the communities. They're underway right now in Texas and New Mexico. They're underway in the state of Nevada. The courts think they should continue because the courts respect the Constitution of the United States that says no one individual should have too much power.

It's time for the Department of Energy, instead of looking for a new processes – You know, I heard a lot of disturbing talk at this meeting that I haven't heard at the other meetings about somehow other countries know how to engage their citizens better than we do. Really? Does anybody in this room believe that Sweden and Finland and France are better at democracy than the United States of America? I don't.

It's time DOE engaged in those processes that we've had and honed for 240 years. Get back in Nevada; get in Texas and get in New Mexico for the sake of the people of Idaho and the communities in which my industry does business. Who didn't consent to be long-term interim storage sites. Get engaged to those. Use the processes we have.

I'm tired of hearing DOE talk about being in the early stages of something we've been at for decades now. I've seen people grow old in this business of trying to solve the nuclear waste problem. Words don't engender consent. Actions do. It's time for the DOE to start taking some actions, get out there and start earning consent where it has the opportunity to do so. Thank you. [Applause].

Mr. Jim Hamilton. Thank you Mr. McCullum. I've got Admiral Grossenbacher, Gary Duarte and then Terry Woodruff.

Admiral John Grossenbacher (Ret.). I'd like to comment that consent not only has to be granted, but then it also has to be maintained. You can't just create it – you have to maintain it.

And it's been said I think so many times here that it takes trust and trust takes transparency and it takes broad public support, which I think is a critical issue relative to information flow; relative to the involvement of our citizens – the issue of active civic involvement to make something like this work. To make an informed decision about something like consent takes an active civic involvement.

I'm going to give very specific now. The side of this that creates the most angst when we talk about risks and benefits are the risks.

The risks – they are always the same – they're transportation risks; seismic risks; environmental risks; you know, in Idaho particularly, protecting the Snake River Aquifer; the radiation exposure to workers as well as the public and then security, you know, the terrorist threat.

I'm convinced that part of what we need for a better informed citizenry on this is we need DOE to partner with the state and the state institutions – partner in terms of sharing information and activity – so that there are people in, and of, and from, the state of Idaho who aren't employed by DOE; who aren't contractors, but who have informed opinions. Like our universities. If you want to talk about what's the real security risk, maybe we ought to engage the Idaho State Police and the Idaho National Guard in the discussion to inform the citizens.

There are plenty of resources in this state to do that. Unless and until we engage that kind of activity in and of people in Idaho, outside of the federal government, and special interest groups, and civic action groups, all of whom I think try to do the right thing, with varying degrees of effectiveness and often influenced by what their own agendas are or can be, I think we are going to continue to stumble.

And again, I think there's a particularly important place for the universities. Because of their commitment to intellectual honesty and because they are of, and from, our state. [Applause].

Mr. Jim Hamilton. Thank you, Admiral. I've got Gary Duarte, Terry Woodruff, Lew Pence, Tim Andreae, David Monsees. And anybody else who's willing to come up, please drop me a note and I'll put you on the list.

Mr. Gary Duarte. Good evening. I thank you for this opportunity. My name is Gary Duarte; I'm Director of the U.S. Nuclear Energy Foundation in Reno-Sparks, Nevada.

The U.S. Nuclear Energy Foundation would like to submit a public comment concerning consent-based spent nuclear fuel facilities *wrongfully termed* as nuclear waste.

This dilemma has been caused by the State of Nevada's political opposition, instead of a reasonable analysis of science-based fact.

The year 2015 saw the retirement of Representative Rush Holt of New Jersey. For 16 years he was Congress's resident astrophysicist. For several years, a string of departures of members has occurred in the sciences, leaving only Representative Bill Foster, Democrat (Illinois) and Jerry McNerny, Democrat (California) out of 535 senators and representatives.

Our country's future is dealing with issues concerning advanced technology, science and engineering. It's very concerning to common-sense citizens that our congressional representation in Washington, D.C. is seriously lacking in representation from the science and technology community.

For the past decade, we have been researching spent nuclear fuel data and the dialogue between science data and political and media representations of this dialogue. Speaking as the grassroots public, we are concerned that the Department of Energy and the Nuclear Regulatory Commission and other such

agencies are being micromanaged by politics instead of oversight by Congress. We do not feel that this represents American citizens, especially in the matters of science and technology.

We are here to emphasize, again, that our grassroots citizens have common sense to request that our scientific agencies and national laboratories be allowed to operate autonomously through oversight and not micromanagement. It is one thing for Congress to offer an opinion, but it's another thing to execute political obstruction without substantiated cause, e.g., Yucca Mountain and the state of Nevada.

In the case of Nevada and the Yucca Mountain repository, the public has not been provided a sufficient or equal understanding of the science versus politics. During the 30+ year dilemma of the Yucca Mountain facility, its safety determination was designed to be achieved by the completion of the Yucca Mountain application process.

Partisan politics caused this obstruction by defunding the funds for its completion instead of changing federal law in the context of the Nuclear Waste Policy Act. Common sense would rule that if Congress cannot change the law, then the law as passed should be upheld.

This first page represents our primary message to the DOE concerning consent-based science. In an effort to save time, we will conclude this verbal portion of this message and submit in public testimony several pages of other recommendations which I have provided for them.

Please come and get some more information from my little display table over there, and thank you for this opportunity. [Applause].

Mr. Jim Hamilton. Thank you Mr. Duarte. I've got Terry Woodruff, Lew Pence and Tim Andreae.

Ms. Terry Woodruff. My name is Terry Woodruff. I'm a native Idahoan, born and raised in Boise, Idaho.

I wanted to start by saying that I graduated from high school in 1996. In 1995, the Settlement Agreement was reached and in 1996 it was ratified. I'm going to my high school reunion – my 20-year reunion – this summer and yes I'm starting to feel older, but that Settlement Agreement really isn't that old just like I should feel as old going to my reunion.

And I want to send the message loud and clear that the people of Idaho have said "no." We are a non-consent state. The Settlement Agreement established that to be part of our future; and our future with that Settlement Agreement is going to continue. And "no" means "no." I teach my children this. I don't understand why this is so hard to process at this level. But the DOE has no place coming to Idaho to look at this as a site of radioactive waste.

To imply that that's not what's happening here is insulting when we have a parallel process happening with the leadership of the Nuclear Energy Commission that's been happening for years. So that reinforces the distrust we have here for the Department of Energy.

Next, I want to say that the Blue Ribbon Commission asked for a new entity to address issues around radioactive waste and spent fuel and that entity must be independent of the Department of Energy and not made up exclusively of leadership from the nuclear industry.

Nuclear waste should be stored as safely as possible; as close to its point of generation as possible. I disagree fundamentally that a consent-based process for interim storage is even something that should be a goal. I think we should reflect back on that storage as close to the point of generation as possible through hardened on-site storage.

The Snake River Aquifer is the sole source of drinking water for hundreds of thousands of Idahoans. They are definitely part of the community. Those of us who disagree with the nuclear industry representatives that have spoken tonight aren't operating out of fear; we aren't uninformed; we aren't stupid – we have looked at the same information; we have looked at the experience of the DOE – and we have reached different conclusions. Thank you very much. [Applause].

Mr. Jim Hamilton. Thank you Ms. Woodruff. I've got Lew Pence, Tim Andreae and David Monsees.

Mr. Lew Pence. Good evening. I'm Lew Pence, Chairman of the Middle Snake Regional Water Resource Commission. The Commission is made up of the counties of Gooding, Lincoln, Jerome, Cassia and Twin Falls.

The Commission's role is to advise and educate the county commissioners, our state legislators, and the general public in our area of water quality and quantity concerns – both surface and subsurface.

One of our major concerns is the quality and quantity of the water in the Middle Snake Aquifer, which furnishes all of the drinking water for the area; much of the irrigation water; and supplies all the water for the fish industry, which produces the most rainbow trout in the world.

In addition to the fish production, we are one of the top dairy producer areas in the nation, producing a huge amount of cheese from the Glanbia and Jerome cheese companies, as well as smaller producers.

Oh, and did I happen to mention that Chobani is located in Twin Falls? It is the largest yogurt plant in the world. And I should mention the potatoes and beets that we also produce in the area.

In summary, the water from the Mid-Snake Region is a major revenue-producing area in the State of Idaho. We cannot afford to take the chance of diminishing the quality of the water resources.

The Agreement that was put together in 1995 and ratified in 1996 by Governor Andrus and Governor Batt should be retained, implemented and enforced. This Agreement in no way should allow additional waste to enter the state unless we figure out a way of safely of getting rid of it. [Applause].

Mr. Jim Hamilton. Thank you, Mr. Pence. Mr. Andreae and then David Monsees.

Mr. Tim Andreae. Thanks. I'll keep this. [Sign reading: "Nuke Free CHOBANI. NO CONSENT"]. So, I just want to state the obvious – a few simple things.

So there's a tension right now because nuclear waste is building up at reactor sites. And I think that tension is really important. It's a healthy thing because it makes us reflect. And that's kind of what we're doing here as well – reflecting, and there's something important about that. So I think deep reflection is in order and I think it should continue.

And I think getting the waste out of sight, out of mind, is not necessarily so healthy. Because it will stop this kind of important reflection that is happening. Including – there are some simple things.

It seems like a no-brainer to not have an interim storage that could be indefinite right directly above the Snake River Aquifer that is a resource for us all. It seems really simple. So, thanks.

Mr. Jim Hamilton. Thank you Mr. Andreae. David Monsees, and we're a little ahead of schedule, which I thank you for. So if there are any other people who want to speak [pointing] alright, give me your name in a second and we can keep going, thank you.

Dr. David Monsees. Hi. We've been grappling all evening about the issue about what to do with the waste. And I've heard in the discussion a couple of times about, you know, a nuclear energy future. And there is no need for that. Nuclear energy, as we know from the whole discussion tonight, is not clean. And it may be carbon-free, but solar and wind are also carbon-free and they are cheaper. Thank you [Applause].

Mr. Jim Hamilton. Thank you Dr. Monsees.

Ms. Liz Paul. I'm Liz Paul. I would like to ask everybody who would like to have their faces and their wonderful bodies memorialized with me, so please come up, with our sign here [Sign reading: "Nuke Free CHOBANI. NO CONSENT."]. Everybody from the Snake River Alliance, please come on up – look at that camera – hi mom! Okay.

This is a great thing. We have lot of people who came a long way – the may not want to get up here and say something, but we can all be in this picture together. Members of Snake River Alliance; future members of Snake River Alliance. There we are. Okay? Are you coming? Anybody else want to come on up? Come on up. We're free – we don't bite. Excellent. Okay. So is somebody getting a nice picture? Okay, see? Hi! Yeah, here we are.

We say that Idaho is a non-consent state. Thank you very much. [Applause].

Mr. Jim Hamilton. Thank you Ms. Paul. So quick time check – it's almost 9:10 PM and we promised to be out of here by 9:30 PM, so we've got a few more minutes if anybody else has a public comment they want to say? Alright. One – do I see two? Or is that going to wrap it up? Okay, great.

Mr. Brent Marchbanks. My name is Brent Marchbanks and I've refused to identify myself as *affiliated* with Snake River Alliance, but I'm outed now.

I wrote an editorial for The Statesman – I wrote it about a month ago – and it appeared two days ago, about this meeting.

When you talk about what people in Idaho know, and the whole issue of transparency by the federal government, Bob Ehlert, the Editorial Page Editor of The Statesman, wasn't going to print my editorial because I said that there were still shipments of the nuclear Navy waste under the Batt Agreement coming into Idaho as late as this year. And he didn't believe me. And he also reported that the entire editorial board of The Idaho Statesman didn't believe that that could possibly be true. He said, "If that was happening, it would be so illegal."

Well, it is true. He also didn't believe me when I said that there were isotopes from the nuclear waste already in the Snake River Aquifer.

Don't tell me that this is an informed decision to be made. I have heard the Department of Energy say for years that they're transparent – I don't think it does us any good to identify transparency as a need, because they'll just say, "We're going to be transparent, sure, from now on." They've promised it in the past – they have never done it before. That's why this whole consent-based process is doomed to failure. [Applause].

Mr. Jim Hamilton. Thank you Mr. Marchbanks.

So that wraps up the public comment period. Again, thank you very much for your thoughts.

Closing Remarks

Mr. Jim Hamilton. Now I'd like to turn it over to Mr. Andrew Griffith, the Associate Deputy Assistant Secretary for Fuel Cycle Technologies, to offer his closing remarks. Mr. Griffith.

Mr. Andrew Griffith. Thank you, Jim. And on behalf of Secretary Moniz, John Kotek and the entire Consent-Based Siting Team, I want to thank you all for coming out tonight.

When we scheduled this meeting in Boise, we knew that with the heritage of this state and your involvement in advocacy for what you believe in on the topic of nuclear waste, that we would not be disappointed. And we weren't. Because you really did come out – you came out in numbers; you came out in volume; you came out in emotion. And that's all really valuable to us as we try to develop solutions for the future.

So I'm going to talk a little bit about the challenges. I'm going to talk a little bit about the trust issue. And then I'll talk about where we go from here.

This is a major challenge. I don't think anybody in here can deny that. There's a lot of opinions – there's a lot of thoughts – about how it should be solved. But another thing I know is that it's not a simple solution. In order to do this properly – in order to do this in a durable manner – in a way that's going to survive time, elections, policies – it's not going to be a simple approach.

We can't predict the future sufficiently today to see how it's going to finally be solved in the end. What we need to do is develop what are the best next steps to solve this challenging problem. And from the Department of Energy's standpoint, we believe we are starting now on having that dialogue. We want to learn from you – and this is part of the process – what we can do to take those best next steps.

So let's talk a little bit about trust. Clearly, we're operating from a trust deficit. We get that. It's identified in our Strategy that having an independent organization is a way of better establishing a position to move forward on.

But this issue is far too important to wait for Congress to act and create this new organization. So we believe that there's some valuable steps that we can take in the near-term to head in the right direction. To do it in a transparent way that engenders trust. And we don't want you to just say, "Oh, yeah, now you're taking a couple steps – we trust you." We want this to be something where we make commitments; you

hold us accountable for those commitments, and that we establish a foundation on which some future organization – we hope – can take this on and bring it home to a final solution.

Because this is a national issue, we need to solve this problem not only for the reactor sites around the country – we're trying to solve this for the Idaho National Laboratory and the waste that's been accumulated there. So we're not here to try to find a site in Idaho. We're trying to find a site, as we design a process for the future, that identifies the home site for that waste that currently resides at the Idaho National Laboratory.

So this is a solution-oriented process that we're trying to design.

So where do we go from here? How do we take those next steps?

Well, the first part of that is we plan to issue a draft report for further public comment at the end of this fiscal year in September, where you can provide us feedback on: Did we capture your concerns; your ideas; your concepts, for how this process should look?

We know it's probably not going to be exactly what you hoped for – that's why we are sending it back so you can help us make sure we get it right as we go forward.

And then provided we get funding from Congress, and direction that doesn't hold us back, we want to start having meaningful conversations with communities that want to step forward and start to understand what it would be like to host one of these facilities in a robust integrated waste management system that ends in disposal.

Again, that's not going to be an easy conversation, but we're just trying to start it. No commitments. No guarantees. Just establish a relationship built on mutual trust – honest, open, transparent – in a way that both sides are learning together on an equal footing. We're not trying to impose anything on anyone. We want to learn, just as we hope to share information with a potential host community.

So, again, the best way to solve a complex, challenging problem like this is taking a step forward. And then taking another step forward. We want to design a phased and adaptive process. That can learn as it goes and take positive steps forward, until we ultimately solve the problem.

So, again, thank you tonight. We really needed your input. You all did deliver. And we look forward to additional engagement as we go forward and solve this together. Thank you so much. Safe travels home. [Applause].

Mr. Jim Hamilton. Thank you Mr. Griffith; thank you panel members; thank you audience both here in Boise and on the webinar; thank you logistics team; thank you facilitators. Very good session today. Do not forget please to pass in your meeting evaluation forms. We read them – we use them – we design meetings based on them.

This wraps up the formal part of the meeting, and the webinar will now close. For those who wish to join the informational poster session, we invite you to do so now.

Thanks again for showing up. We are adjourned. Have a good evening.