



MINUTES

Friday, January 25, 2013

9:00 a.m. – 11:30 .m.

**Idaho State Capitol Auditorium – Garden Level, West Wing
(700 W. Jefferson, Boise, Idaho)**

Commission Members in Attendance

Chairman Jeff Sayer, Dept. of Commerce

Jared Fuhriman, Mayor of Idaho Falls

John Kotek, Gallatin Public Affairs

Larry Craig, Retired United States Senator

Roger Madsen, Dept. of Labor

Mark Rudin, Boise State University

Peggy Hinman, Northwind

Jeff Thompson, Idaho House of Representatives

Bart Davis, Idaho State Senate

John Grossenbacher, Idaho National Laboratory

Duane Nellis, University of Idaho

Arthur Vailas, Idaho State University

Summary of Public Comments to the LINE Progress Report

Chairman Sayer welcomed the members of the LINE Commission to this last meeting of what has been an adventure. Considerable work has been done, and we are preparing to deliver a report to the Governor next week. A lot of work has taken place behind the scenes that reflect the public discussions and presentations – as well as the public comment that has been received.

The Chairman indicated that in this meeting we will try to summarize the public comments we received in the last four to six weeks. John Kotek will give the Commission an update on the policy announcement from President Obama and Sec. Chu in response to the Blue Ribbon Commission recommendations. The timing is good as we finalize our report. Finally, in this meeting we will go over the six broad-based recommendations that are being developed. We have a drafting committee preparing a report for the Commission's review and that report is approaching 80 plus pages. We're working hard to scale that back and make it as efficient for your review as possible. Today, we will formally discuss as a Commission what we've determined to be our six broader recommendations.

The Chairman indicated that there were 274 comments submitted in the last four to six weeks. The volume of information has been interesting and enlightening and helpful to hear the broad array of feelings on the issues. We appreciate the involvement and everyone who forwarded a comment. We

have determined what the two polar ends of the spectrum are on the issue: We've heard everything from the INL should abandon nuclear work at the lab and focus on renewables to recommendations that Idaho replicate what New Mexico is doing in terms of trying to become an interim storage site. We've heard comments for and against the Lab and for and against what the work the Commission is doing.

Chairman Sayer announced that ALL public comments will be posted on the LINE Commission website on Thursday, January 31, the day that the report is submitted to the Governor. The Chairman then quoted from dozens of letters and e-mails from throughout Idaho – highlighting some of the salient points that are on the minds of Idahoans.

John Kotek has tried to stay current on reviewing the public comments. He said there were lots of comments about how dry spent fuel storage would be a threat to the aquifer, but he asked if anyone provided specifics on a transport mechanism. Was there any sort of technical analysis on how that might migrate to the aquifer? The Chairman indicated that we had some comments refer us to various scientific findings. There was input on the organic contamination from the Rocky Flats transuranic waste, but used nuclear fuel is in a stable form. It's housed in concrete, lead and steel and does not leach or pose any threat to aquifer. It would have a radiation hazard but not to the aquifer.

Update on the U.S. Department of Energy's Response to the Blue Ribbon Commission Report

John Kotek reviewed the recent pronouncement from the Obama Administration on its Strategy in response to the Blue Ribbon Commission Recommendations.

This Strategy includes a phased, adaptive, and consent-based approach to siting and implementing a comprehensive management and disposal system.

[T]he Administration currently plans to implement a program over the next 10 years that:

- Sites, designs and licenses, constructs and begins operations of a pilot interim storage facility by 2021 with an initial focus on accepting used nuclear fuel from shut-down reactor sites;
- Advances toward the siting and licensing of a larger interim storage facility to be available by 2025 that will have sufficient capacity to provide flexibility in the waste management system and allows for acceptance of enough used nuclear fuel to reduce expected government liabilities; and
- Makes demonstrable progress on the siting and characterization of repository sites to facilitate the availability of a geologic repository by 2048...The Administration's goal is to have a repository sited by 2026; the site characterized, and the repository designed and licensed by 2042; and the repository constructed and its operations started by 2048.

Consent-Based Siting

[DOE] endorses the proposition that prospective host jurisdictions must be recognized as partners. Public trust and confidence is a prerequisite to the success of the overall effort, as is a program that remains stable over many decades; therefore, public perceptions must be addressed regarding the program's ability to transport, store, and dispose of used nuclear fuel and high-level radioactive waste in a manner that is protective of the public's health, safety, and security and protective of the environment.

New Organization

A new waste management and disposal organization (MDO) is needed to provide the stability, focus, and credibility to build public trust and confidence...The BRC recommended a specific model in a congressionally-chartered federal corporation. The Administration agrees that a new organizational entity is needed and believes that there are several viable organizational models that can possess the critical attributes... Whatever form the new organization takes, organizational stability, leadership continuity, oversight and accountability, and public credibility are critical attributes for future success.

[F]unding made available to the MDO should be used only for the management and disposal of radioactive waste. While this could include the management and disposal of waste resulting from the processing of defense materials, the MDO itself should not be authorized to perform research on, fund or conduct activities to reprocess or recycle used nuclear fuel.

Funding

The [Nuclear Waste Policy Act] established a self-financing mechanism for the nation's commercial nuclear material management system...Fees collected total approximately \$750 million per year; [fees collected] in excess of appropriations are...credited to the [Nuclear Waste} Fund. The current balance of the Fund is estimated at \$28 billion.

Reform of the current funding arrangement is necessary and should consist of the following elements: ongoing discretionary appropriations, access to annual fee collections provided in legislation either through their reclassification from mandatory to discretionary or as a direct mandatory appropriation of the fees, and eventual access to the balance or "corpus" of the NWF.

The cost of the government's growing liability for partial breach of contracts with nuclear utilities is paid from the Judgment Fund of the U.S. Government.

Linkages Between Storage and Disposal

[P]rogress toward a repository is important so that states and communities that consent to hosting a consolidated interim storage facility do not face the prospect of a de facto permanent facility without

consent. However, this linkage should not be such that it overly restricts forward movement on a pilot or larger storage facility that could make progress against the waste management mission. The NWPA currently constrains the development of a storage facility by limiting the start of construction of such a facility until after the Nuclear Regulatory Commission has issued a license for construction of a repository. This restriction has effectively eliminated the possibility of having an interim storage facility as an integral component of a waste management system.

Interim Storage of Government-Owned Wastes

In addition to commercial used nuclear fuel, pilot-scale and larger interim storage facilities could provide similar benefits for government-owned and managed used nuclear fuel and high-level radioactive waste, such as demonstration of capability and flexibility in system operations. Therefore, the feasibility of accepting these wastes at interim storage facilities will be considered.

Advanced Fuel Cycle R&D

[C]onsistent with past practice and the BRC's recommendations, DOE will continue to conduct research on advanced fuel cycles to inform decisions on new technologies that may contribute to meeting the nation's future energy demands while supporting non-proliferation and used nuclear fuel and high-level radioactive waste management objectives.

Implementation/Legislation

Full implementation of this program will require legislation to enable the timely deployment of the system elements noted above. Legislation should also include the requirements for consent-based siting; a reformed funding approach that provides sufficient and timely resources; and the establishment of a new organization to implement the program, the structure of which should balance greater autonomy with the need for continued Executive and Legislative branch oversight. The Administration looks forward to engaging Congress on comprehensive legislation to move forward on this important national responsibility.

In the meantime, the Administration, through the Department of Energy (DOE), is undertaking activities within existing Congressional authorization to plan for the eventual transportation, storage, and disposal of used nuclear fuel. Activities range from examining waste management system design concepts, to developing plans for consent-based siting processes, to conducting research and development on the suitability of various geologies for a repository. These activities are designed to not limit the options of either the Administration or Congress and could be transferred to the new waste management and disposal organization when it is established.

John Kotek added that the federal liability for not having a repository in place is expected to grow to \$500 million/year. Thus far, they've paid out about \$2.7 billion in damages. That doesn't come from nuclear waste fund, it's the judgment fund.

There was discussion among the Commission about the linkage between storage and disposal and whether DOE waste would have priority.

A question was asked about the 2021 target for a pilot interim storage facility. Would that be a small one with limited quantities? They would try to define a pilot facility as restricted in how much, what, and from where it could take materials. The larger 2025 facility would have larger limits.

A question was asked if there was any sense on what the legislative process might look like in Congress. John Kotek indicated that with turnover, Senator Ron Wyden of Oregon is now the new chairman. There was some question as to whether Sen. Wyden was going to join in with the other three Senators who have worked to implement the BRC recommendations. He has in fact decided that he is going to move forward. He has a Congressional Fellow with a strong nuclear background, and they are thinking about taking meaningful action. Sen. Craig concurred that there is potential for movement based on the new chairmanship. He's encouraged our delegation to participate. The House is committed to Yucca. BRC tried to advance a strategy that was not dependent on Yucca.

A question was asked if John Kotek had any insights to the court challenge to the Administrations authority to stop work on Yucca Mountain? John Kotek indicated that decisions are imminent and that was one of the forcing functions for DOE to get its response out. One of the issues for discussion is how the federal government can collect this fee when there is no program. Rulings are expected soon.

There was discussion on whether it would be wise to presuppose the outcome of that litigation one way or the other in making our recommendations to the Governor. John Kotek didn't think that we have to presuppose the outcome in what we've said, I don't know that we've made any declaration in our report that there's a particular date by which Yucca should be available. We should be careful to write a set of recommendations to the Governor that reflect the uncertainty in the nuclear waste management program that is likely to exist over the next several year, and highlight the need to stay vigilant to participate in that debate, and influence that debate in ways that are in the best interest of Idaho, but don't lock us into a specific path.

A question was asked for additional clarification on the annual fee and waste fund. John Kotek said the ongoing fee collection and the balance of the fund are to be paid for nuclear waste management, storage, transportation, and disposal. The annual \$750 million in fees gives you immediate ability to pay for siting, licensing, and construction of interim storage facility. It's an operation that doesn't cost

billions. In the early days when you are licensing or going through site selection, you're not spending \$750 million, the program can survive on that. When you start excavating, that's when you start getting into the big money – and where you would begin to draw down the corpus of the nuclear waste fund.

Sen. Craig reminded the Commission that the Nuclear Waste Fund is an account with numbers, not money. Subject to appropriation. The \$750 million flows in and gets spent on everything else.

A question was asked if there has there been any clarity on what a consent based process would look like. John Kotek indicated that some states have strong ballot initiatives. There, it may be appropriate to work with legislature, governor, AG, and have them vote. The commission didn't try to say this is what consent looks like because it's different in each state. The ability for a state to enter into a legally binding agreement was a good measure of a state's ability to consent to host a facility. Sen. Craig said that Congress may have more specificity on how consent is interpreted. It has to be legal in terms of being binding. John Grossenbacher pointed out that WIPP is an example of how this is done with the consent of the people of a state. You would see the same thing in large scale military activities. Bases around the country serve a national need, things change. New aircraft are developed. They find a process by which they validate the burdens and benefits of accepting such a facility. WIPP and military bases offer us some good examples.

Chairman Sayer said the recommendations include continuing research on advanced fuels. Do we have any sense what's happening in DOE? John Grossenbacher said the biggest influence there has been the accident in Fukushima. It's not a new interest, it's just gotten more interest. Can we use a fuel, so if something bad like Fukushima happens the results are less onerous. Current cladding fuel creates hydrogen. There is an interest in that. The Lab's focus, supported by DOE, has been to move the science of nuclear fuel development to the next level. We now understand materials and behaviors at the atomic level. Fuel cycle work is always in the background but it is fundamental.

A question was asked now that we have a target of 2048 for a permanent repository, there is a need for additional research. How many decades do we think we'll need to leave used fuel in dry storage, and how confident are we in how it will behave? If you need to pull it out, what will you have when you open it up?

Chairman Sayer also noted that the 1995 Settlement Agreement includes potential fines for the federal government not removing spent nuclear fuel from Idaho and having high level waste ready to leave the state. But, he indicated that those fines that we have are subject to Congressional appropriation. It will be interesting to see what happens if our state ever has to cross that bridge.

Overview of Proposed Recommendations

The Commission then discussed the six broad recommendations that it felt best captured the presentations and public input of the past year.

- 1) Continue to work cooperatively with the US Department of Energy to address remaining environmental risks at the INL site.
 - a. Environment remains the top priority and that needs to continue.
 - b. First thing we need to have happen is to focus on getting the cleanup completed. We do have some threats to the aquifer from the legacy waste.
 - c. Sen. Craig said the monies that come to Idaho that produce the cleanup are discretionary monies. They're not entitled money. The agreement attempted to create some entitlement, but it is still a year to year process – it isn't locked in. His greatest concern is the reality of the current environment in Washington, DC. When we talk about budget cuts, and fail to address the entitlements, they try to find other areas to cut to meet those political needs. We are inside the target, in fact these discretionary funds for cleanup are the bulls eye of the target. It is a reality today. There is heavy lifting to be done, and to complete these processes, it's a problem we're going to have to deal with.
 - d. Chairman Sayer indicated that the risk in Idaho is much less, and our cleanup is a far lower priority on the list than Hanford. We do need to be proactive and make sure we protect the funding of our activities.
 - e. John Kotek indicated that there is still sodium-bearing liquid waste that needs to be address. Still buried waste that we're working on.
 - f. Mark Rudin pointed out that this recommendation is a statement set in the past. Injection wells, buried waste were a threat, but there are some other opportunities that present themselves to Idaho such as high level waste that present a whole different set of risks. Those risks are orders of magnitude different. Not all risks are created equal. I have a problem leaving this text as it is. I hope we can address that topic.
 - g. John Grossenbacher said we need to differentiate between disposal and storage. Injection wells were a past practice -- which presented a significant threat -- was disposal, not storage. Solid, high-level waste – calcine – is safely stored in well-engineered containers with a 400 to 600 year life span. That's storage not disposal. The timeline associated with nuclear is long. Nuclear is going to be a source that humankind is going to need for hundreds if not thousands of years. Short-term modern reactors are being extended to 60 and some to 80 years. We should reasonable expect a reactor to last for 100 years. We tend not to think long-term, it's easy to stay storage becomes a "repository."

- 2) Exercise leadership as the US formulates federal energy and nuclear waste management policies.
- a. John Kotek – the input from and experiences of the state of Idaho had a profound impact on the BRC recommendations. Subcommittee toured INL, heard from Andrus, Leroy, SRA, Susan Burke, Lt. Governor, Delegation, and they studied the experience with the Settlement Agreement. If our state remains engaged, the nation can enjoy a better outcome as well.
 - b. Bob Smith – This is one of the most critical. Quite often the state looks at what we do and there are misconceptions about the policy, so we have things done to us rather than proactively setting the agendas. These decisions will be made one way or the other and they will impact Idaho one way or another and we need to ensure that the interests of Idaho are protected.
 - c. Sen. Craig - We are historically well-qualified to lead. We have a legacy of leadership here in the technological side and political side in how to solve problems that our former leaders engaged in. To have a debate in this nation about the industry's future and needs and for us to be silent in it is a real loss. We are world-class. We have facilities that no other state or facility has in the world. We should recognize and effectively use that. For national and possibly world leadership. It's the benefit of the burden/benefit side of what the Admiral says.
 - d. John Grossenbacher – The analog I like to use is that the Navy has the Oceana Naval Station in Norfolk, VA. That was a benefit to the nation and the world. The citizens there paid a lot of attention. They often evaluated the burdens and benefits of the activities there. It used to be surrounded by forests. Over the decades it's been developed. They now have high performance aircraft operated at the edge of their capabilities. Things fall off aircrafts. Several years ago there was a tragedy. A new plane comes along that is a lot louder. They engage in the discussion. They, in their own way, exercise their own consent about not only maintaining and competing for opportunities. They recognize that if they say no, someone else is going to say yes.
 - e. Chairman Sayer – Deputy Secretary Poneman was quick to highlight the other capabilities of the Lab. Other states had been there to his office. They are interested in being a part of the BRC work, but they were also interested in getting our research. We know our budgets are going to go down, we still have a mission to accomplish and we have to move forward. We're making the allocation decisions on the states that are the best partners in helping us solve those problems. We're not in a vacuum. Just because we've had all this funding come every year doesn't mean it's going to continue. We need to develop our process. We need to have a conversation. Liz and SRA think we've had that conversation. We need to have the ability to address the burdens and benefits

to have the balance to make those intelligent decisions as the world changes around us. It's happening quickly – in terms of nuclear energy times.

- 3) Capitalize on Idaho's nuclear technology competencies by supporting the growth of existing nuclear businesses and attract new nuclear businesses.
 - a. Bob Smith – a lot of the success has been because of the state oversight. Nuclear is a hard technology and as we encourage growth, we do it in a way that they can be successful. We pride ourselves on limited government, but there is a role for government to play. An organization starts and then fails, and then there's the possibility something goes wrong. That needs to be considered – an appropriate structure where the risk is managed, and we ensure the likelihood that those companies will be successful for the long-term.
 - b. John Grossenbacher – The US is largely de-industrialized in the design and manufacture of large pieces. That has shifted to France, SK, Japan, and China and India having enormous ambitions in this area. We have devolved to a service industry, so there is a need.
- 4) Invest in research infrastructure to enable INL and Idaho universities to successfully compete for US and global research opportunities.
 - a. Art Vailas -- nuclear science is a broad, complex field. There are so many benefits that come out of the research into nuclear science that benefit economic potential through R&D. Nuclear R&D also benefits the medical world.
 - b. Duane Nellis – we are building on this through IGEM, and we should keep that in mind.
 - c. Bob Smith – SBIR program is a program that supports the development of new technologies and the commercialization of those technologies.
 - d. John Grossenbacher – The university partnership is essential. We cannot be successful without the universities. They do some type of research much better than we do, they're better, more creative. They offer us the opportunity to attract talent that we otherwise wouldn't get. There are brilliant people who like teaching, they like the intellectual stimulation of young minds. The universities are the source of our future talent.
 - e. Sen. Davis – We may need to remove “research” as the focus of infrastructure since there are other physical facilities and investments that should be considered. We talked about working with Bonneville County and Idaho Falls and private developers to develop a science and technology park around the north end of University place. We looked at transportation improvements to have a long-term robust mission – including the expansion of Highway 20. If that is down the road further, pun intended, there are some safety and congestion relief techniques that can be considered. ITD has done some work in partnership with INL on some of the equipment they have to have sophisticated inspection of pavement and roads and to date, INL is doing that. Rights of

- way access is important, but we can locate fiber optic cables during construction. The railroad between University Place and CAES is a safety concern. There has been a great deal of effort to look at going under or across those tracks. We don't know what the solution is, but we understand the railroad may be a willing partner. Two access points are important. We spent a great deal of time talking about CAES and CAES II – we found value in that, too. Some of these infrastructure improvements would help that for Idaho and the region.
- 5) Develop and promote the Center for Advanced Energy Studies as a regional, national and global resource for energy research.
 - a. Nellis – this can bring in other states, and provinces to do collaborative research through CAES. The future is even more promising with an expansion of its mission.
 - b. Bob Smith – CAES is much more than a building in Idaho Falls. Brought together universities. Facility provides state of the art activities, but every campus of the state has activity. He spoke of the cumulative capabilities of the four institutions.
 - c. Mark Rudin – CAES creates opportunities for students they can't get anywhere else.
 - 6) Strengthen and expand nuclear education and workforce training offerings.
 - a. We have an aging workforce and we need to prepare the workers of the future.
 - b. Department of Labor indicates that these are well-paying jobs.

Chairman Sayer thanked the Commission for providing guidance on and reaction to these recommendations. Liz Woodruff asked questions about process and wanted to be involved in the drafting sessions. Chairman Sayer responded to her and indicated that we have had a condensed period of time to do our work and that the drafting session was not an official Commission meeting, although members of the Commission were welcome.

The meeting adjourned at 11:39 AM.