



MINUTES
October 26, 2023

Commission Members in Attendance:	
Scott Bedke	Steve Laflin
John Wagner	Tom Kealey
Brady Hall	Brian Wonderlich
Jim Woodward	Paul Arrington
James Petzke	Marty Blair
Raul Labrador	Chris Nomura
Hootie Langseth	Philip Reppert
Rebecca Casper	Richard Stover
Rick Aman	Jess Byrne
Nancy Glenn	Dave Lent
Ty Blackford	Wendy Horman

9:05 am Co-Chair John Wagner called the meeting to order.

Casper moved to approve minutes from May 3rd, 2023. Seconded by Horman. Motion approved.

DOE ID Update. Lance Lacroix, Idaho Operations, DOE. See PowerPoint.

Q: Bedke – Is Veolia the same as the water provider in Boise? Is this a technology that they own?

A: Yes. It basically makes big glass cubes. Several years ago, we wanted to address difficult waste forms. We invested time and work into Veolia. They had a test facility in Hanford. Sodium waste and EBR-II reactor waste was difficult to treat. It took about 4 years of working with Veolia to come up with this technology. It has a 10-ton rating that heats up waste and turns it into a big glass cube. It is a fairly simple process and is relatively inexpensive – stick stuff in, melt it, a big glass cube comes out. Glass is the most stable waste form.

Q: Horman – Regarding the Settlement Agreement, how did we send the message more broadly to the nuclear community that this barrier has been eliminated and that INL is ready for more R&D? What are our next steps in that?

A: We are always working with the State and DEQ. Every two weeks we provide them with an update to ensure full transparency. We also work with the Attorney General’s Office and the Governor’s Office so that we are complying with legal requirements of the Agreement. We are always working with industry as they are reaching out. We are open for business, and we have ways to matriculate through the Agreement. We will continue to do that and work closely with the State.

Q: Casper – What is the transportation chain like for waste removal?

A: We work with the DOT to meet requirements when transporting across state lines. We package the material in DOT-certified containers to the Veolia technology.

Q: Blair – 150M funds for existing infrastructure?

A: Right now, we are doing things that we needed to do for a long time. We were happy that we are allowed this funding to address additional work. We have been getting approximately \$30M a year for deferred maintenance and projects in the backlog – that is what we are addressing with this new funding.

Q: Wonderlich – Where is all of this additional funding going?

A: It's going to many areas in the portfolio. The growth is here because INL is successful, which breeds more funding. If we are marching toward net-zero by 2031, then we need to advance reactor technology. My advice to the IAEC last week was that it's time for people to start sticking their toes in the water. Ty, John, Craig's groups are one of the largest employers in the state. Our reimbursable work ceiling is over \$1B.

Wagner – We are growing across the entire portfolio; about 50% is energy, 30-35% is national security, 15% is energy security. Not seeing ratios change that much, maybe some shifts on the security side. We are setting new records for the budget because there is strong interest. Recently crossed 6,000 employees – had a 15% increase in staff.

Q: Laflin – Long-term forecast for continued operations of ATR?

A: Well into the rest of the century.

Q: Byrne – In presentation, you separated nuclear and clean energy. Why is nuclear energy separated out?

A: Nuclear energy is clean energy. It makes up 20% of our portfolio, 50% of carbon-free energy to the nation. We expect that to get bigger.

Byron Shipment Update. Fabiola (Fabi) Cappia, Post-Irradiation Examination Department Manager, INL. See PowerPoint.

Comment: Wagner – This was made possible by the amendment to the Settlement Agreement. A lot of people worked together to make this possible.

Q: Lent – It has the potential to cut in half the number of outages? Number of plants?

A: 1.8M-5M saving per year per plant. 93 operational plants, I believe.

Q: Hall – How long will this last? Is there a future need for research? INL has the capability to bring in more fuel for additional research?

A: This will be discussed. There are many in need of the material. Need other shipments to address other technologies. To the second question, yes.

Q: Casper – Over time, research for spent fuel from Navy vessels. Navy fuel lasts longer than the life of the vessel. If we can increase efficiency, we save money on brick-and-mortar construction costs. Seems like this efficiency and cost-saving is a no-brainer. Is there anything standing in our way?

A: When we use fuel more efficiently, we support the economics of current fleet. More safe and more economic. I don't believe anything is standing in our way. Coordination is needed and there are many teams working on this.

Q: Laflin – Overall, are we recycling used fuel and turning it into useable fuel? Good to hear we can do that to fuel generated here.

A: Essentially, yes.

Enabling Future Research at INL. Josh Jarrell, Senior Technical Advisor to DOE, Advanced Nuclear Fuel Availability Program, INL. See PowerPoint.

Q: Blair – Market for research... double the amount of testing facilities at INL? How do we beat out other labs?

A: The facilities we have are big. I am not sure we can double the facilities. We project over the next 5 years, 150-200M funds going somewhere. It costs a lot of money to support nuclear facilities, it's hard to say double. If we had certainty

that we can bring material, we would beat them out. The Settlement Agreement is a barrier, it has impacted INL's portfolio and ability to help current reactor and advanced fleet.

Wagner – There are discussions about changes and modernization to provide more certainty.

Lent – The safety culture of the site has improved. This is an excellent time to revisit the Settlement Agreement and create more flexibility. I encourage us to continue the dialogue to create more flexibility in the Settlement Agreement.

Hall – It's nothing new. We've heard that the Agreement creates an impediment. We are engaged in complex negotiations, balancing a lot of issues. Although things have changed, the Agreement has benefitted us too. We don't want to throw the baby out with the bathwater, so to speak. We want to balance many things. Our response is that we don't like the narrative that the Agreement is an impediment to INL. There is some flexibility in the current Agreement, such as a waiver of certain activities—such as in 2019. If there is an impediment, we ask how do we address that in another way?

Labrador – I agree with Hall. I am trying to modernize the Agreement, but we need to keep the promises that we made. We need to be careful about how we make these changes. I am committed and I know the Governor's Office is committed to modernizing the Agreement. Some things in the Agreement have not been met, so we want to make sure those are met as we modernize. We want to all be on the same page.

Blair: If waivers could be a great solution in the meantime.

Bedke: This is why we have the LINE Commission – to recognize the future and find out how we move forward. This entered action brings us here together.

Q: Byrne – Non-commercial SNF. There is some uncertainty around SNF, is that related to the Agreement?

A: The Agreement was initially over DOE's fuel in '95. In 2011, there was an Agreement that we can bring in commercial fuel. The 2019 Supplemental brought us back to 2011. All of this comes down to certainty -- do we have a path forward and have we demonstrated the path forward?

Q: Wagner – Can you explain the concern about nuclear material?

A: Opportunity for adversaries to use material for weapons. There is a challenge that we want to ensure how much nuclear material there is. That was the original hangup back in the 70's – proliferation concerns. Recycling can create pure streams.

Comment: Horman – We need to understand the complexities. We want to maintain low regulatory environment that ID is famous for, while honoring our promises. The urgency to get to solutions is evident. It is an exciting challenge. Thank you for explaining what's next.

Casper: I'm feeling a sense of urgency. We need to emphasize leadership. We are vested with this incredible resource, INL, that has global impact. I would hate to see our slowness on negotiations hold us back. If we don't do it, someone else will. So much has been invested in Idaho, the leadership responsibility we have is to make sure this opportunity is not squandered. The opportunity is now. I wonder if there is anything LINE Commission can do to help with the negotiations that Hall and AG are having. How do we encourage or shape how the dialogue is happening and infuse it with this sense of urgency and what we have learned today.

Labrador: My office has urgency. This negotiation was not happening before I came into this role. We are going to do it right and protect the people of Idaho, not INL.

Hall: Urgency does exist for the Governor's Office. We don't want to lose momentum. There were discussions on this last year. On the state side, there appears to be fewer barriers. Compared to the federal government, we are leaner and can respond faster. LINE can help bring discussion to the congressional delegation and the federal government to streamline the process and reduce time associated with the bureaucracy.

Bedke: I am new to the Commission, so that means that I am new to the issue, jargon, acronyms. We need to be the liaison to the public at-large. This is not a simple or familiar subject. The ability to articulate potential and reassure about the commitments that will be honored is our responsibility, such as engaging in conversations, op-eds, social media. You are here because you are in a position of social influence.

Casper, we need to continue to go to conferences and share takeaways. We will all play our role. It is important to look outside of the group and teach each other what we are learning. With the exception of people that work at INL, none of us came to this group educated, but this is totally enthralling to me. I think we need to multiply this in our communities – that’s what I think the “leadership” in LINE is. We need to be ready to promote it when we can. Let’s move. This is very exciting technology.

Q: Horman – I formed Energy and Technology Caucus. INL has been very generous about bringing people in. It has been a wonderful tool to educate policymakers. Sometimes there are policy statements that we can make. Having the backing of LINE has been significant. Approximately \$80M of work has gone to other states because we were prohibited. Can you help me understand if other states have prohibitions similar to ours? Are there examples of other states safely doing this?

A: Other states receiving fuel do not have prohibitions, Idaho is unique to that. We have been shipping and storing SNF for 40-60 years safely. We ship across the country and it has happened safely. We have a wealth of knowledge of shipping safely without danger to the public. The material is so robust that it is hard to damage more. There are probably opportunities on how to better communicate this.

Comments: Wonderlich: I agree. Average people might wonder is that a lot of fuel, how safe is it...

Wagner – To provide context... There are active discussions about all of this. If you go back in time to the origination of the Settlement Agreement, the State had very legitimate concerns. State didn’t want to get stuck with the material. There was no enduring mission at INL for this. DOE was planning to move away from nuclear – there was no future. In 2005, the federal government decided it did want a nuclear laboratory and a new future started. So now, we are in a situation where the core mission of INL is as far as anyone can see. We are in a different place than where we were in 1995. Need to figure out what makes sense. That’s why other states don’t have prohibitions.

Byrne: We also had a large amount of waste that was buried that was brought in from other states. Idaho did not want to become the dumping ground because we were a low-populated state. There are other states that have different but similar histories that also have agreements. If you can find a way to modernize but keep the commitments of the past, that is the goal.

Idaho Cleanup Update. Connie Flohr, Idaho Cleanup Project Manager. See PowerPoint.

Q: Byrne – Waste shipments to WIPP. Is it able to accept more now?

A: We will only send 7 a week until we can pass the outage.

Q: Wonderlich – At the increase rate of shipments going to WIPP, has that accelerated the shipments from ID?

A: Yes and no. It’s a sequencing thing. Looks like 2031 rather than 2028, shorter may be possible if all parties can come together.

Q: Wagner – How many canisters have you processed?

A: I think it’s about 148 canisters. We don’t count canisters, it’s an arbitrary thing that we do to meet the Settlement Agreement. We are more focused on the number of gallons we’ve processed and the empty tanks.

Q: Casper – Our ability to send things to WIPP is not limited by the number of canisters.

A: Nope. Measured by room space rather than number of canisters.

Q: Laflin – There was a time that DOE was talking about redefining the definition of high-level waste.

A: It’s been approved, but nothing that we have is affected by this definition process.

Q: Byrne – How challenging is it to work on the IWTU?

A: Dry heat pump system. The highest dose rate we saw was leaks where we were already expecting leaks. Dose does not equate to contamination. Contamination beyond that is absolutely zero. PGF functioned perfectly. We believe that the PGF functioned well. We are getting into the DMR. The concerns are that it is the heart of the system. We know we will see a

lot of contamination in the lines and the nozzles. Will look at how the nozzles performed. Dose rates were much lower than anticipated.

Idaho Advanced Energy Consortium Update. Kirt Marlow, Idaho Advanced Energy Consortium, Executive Director.

Q: Casper – What is match for EDA Tech Hub Grant?

A: Not just cash. Lots of in-kind match.

Q: Labrador – How is this different than LINE and other efforts in the past?

A: When we had the planning session for the Phase I application to the EDA, the conversation was around how we bring all these people together.

Breakout Session (Communications and Outreach Breakout and State Impact and Recommendations Review). See summary.

Commission Discussion

No commission discussion.

Public Comments

No public comments.

Closing Comments

Next meeting is January 31st, 2024 in Boise.

Meeting adjourns at 3:53 pm.