



MINUTES

Wednesday October 4th

10:00 a.m. – 3:45 p.m.

College of Southern Idaho; 315 Falls Ave, Twin Falls, ID 83301
Room #276 (Sage Room) Taylor Building

Members in Attendance:

Jeff Feeler
Wendy Horman
John Tippets
Lawrence Wasden
Mark Peters
Brad Little
Sam Eaton
Megan Ronk
Janet Nelson
Rebecca Casper
Mark Rudin
Rose Bernal
Neels Van der Schyf
John Grossenbacher
Daniel Stone
Noel Bakhtian
Steve Laflin

10:07 am Lt Governor Little started the meeting with thanking previous members from LINE 2.0, welcoming new LINE 3.0. New members gave a brief introduction

Lt. Governor Little introduced President Jeff Fox - welcomed commissioners and public. President Fox highlighted College of Southern Idaho programs and the partnerships that exist - STEM teaching programs with INL, business recruitment training and re-training for new companies and new segments of industry

Q: *Rudin* - What relationship do you have with other Community Colleges?

A: There are now four community colleges in Idaho. We benefit from strong relationships with other community colleges. The strength of the community college is the strength of the region.

Lt. Governor Little presented John Grossenbacher with a recognition letter from Governor Otter for his service as Co-Chair of LINE 2.0.

Attorney General Wasden made a motion members of LINE 3.0 echo their thanks for his service. Lt Governor Little seconded motion. Motion passed unanimously.

Dr. Peters introduced Robin Rickman, VP of Business Development with Terrestrial Energy USA. See PowerPoint.

Q: *Tippets* - How long will it take the liquid fuel to solidify?

A: Can't give exact time, but can give you temperature - 425 c. Liquid to solid.

Peters: Several months to a year would be the estimation.

Used fuel is not a liquid waste. It is solid. This SMR uses low enriched uranium. This allows for more flexibility in terms of regulation. Want to get reactor into the market – ultimate goal of Terrestrial Energy USA is to make money.

Mr. Rickman thanked Idaho for being proactive in identifying state, local, regional incentives. That information has made early research easier and worth the investment to look further in Idaho.

Dave Hill – The Terrestrial Energy USA approach is to engineer out risk with this technology. They also go to private investors to raise money to spend the money. This is a real reactor.

Q: *Van der Schyf* – What is going to the cost of this model compared to others?

A: Cost is the issue today. Conventional reactors are too large and too costly. Designing out the risk will in turn drive down the cost. \$1.2B construction project no matter the location. DOE just added additional \$3.7B to loan guarantee to continue construction of existing projects.

Q: *Bakhtian* – What characteristics are you looking for in the region?

A: Utilize a matrix of attributes applying to each site. For example: water supply, land supply, population density, other existing facilities, workforce, supporting educational programs, public concern, political environment – market based elements, transportation

Q: *Casper* – No matter risk or technology you have to have customers and the grid. We need to talk about Idaho's grid and distribution if we are serious about these technologies.

Dr. Peters introduced Carlo Melbiness, Director Facilities and Site Services with Idaho National Laboratory to give an update on the Cybercore/C3 Buildings as well as a broader INL campus update, including a railroad crossing. See PowerPoint presentation.

Q: *Wasden* - Can you help me understand the educational component of these buildings?

A: Allowing the universities access to spaces, pipeline for talent linking with all three universities.

Peters - We've worked with the VPRs (present at meeting) developing a specific planning and targets. Working with State Board of Education in detail – that is already in record. Being strategic about university engagement.

Rudin – It would be wrong to understate the workforce component. In addition to students, joint appointments, creating experiences.

Horman – This will provide practical experience - project based learning suits this model.

Nelson – We have been included in dialogue as well as Provosts, not a new partnership just building on an existing relationship

Van der Schyf – Echoes previous comments but would add we need to make the railroad crossing happen. Campus masterplan should be a major issue because it's a major artery.

Casper – Speaking to the education component: this will give our students opportunity for hands on experience -- we can make Idaho an importer of talent for advanced research and nuclear. Regarding the railroad: The City of Idaho Falls cannot do it on its own - cost is a big issue. However, it is possible with collaboration.

Melbiess – We welcome the collaboration.

Q: Little – How many people in your Cyber world today?

Peters - Hundreds, will double with these programs and buildings

Dr. Peters welcomed Jack Zimmerman, via telephone, to give the standing DOE ID Cleanup Progress Presentation. See PowerPoint.

Q: Little – Have we had to change anything or audit?

A: No. We've had to implement new procedures, requirements and modifications

Q: Tippets – we don't yet know if TRU waste packaging will need adjustment. Is that correct?

A: That's partially correct. We have a good enough understand to believe the number of drums that will require rework will be small. All will require analysis. Rework will be limited to a few hundred drums. No immediate shipping impact but want to have all waste certified and waiting on shipment.

Wasden – want to publically thank for the work you've done on TRU waste effort. Amazing the work you've been able to accomplish and appreciate the personal relationship and trust.

Zimmerman – doing what we can meet milestones where we can and appreciate the working relationship with the Attorney General's Office.

Q: Grossenbacher – given the delay of ITWU startup is there an update on tank integrity? Any concerns?

A: No concerns. Never had a leak – 5 years ago – no degradation at that point

Q: Bakhtian – It looks like there was a drop in 2013 – what caused that drop?

A: Inventory reconciliation and significant amount of waste we had treated but not certified.

Q: Peters – schedule for IWTU simulation run timing?

A: Dependent on fabrication of component inside of vessel. Additional testing needed. Next stimulant will be around middle to end of winter.

Q: Peters – This is a very important run.

A: Yes. We will have done all the changes and model and simulation to this point.

12:30 broke for lunch.

Dr. Peters introduced John Bumgardner, Director of the Resumption of Transient Testing at Idaho National Laboratory. Mr. Bumgardner spoke about the 4th reactor set to start at the laboratory -- Transient Reactor Test Facility (TREAT) including the restart overview, the need, and the timeline. See PowerPoint.

Peters – Would like to make the observation that this does not happen every day. Restart evaluation team commented it's the best run operation they have ever seen.

Q: Van der Schyf – This is a unique project – can you give us similar examples?

A: There is nothing like this in the rest of the world. There is international interest in this technology and how we can work together. Exchange of information for previous work being done internationally/worldwide.

Q: *Laflin* – Operations standpoint: how are you handling not having qualified operators?

A: We are bringing back previous reactor operators – institutional knowledge. Updated training materials used previously. Of any single activity for restart - training cost the most. Simple reactor relatively simple to operate – solid training program based on historical information data.

Subcommittee Updates

- SMR Ad Hoc, Megan Ronk and Rebecca Casper
 - Information in packet, active subcommittee
 - Ahead of the curve to understand what Idaho can do to support the growth of SMR's
 - **Mark Rudin made a motion the LINE Commission send a letter of support to key committee members (and Idaho Delegation) on the proposed Production Tax Credit legislation in Congress. Seconded by Janet Nelson. Mark Peters, Daniel Stone, Lawrence Wasden and Noel Baktian abstained from vote. Approved.**
- Commission Discussion on SMR Ad Hoc:
 - Tippetts: why are we just focused in on just SMRs or should we expand to further technologies?
 - Peters: RDD&D covers the new technologies, SMR was established to be nimble and capitalize this as an Idaho project
 - Tippetts: SMR should not imply we are not supportive of other technologies
 - Peters: Exactly, quite the opposite - there are other technologies this is a light water reactor
 - Grossenbacher: Suggested working group with: DOE, State, UAMPS/NuScale, Congressional Delegation. Goal to evaluate the issues of the day to sustain the project. Coordinating the project to make it financially viable. Commission should consider this issue because of the difficult nature of the project and our history.
 - Peters: There are lots of efforts taking place. Need to talk to Perry before we do anything formal
- Research Development Demonstration and Deployment, Mark Peters
 - Kicking off committee – what's the basis for the conversation? How do you think about the opportunity?
 - EESAI Study on Advanced Reactors and Supply Chain in the Region - forming study group to have a base for conversation and informs conversation and INL role in national conversation
 - Subcommittee will be the primary customer for the study – report final report to the full commission in the near future
- Safety and Environment and Risks, Mark Rudin
 - 3 phases to review calcine
 - Credible, reliable resource to public through a report from EPI CAES to present to commission
- Education/Workforce Subcommittee Reorganization
 - New members, new charge
 - President Ammon gave a brief overview of the subcommittee focus

LINE Commission Discussion:

Casper: Looking for LINE 3.0 to have more deliverables, less talk and more action than LINE 2.0. Development for more formal protocol: Formal meeting schedule? Recording our meetings? Facilitator for commission? How can we formalize and dress for success as a commission?

Bakhtian: What are our levers that we can pull? Delegation, working groups. Better understanding what levers can we pull to be more targeted.

Eaton: Catching up on history of LINE. Still have positive outcomes that we can continue to focus on and resolve from LINE 1.0. Can we create something to pass along to future Governors to educate? There is some appeal to being informal to keep flexibility.

John Revier: We have 3 subcommittees formed and working effectively. Hopefully our subcommittees will drive what we do as a full commission in its recommendations to Governor Otter, legislature, Idaho delegation and beyond.

Peters: All materials should be provided to commissioners before meetings

Nelson: Possibility of subcommittee meetings in person during, before or after LINE Commission meetings.

Little: We have an obligation to relay information from meetings to public and constituents – including the work being done at INL. That is the goal of having traveling meetings throughout Idaho.

Open to Public Comment:

Tammie Thatcher – Having meetings around the state so people can learn more is good but no packets for public or microphones. Not sure what the public is supposed to do. Concerns on calcine waste – storage, disposal. Interested in NuScale reactor progress. Confusion verbiage in Idaho Settlement Agreement about “all waste” out of Idaho by 2035. Don’t know who to ask for answers. What will happen to NuScale waste? Will it be leaving by 2035? Are you funding dry storage? Contact person for long term questions is needed.

3:01 Wasden made a motion to adjourn.

Next Meeting: January 31st in Boise; Lincoln Auditorium