



MINUTES
Friday, September 21, 2012
9:00 a.m. – 3:30 p.m.
Hilton Garden Inn (700 Lindsay Blvd., Idaho Falls, Idaho)

Commission Members in Attendance

Chairman Jeff Sayer, Dept. of Commerce	Bart Davis, Idaho State Senate
Jared Fuhriman, Mayor of Idaho Falls	John Grossenbacher, Idaho National Laboratory
John Kotek, Gallatin Public Affairs	Roger Madsen, Dept. of Labor (via phone)
Larry Craig, Retired United States Senator	
John Chatburn, Office of Energy Resources	
Dwight Johnson, Dept. of Labor (proxy for Roger Madsen)	
Mark Rudin, Boise State University (via phone)	
Peggy Hinman, Northwind (proxy for Sylvia Medina)	
Nathan Small, Shoshone-Bannock Tribes	
Richard Jacobsen, Idaho State University (proxy for Arthur Vailas)	
Robert Smith, University of Idaho (proxy for Duane Nellis)	

Jeff Thompson – not in attendance due to medical emergency

Welcome and Introductions

Chairman Sayer welcomed everyone to the LINE Commission meeting. He reminded the audience that there would be an opportunity for public comment, but they need to sign up on the sheets located outside the entrance. He acknowledged that we have proxies for this meeting; Dwight Johnson for Roger Madsen (but Roger is also on the phone). Dr. Bob Smith is representing President Nellis, and Dr. Jacobson is in place of President Vailas, and Peggy Hinman is in place of Sylvia Medina. Dr. Rudin is on the phone.

Chairman Sayer acknowledged special guests Marv Fertel and Kristine Svinicki and other national figures that are here today. He thanked John Grossenbacher, Glen Tait and Brian Whitlock of INL for arranging meetings that he had in Washington, DC earlier this week – including time with U.S. Department of Energy Deputy Secretary Dan Poneman. He said the folks in DC are watching what this Commission is doing very carefully. What we're doing has a great influence on several important issues in Washington, DC.

Chairman Sayer welcomed Commissioner Kristine Svinicki of the Nuclear Regulatory Commission in Washington, DC.

Presentation by United States Nuclear Regulatory Commission (NRC)

The Commissioner is anxious to see the recommendations that will be made to the Governor by the end of the year. This commission includes friends and mentors. She addressed a group of policy makers earlier in the week on advancing the dialogue on nuclear energy. The LINE Commission has as its charge to ensure that INL continues to play a role in that future. She is no stranger to the history and capabilities of INL. She is familiar with the people and businesses that comprise the nuclear sector of Idaho. Idaho is a fundamental element of her nuclear DNA. She reviewed "Proving the Principle" this week, and she reflected on the words in the introduction by Susan Stacy, who wrote about the INL. What did they actually do there? This question has come my way. Idahoans have continuity with their agricultural heritage. But when it comes to the nuclear heritage the connection seems vague. It is still remote in more ways than one. Teamwork is a fact of science.

Following Fukushima, the NRC chartered a near term task force to review NRC's processes and regulations to determine whether improvements to the regulatory systems needed to be made. The task force concluded that the same sequence of events is unlikely to occur. Continued operation and license activities do not pose a risk. However, additional requirements were imposed to increase the capabilities to minimize the effects of beyond design basis catastrophic activities. Tier 1, 2 and 3 recommendations were made.

Member countries participated in an extraordinary meeting was convened last month and discussed a sustainable, safe, and secure nuclear program. You need an independent regulator. Countries have reviewed and enhanced technical enhancements of regulatory programs. They have also enhanced and expanded attention to cleanup and decommissioning activities.

Commissioner Svinicki drew attention to analysis and studies that show a role and need for confirmatory experimentation at laboratories like INL, so we have confidence in our new models. NRC's report to Congress on advanced reactor licensing addressed the scope anticipated in the next several decades which include updating consensus standards, projected resource standards, and the overall plan for utilization of human capital and capabilities.

Regarding advanced reactors, the same level of safety is expected for light water reactors. New reactor licensing processes are being refined.

70 applications have been approved for an additional 20 years of operation. Others are currently under review or anticipated to be submitted. Steam generators have been replaced, and other upgrades have been made to be more robust than original plant equipment.

Commissioner Svinicki also touched on other areas of focus for the NRC which include assurance that passive systems are sufficient as well as disposal policies.

She said the NRC's Waste Confidence Decision and the temporary rule was the subject of recent DC Circuit Court ruling. If the government fails in its quest, then waste will stay on site permanently. Waste confidence undergirds certain decisions, including new reactor licensing and license renewals. They will not issue decisions

until the court's remand is addressed. They were instructed to develop a generic EIS to update the rule within 24 months. National policies will impact other functions such as licensing

Question: In the guidance that the Commission gave in developing the generic EIS, was there a time frame to examine how long fuel could be in interim storage?

Commissioner Svinicki said the NRC Commission tries to strike a balance between over directing and letting the staff do its work. We had approached the waste confidence rule with the understanding that the Waste Policy Act was the law of the land.

Two court cases challenged the issuance of licenses for nuclear power plants that it was irresponsible to license in absence of a disposal policy. They said the Commission needs to make findings asserting the confidence in the fact that there would be a disposal capacity. A component had to be an expression that they had analyzed that at some point a disposal policy would be in place and the country would be making progress toward that.

Question: In looking at the Light Water Reactor Sustainability program, if you were to look into the crystal ball what role INL can play in conjunction with the NRC to help extend licenses for the fleet beyond the 60 years?

The Commissioner said we continue to see new phenomena emerge, and it's important to do actual work with nuclear materials. It provides foundations for what we can do computationally. The Lab's ability to do that in a safe and environmentally cognizant way, then allows the computing to be done at universities, but at the lab we can populate those models with actual data. We do need to continue to expand our knowledge and understanding, and the marriage of the data and the computational work is important. Partnerships are emphasized at the Lab, and what she heard yesterday on her tours is that the Lab is leveraging its capabilities. Those partnerships are very powerful.

Question: Could you expand on what you see as both opportunities and challenges currently and into the future?

Svinicki reiterated the work on advanced reactors and life beyond 60. Much of that work is materials issues where you develop codes and consensus standards, but if you want to install a component there is a lot of reliance on established codes and standards. INL has a tradition of engineering which is an acknowledgement of the hands-on work. There are a lot of people in the theoretical world, but you need the experimental world. Experimental work on concrete, alloys, metals is fundamental to the industry. She described a plant in California that needed to replace its steam generators.

Question: What is your confidence in dry cask storage?

The NRC's view is that storage of spent fuel in wet and dry storage is safe, and confidence in our ability to regulate that. Dry storage is more passive. As long as you have a nuclear power program, you will have pools to more actively cool the fuel rods. NRC is confident wet and dry are both safe. There are very limited data sets where fuel has been placed in a dry environment and then studied. There has not been an investment, to date,

in that. Perhaps multiple nations could come together to participate in a demonstration program. Once the fuel is in the dry cask, it is in an inert environment, the fuel continues to radioactively decay and become less hot over time. Over time it becomes less and less stressed. In terms of putting something in storage for 30 years and opening it up -- that has not happened, and that is a gap in our technical knowledge.

Presentation by United States Nuclear Regulatory Commission (NRC)

Chairman Sayer welcomed Mr. Marv Fertel, President and CEO of the Nuclear Energy Institute based in Washington, DC.

Fertel complimented the Governor for the formation of the Commission. He will leverage the thorough and thoughtful remarks from Commissioner Svinicki. He also referenced John Grossenbacher's excellent overview of the industry. He doesn't see the nuclear industry going away. It isn't there because we like it. It's there because it produces electricity. There are about 2 billion people in the world without electricity. Plants are going to be coming to the end of their life. We are sure that some will go beyond the 60 years, but some won't. Dealing with the waste will be critical.

The Idaho National Lab has been instrumental and important in the health of nuclear energy in our country and worldwide. Going forward, that importance doesn't decrease; in fact, it increases. There are some new opportunities that may be pursued in addition to what you are already doing.

Public favorability on nuclear energy has been stabilized in the mid-60 range. In the month or two following Fukushima, that number dropped to 46 percent. Most of the drop went to neutral, not negative. When you ask the public today about nuclear, over 80 percent support license renewal, 70 percent support building new at existing plants. We have great support around existing sites.

85% believe the US should maintain a nuclear safety, nonproliferation role. About 74 percent said you should be staying involved and selling reactors overseas. That will help safety and improve the economy here. We operate 16 of the top 20 plants in the world. The NRC has a lot to do making sure we are focused on safety. I would feel better if our operators were operating plants globally.

Light water reactor sustainability program is critical to help current plants and set the stage for future plants. In general, one of the things we'll see in Washington is less money. I would think what the Labs need to do is focus on the top priorities, which are most sustainable as opposed to starting and losing funding. Partnerships are going to be critical -- even internationally -- to make sure we have programs that you get through that have broad support to get funded. There isn't a member of Congress who wouldn't say R&D is important, but they don't get lobbied on R&D like they do on other things.

Material aging and degradation, advanced fuel designs, advanced I&C, cable aging, beyond 60-year aging management are all critically important.

SMR – reason we don't have them is because we haven't figured out how to make them economically. What can we do to get them to market in a reasonable amount of time? When US industry competes, we do it against governments. It's a tough market for US companies, but this is an area where the Lab can play a good role.

Dry storage, INEEL did work on dry cask storage research for lower burn-up fuel. We now use high burn-up fuel. We haven't done the same research there. I am very familiar with the Batt Agreement, but we would like to do research on the different fuels. The talent, research experience and capabilities, exist to give the NRC and industry confidence on the high burn-up fuels. We see that as a valuable contribution.

Used nuclear fuel management, we are expecting that the court will issue a directive to continue licensing on Yucca Mountain. Sen. Reid will oppose funding. It's not Idaho's fault or industry's fault that we don't have Yucca, but it does pose a problem about what you do with used fuel. The earliest plants coming into greater than 60, those are the least likelihood of going beyond. We will be shutting down some of those plants. We'll have orphaned sites, like the nine we have right now, that basically have nothing but dry cask storage. BRC recommended consolidated storage. That makes sense. We would like to get to sites that are consolidated and that you can move fuel from sites. We have been talking to other states. New Mexico is interested. They have had good success with WIPP. The consent-based approach is being demonstrated in New Mexico. I would encourage some open minded thinking whether Idaho wants to play in that. Texas and Mississippi may be interested. You don't just get waste. You have dry cask storage here already, but what we think comes with consolidated storage are other R&D opportunities. You may have fabrication of casks. We're not going to have a repository as quick as any of us would want, but it won't be as fast as any of us would expect. You're the only operating recycling facility - we have pyro-processing with the Navy. Developing for the long-term is important. If we continue to believe in the importance of nuclear plants, doing something smarter with the used fuel, from a safety and material use standpoint, has value.

Bill Gates is interested in developing the next generation of reactor. Terra Power is the technology he is pursuing. It's humanitarian driven. It's based on the fact that you have to stop emitting greenhouse gases, and you can't have a productive society without electricity. He is looking at reactors that would deal more efficiently with the waste issue. Right now he's not planning on building that in this country. There's probably no better place than Idaho. That is a unique opportunity that could benefit the country and the world.

Question: Cyber security issue is not a nuclear issue. The good news and the bad news is we are analog at most of our plants. It's good news from a cyber protection standpoint, but we want to get to more efficient digital.

Mr. Fertel said cyber security is very important to keeping the grid up. The smarter we make the grid, the more stupid we make it from a cyber standpoint. Lab is doing significant work in protecting our infrastructure. When people think about threats to us, cyber is the biggest thing they think about. The grid is a critical part of our infrastructure. It is one of the very important near-term things that the Lab is doing - most of the nuclear R&D is long-term. How do we communicate better on how we deal with threats and incorporate into our systems? We have to figure out how we get the value of the work you're doing into our infrastructure – faster and smarter.

Question: Gaze into crystal ball – how do you see the Bingaman legislation and the Feinstein/Alexander provision playing out?

Fertel – we are committed to moving the BRC recommendations forward, and our hope is that in the next Congress we'll see something leveraged off of Bingaman's legislation, and the hard spot between the two bodies will be Yucca. Sen. Reid will oppose, that is not the same view in the House.

Question: Does a court decision help?

Fertel – I think it helps because it allows licensing to go forward. The court has ruled, and given Congress until December to see what they would do.

Question: How are other states addressing the burden and benefits discussion?

Fertel – South Carolina is where they are building two new nuclear plants. Within SC is the Governor, legislature, PUC and public supporting two new plants plus what can you do to make SRNL more robust? New Mexico has two labs. In talking to counties, their risk is oil and gas development, not nuclear – we do it very safe. They're interested in consolidated storage and the locals are very interested in a repository, but that support may not go to the top of the state's leadership. Washington has serious problems. He is a civil engineer and worked with the electrical industry. It's so important. If you can't appreciate electricity, you don't look at nuclear in context. If you appreciate the value of electricity, you appreciate why nuclear energy is very important. That's a failing of our industry on educating the public on the value of our industry.

Question: Why are other nation's moving forward?

Fertel – Here in the US, we have not recovered to electricity demand in 2012 beyond 2007's demand. Domestically, we don't think natural gas will stay in the 2-3 dollar range – they're not making money. It's not going to \$10-12, but will go to \$4-6 to make a difference. Sierra Club and others want to go after gas – it's still half the carbon emission of coal. We see nuclear being built in this country, but not until later in this decade or beyond. China is doing a lot, India is going to move into nuclear, when your population is over a billion and over half don't have electricity most of the time? Middle East, Eastern Europe, France will retire but build new, UK will build. Our strategy domestically – we're not building infrastructure as fast. The way we do that is to sell overseas which will help our infrastructure here so it's more robust. It will be interesting to see what Japan ultimately does. They have talked about phasing out in 2030 or 2040. They are an island, they have no resources. They are importing oil and gas. The reason they don't have blackouts is they keep temperatures at 80 degrees and turn lights out. After two days the public loses patience when they can't use their twitter account because everyone who has power is talking about how bad it is. 800 billion kilowatts is produced by nuclear in this country – that is more electricity than all but four countries use in the world. Our program is big, but it also tells you that a lot of people don't have electricity. Proliferation is not the first issue that comes out in my mind, it's safety. ATR is getting more involved to get the Japanese here to have their culture driven from a safety standpoint.

Question: With other nations moving ahead on nuclear, some nations like China want to build up the know-how. Where are they going to buy it from?

Fertel – from a technology standpoint, we have the safest in the world. US sales overseas provide jobs, and provide a much stronger non-proliferation opportunity, but we have to make sure they're safe and don't reprocess without our consent. There is more of a desire for US technology because they're seeing how well we operate our plants. How do we leverage the National Lab capability when we're trying to sell stuff? Better would be easy because we don't do it at all. We're competing against governments. When the Chinese sell, they bring the financing. The Germans sell and they take back the waste. That's an attractive deal. President Obama has been very helpful and his post-Fukushima statements were very balanced.

Question: What advice do you have for universities?

Fertel – They have 38 programs running very well with community colleges. If we can have a uniform program with community colleges, then graduates can get a job in Idaho if they want to stay here or go to Pennsylvania because they've had the same program. We have a monster turnover. We've hired 41,000 people in the past few years, and we have another 35,000 retiring in the next five years. We need to look at similar things that we can be doing that would help. We don't hire nuclear engineers at our plants. The vendors and labs do. Nuclear engineering minors with a mechanical or electrical degree are what we need.

Question: There are lots of opportunities, but a lot of moving parts. What tactical steps can Idaho take now in this current environment, to strengthen its relationship with DOE, and elevate our visibility with the industry?

Fertel – Relationships first. Everything is based on relationships and trust. You have a tremendous capability. Figuring out how we make sure the industry knows more. Sit down with EPRI, and have a discussion on priorities. What we find in our own industry, when you get the technical guys together, their issues are the most important. Get the capabilities married up with the needs of the industry in the same time period. With DOE, establish more than just a visit type relationship. I think what Governor Otter has given you is a forum for calling for a change in the dialogue – there are some real needs and it's going to help our industry and our country. Helping everyone get on the same page will be very important. Take as many people as you can to the plants. More impressive than the physical structures are the people. They are committed to safe, reliable operation and they're competent. We don't humanize nuclear at all, and in dealing with the public and others, you have to humanize these things. It's not concrete, steel, and radiation. It's very competent people -- as I met at ATR here. There could be real value to figure out between the research you're doing what the near-term priorities are.

Nuclear Industry Perspectives

Chairman Sayer welcomed Jim Lemons, General Manager of TVA, Reactor Engineering and Fuels. Mr. Lemons gave an overview of TVA which is funded by power sales and exists mainly for flood control and power generation. They operate six reactors and have one reactor under construction, with additional reactors either approved or under evaluation. Watts Bar Unit 2 will be the nation's 105th plant. Then they'll do work on

Bellefonte. They are in a partnership to study SMR's with B&W's m-Power venture that would be at Clinch River.

TVA is partners with DOE in a number of programs. TVA is involved in the blended low enriched uranium program to down blend weapons program uranium. They produce tritium for national security at Watts Bar 1. They do MOX evaluation to ensure it is an environmentally safe, economic benefit to rate payers and approved by NRC. They also do work on accident tolerant fuel design development to resolve current and emerging problems with fuel to address fuel reliability and safety.

Hot cell exams are necessary to figure out fuel failures and improve reliability and safety. They can make adjustments, and as a result, they haven't seen that type of failure in years. In the future, to maintain cost competitiveness, we have to continually improve design and materials. INL with its infrastructure is critical to develop a nuclear future.

Question: Talk about the economics in TVA's determination to deploy nuclear?

Mr. Lemons said nuclear is still their cheapest form of energy short of hydro and is their first dispatched.

Question: TVA is in close proximity to Oak Ridge, but how do we improve the INL relationship and visibility?

Mr. Lemons said there is an INL workshop on October 11 to get people to come see the resources at the Lab and that's important to make sure the industry understands the capabilities. Strong partnership with EPRI will go a long way. That's how the utility industry works to solve their problems.

Chairman Sayer welcomed Jeff Deshon, Program Manager, EPRI, Fuel Reliability Program,-- a non-profit organization conducting research on issues facing the electricity sector. EPRI annual budget \$383 million. \$165 million is allocated to the nuclear division.

EPRI's principle effort is on maximizing the utilization of existing nuclear plants. EPRI's long-term operation program and DOE's light water reactor sustainability program are separate, but integrated and complement each other. The industry critically needs to understand materials aging, advanced welding, concrete structures, cable systems, advanced I&C, integrated life cycle management and enhanced risk and safety analysis tools to extend the life of existing plants – and INL's capabilities in that area are very important.

ATR Loop 2A is completed and will start work on boiling water reactor materials in October 2012. Additional work is underway to understand assembly distortion, and Global Nuclear Fuel, Westinghouse and Areva are working together at INL to understand that.

EPRI and the industry are working toward a zero failure policy.

In the 104 operating units in the US Fleet, there are 5.1 million fuel rods in service – and we need domestic capabilities that allow us to evaluate and assess and determine the causes for why failures occur.

Norway doesn't have a commercial reactor, but they have world-class capabilities at their research reactor. Sweden, Russia, Switzerland, France, Japan, Korea, Taiwan all have hot cell capabilities. The GE facility in California has downgraded their hot cell capabilities. The abilities of INL have only been made available in recent years (January 2011). It makes much more sense to ship it here for research than to a laboratory overseas.

Question: What are the implications of a fuel failure?

Jeff Deshon – in most cases it's not significant, and the reactor can continue to operate at full power. As long as you don't hit a certain trigger point, then you don't have to do much more than normal operations. If a fuel rod degrades significantly, which doesn't happen in pressurized reactors, it has happened in boiling reactors but it's infrequent.

Question: Are any barriers in dealing with the Labs?

Deschon – DOE's policy now includes industry engagement, so that's helpful. Historically, we've had projects here, but today, if we fulfill DOE's vision for the lab in the future, it's going to bring in more commercial interest, and we're going to do a lot more work together.

Question: What are the challenges INL may have in moving forward?

Mr. Deschon encouraged the state develop the relationships and communicate what you have to offer here.

Chairman Sayer welcomed Mr. John Goossen, Westinghouse VP of Innovation and SMR Development. Westinghouse is growing and they are hiring 200 grads a year. How do we replace the operating systems from analog to digital is something the Lab can help us with? There has been 15 years of testing and licensing to get us where we are today on passive safety. With the AP 1000 technology, you can walk away for three days and be fine. It would have been fine at Fukushima.

The US has to be first on SMR's. Whoever gets there first will control the world market. China is moving quickly. DOE Funding Opportunity Announcement will be helpful in moving forward. Westinghouse has designed their SMR technology so they can make 100% of it in the US. But, he acknowledged that we need to re-establish our heavy forging capability in the states.

Some of the needs he identified included seismic capabilities on isolators, or big rubber pads. We need to better understand load following performance. Need to get to simulation rather than just testing, it will help get to market. Fukushima fuel analysis would be good. INL safeguard and security with international units. Right now they do their research overseas. He suggested a master research agreement with a CRADA in place that outlines IP. All we need to do is a task order and go. 2500 people used to do research at Westinghouse, now they are down to 60 – so they look to the labs for that work.

Chairman Sayer welcomed Mr. Charles “Chip” Pardee, COO of Exelon Generation. Chip mentioned he and Marv Fertel had a great 30 minute meeting with the Governor on Thursday followed by a wonderful tour of the Lab. That line of sight is helpful. He is responsible for the generation aspect of Exelon. We are entirely a merchant generation company. They do have 100 megawatts of wind deployed or being deployed in Idaho. The same dynamics with wind and nuclear are very relevant.

We are faced with significant challenges as a country as well as some remarkable problems -- like an abundance of coal, or nuclear technology, and now we have an abundance of natural gas. This is a problem other nations would love to have.

Fukushima Response Steering Committee made up of nuclear companies got together after Fukushima and developed eight goals. His suggestion for the LINE Commission is to focus on the bolded areas of the FRSC report where INL may find opportunities.

- Safety and operational excellence
- Core cooling, containment integrity and spent fuel storage pool cooling
- Response to an international event
- Severe accident management guidelines; external event response plans
- Margins for protection from external events, latest hazard analyses and historical data
- Spent fuel cooling
- Primary containment protective strategies
- Steps for controlling, monitoring and assessing potential radiation and ingestion pathways; timely communication of accurate information.

Chairman Sayer welcomed Charles “Chip” Pardee, Chief Operating Officer for Exelon Generation and Former Chair of the Industry Fukushima Response Steering Committee.

Pardee discussed the way forward Post-Fukushima from an industry perspective. The focus is on safety and operational excellent at all plants and to ensure continued core cooling, containment, integrity and spent fuel pool cooling. They have also made it a priority to ensure that severe accident management guidelines are integrated into all nuclear facilities. Accident response procedures, including strong and timely communication, are also essential. Pardee also discussed fuel behavior during extraordinary events, containment systems performance, used fuel management, advanced cladding materials, and small modular reactor development.

LUNCH

Presentation by Babcock & Wilcox

Chairman Sayer welcomed Jeff Crater, VP of Government Relations for Babcock and Wilcox. Crater indicated he hasn't seen anything like this in any other state, so this is a good forum, and anytime you get a group like this together, it's a good catalyst for the industry to come together. B&W is the only manufacturing capability left in the US. They have 14,000 nuclear workers throughout the US, and have a strong history and legacy of working

in Idaho. They have manufactured Advanced Test Reactor fuel since 1967 and have been a DOE-Idaho contractor since 1994. Today, B&W is part of 3 of 4 Idaho M&O contracts.

Crater's advice was to keep what we've got -- Idaho has one of the best congressional delegations on nuclear power, hands down.

Presentation by Labor Unions

Ryan Van Leuven – Idaho AFL-CIO President. They have 10,000 members in Idaho and growing. There are 75 different locals. Idaho labor shares the Lab's vision of being the preeminent nuclear lab in the country. We have the talent to reach that vision. INL must take great care to protect its workers. Appreciate that INL retools its training and safety. AFL-CIO stands ready to work with anyone who wants to create good jobs and help restore America's middle class. He would like to bring together a productive force management system. If we can send something to Mars, we ought to be able to do something with Idaho's challenges. Cleaning up the forests and turning that into biofuels will create jobs in Idaho. Biomass, bio-fuel technology and other industries need to expand. When you can diversify like that, then it's hard to shut a whole state down.

David Fry, United Steel Workers

Senator Craig thanked the Union for their prior support and indicated that as we move forward, they may be asked to step up and do it again. Mr. Fry – "We're glad to do it."

Nate Millward, Pocatello Central Labor Council, said that rail is the safest way to transport critical materials. From all the documents he's analyzed over the past 50 years, he believes things are handled safely and securely at the INL to protect both the workers and the public.

Public Comments

Chairman Sayer opened the meeting to public comment.

Ann Rydalch – Board member for Partnership for Science & Technology and Chair of the Energy, Natural Resource & Agriculture Policy Committee for the National Foundation for Women Legislators. This organization has been focusing on reducing depending on foreign sources of energy. We need a common sense energy policy and focus on expanding alternatives, including nuclear. Let's be an energy producing state, not just an energy consuming state. The establishment of a Small Modular Reactor manufacturing industry will create numerous opportunities and provide energy and economic security – Idaho should take a strong look at this. There is clear evidence that the people of Idaho support nuclear energy, and so does the nation.

Katherine Daly – Citizen of Pocatello and Owner of The Great Rift Company – She opposes waste shipments into Idaho. She is in favor of economic growth, but not at the risk of Idaho citizens. The Idaho National Lab sits atop the Snake River Aquifer and the INL is still cleaning up from past mistakes. The liquid sodium bearing waste must be removed and the buried tanks must be cleaned out and closed. We must continue to honor the 1995 Settlement Agreement and keep nuclear waste out of Idaho.

Bob Skinner – The 1995 Settlement Agreement is an old tool that needs to be updated. We don't need to renegotiate the old agreement; we need to forge a new agreement. Spent fuel poses no threat. Through understanding comes acceptance.

Margo Proshka – Citizen of Pocatello – Idaho is a non-consent state and we should be very concerned about waste over the aquifer. The LINE Commission should respect the hard work that went into developing the 1995 Settlement Agreement. Ms. Proshka outlined several recommendations for economic development in Southeastern Idaho. The LINE Commission must respect the hard earned 1995 Settlement Agreement. The safest place for commercial spent fuel is at the site of origin in solid form. If you must move waste, move it to solve a problem.

Roger Turner – Citizen of Pocatello -- He believes the LINE Commission was formed because DOE will not meet the deadlines in the 1995 Settlement Agreement. The people of Idaho supported the Settlement Agreement – to keep nuclear waste out of Idaho. We need a consent-based approach to site nuclear facilities – but Idaho is a non-consent state. It would be a mistake for Idaho to accept high level waste when in the near future we are looking at significant budget cuts at DOE. The State of Idaho can simultaneously support the Settlement Agreement and get the waste out and still support DOE research in Idaho.

Darryl Seimer – He is “pro nuke.” What we need as a country are sustainable reactors. We should look at the book “Plentiful Energy” to understand how nuclear energy could be implemented.

Matt Coverdale – Premier Technology – Works within the nuclear industry and sells dry storage casks. The Blue Ribbon Commission is looking for a community to step up and the community that wins will right their ticket. If that happens, the Idaho National Laboratory will lose. No one is asking for a permanent storage solution in Idaho. Storage does not have to happen on federal land. An energy cluster will be built around wherever interim storage is located. There are hundreds of jobs that are supported through the nuclear industry and we have to open our eyes to the possibilities exist to help the nation solve this problem – temporarily, not permanently. We can write what the rules are to make sure the plan works for all parties involved.

Andy Hasselbring – Premier Technology – Long term resident of Eastern Idaho, former small business owner, and currently an employee of Premier Technology. He has closely followed the LINE Commission process. We have to focus on the opportunities that can help the supply chain of the nuclear industry that is already based here in Eastern Idaho. We must seize the opportunities that are out there to help grow our state's economy.

Suketn Gandhi – Citizen of Idaho Falls— Idaho needs quality education through our schools – including mathematics – in order to have a strong labor force. Industrial research has short term benefit and university research has long term benefit. University research has larger impact on nuclear industry. The LINE Commission should encourage Congressional Delegation to ensure that FAST reactors move forward. Need to also encourage decision makers in Washington that there is reprocessing to facilitate FAST reactors. INL is a national laboratory and they can handle sensitive research which is critical for both government and industry. U.S. has unique advantages over other countries in that “small man can question big man” on bases of logic.

Roger Chase – Owner of Clearview Consulting. Read letters from Bingham Economic Development Association, City of Blackfoot, and Bingham County Commissioners. Copies were provided to the Chairman for the official record

Tim Forhan – Chairman for Bannock Development Corporation. The success of the INL is peak and having 50 years of experience and history is what makes it unique. There are a lot of things working together well in this region. The excellent execution at the INL is critical to its future. The political stability in Idaho is also important to the future to the Lab. There are tough problems to be solved, but this is an exciting challenge for the community. The lab is important to Eastern Idaho and to the United States.

John Tanner – Chairman of Coalition 21 which is a predecessor to Partnership for Science and Technology. Would like to see a restart of the TREAT Reactor, Small Modular Reactors built in Idaho, research qualities of fuel brought into the state for analysis, and reprocessing of spent fuel.

John Regentz – Bannock Development Corporation – The Pocatello Community supports the mission of the INL and its funding for the nation for the economic knowledge economy. The INL will open new economic frontiers, specifically for its focus on generating clean nuclear energy. Technology and talent base at INL supports our participation in high-tech knowledge-based economy. Good jobs, training and entrepreneurialism are critical for the state and region.

Jean McKay – Citizen of Idaho Falls – Please do not neglect the citizens in the LINE Commission deliberations. In California, the San Onofre Nuclear Generating Station has been declared dead. Even though jobs have been cut, ratepayers still pay \$54M/month for service not rendered to Southern CA Edison & San Diego Gas and Electric. Utility companies that build and operate nuclear facilities should not be underwritten by taxpayer money. Taxpayers should not be subsidizing the most costly form of power.

Mike Hart – Past generations have relied on fossil fuels – global warming is a big reality. In the next couple of decades, those who have denied this will regret this. The Settlement Agreement was a very great document for 1995 as at that time most of the cleanup was pending and this document was an incentive. This ensured ongoing funding for cleanup and served an important purpose. \$10B invested and cleanup and it has had an important impact – targeted burial waste is being removed, has cleaned up the environment, old facilities have been demolished. The threat to the aquifer has been minimized and in fact probably doesn't exist. It is not a scientifically-based statement to say that spent nuclear fuel can't be safely managed over the Snake River Aquifer. There is very little wet storage and aqueous chemistry. SRA is a resource to be concerned about, but there is no current threat from modern INL. Since 1995, the DOE has been held to a higher standard and they have done a good job of complying. The Commission should consider opening and changing the 1995 agreement. Given the BRC opening incentives for those with the burden, it is an incredible opportunity. There is no limit to what we should be saying yes to.

Martin Hubner – Has been working in nuclear industry since 1954. The term that bothers him is “nuclear waste.” Spent fuel is no more spent than I am – and to call it waste is nonsense. We could have a state of the

art reprocessing facility right next to the site. He is appalled to see the government wasting money on a new facility as opposed to just calcining it.

Lane Allgood – Allgood outline several ideas that they would like to see adopted by each of the LINE Commission subcommittees. His comments focused on long term and interim storage research and the establishment of an Advanced Nuclear Manufacturing Research Center in Idaho, which would be modeled after another program in the United Kingdom. Allgood also emphasized the INL's outstanding track record on safety. TREAT is an absolute necessity in the suite of reactor fuel test capabilities, and APEX is needed to support the industry in predicting behavior performance of nuclear fuels. The state should also not close the door in investigating potential interim storage opportunities.

The meeting adjourned at 4:50 p.m. with the next LINE Commission meeting scheduled for October 19, 2012 in Moscow, Idaho.