

## **MINUTES**

February 10, 2022

Commission Members in Attendance:		
John Wagner, Co-Chair		
John Chatburn, Co-Chair	Steve Laflin	
Mark Peters	Jess Byrne	
Brady Hall	Ty Blackford	
Rebecca Casper	Scott Snyder	
Hootie Langseth	Jim Woodward	
Nancy Glenn	Mark Nye	
Brady Hall	Chris Nomura	
Terry Brog		
Lawrence Wasden		
Brian Wonderlich		
Wendy Horman	Staff:	
Scott Snyder	Elli Brown	
Janie McGeachin	Nate Fisher Jr	

9:02 am Co-Chair John Chatburn called the meeting to order.

#### Wasden moved to approve minutes from August 20<sup>th</sup>, 2021 meeting, seconded by Horman. Motion approved.

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

Ty Blackford, Idaho Environmental Coalition President, provided an Idaho Cleanup Program Manager. See PowerPoint.

*Q: Peters – Can you remind me what the options are going forward for the calcine disposition evaluations?* A: We've conducted two analysis of alternatives - all indications are vitrification is the best path forward. As you know there are many avenues in the world of vitrification. We have more options because of the state of the calcine. Our next step, beyond regulatory process, is getting a line-item funding from Congress to proceed to narrow the path forward.

*Q: Laflin – As a Navy guy I'm saddened to see the decommissioning of the NRF facilities and its rich history. Are you considering saving anything from S1W? Could it be located at EBR1 museum?* A: We've been having internal conversations about how to preserve the history, still in the early stages about options.

Q: Casper – Appreciative of IEC's commitment to community involvement and encouraged about the longer-term nature of the contract for the stability of the community and employees.

Congressman Simpson addressed the commission about activities taking place in Congress, including the budgeting process, energy, and water budget.

*Q: Wagner – You mentioned we might be looking at another continuing resolution - what is your outlook?* A: The problem is timing. It takes time to get the bills prepared, when we get the numbers, the staff can start working on the bills, but depending on when that happens it may not give them enough time. I am not optimistic about making the March 17<sup>th</sup> deadline.

# Q: Wagner – Is there any interest in the Congress in addressing the need for a long-term geologic repository, like Yucca Mountain?

A: Yes, there is. Everyone knows we need to find a long-term geological repository. It's the most expensive hole we've ever dug and most studied piece of land in the world and I will continue to advocate for its utilization.

Jess Gehin, Associate Laboratory Director, Nuclear Science and Technology at INL moderated and advanced reactor panel. The panelists included:

- Carbon Free Power Project Doug Hunter, UAMPS
- Natrium Chris Levesque, Terrapower
- Molten Chloride Reactor Experiment Nick Ivrin, Southern
- MARVEL Yasir Arafat, INL
- Oklo Caroline Cochran, Oklo Inc.

Q: Snyder – What are your workforce needs? What can we, Idaho Universities, do to support your efforts?

A: The region is playing a key role in developing the needed talent to operate the nuclear when its online, construction is the critical aspect right now.

A: Wyoming, Idaho and the region can be an advanced nuclear technology hub. Beyond the key folks to run the plant, I want to echo the comments about the need for construction. We are in frequent discussion at WY. UWY is looking at this an opportunity to make the region an advanced nuclear technology hub through vision and investments.

A: Craft labor (pipefitters, welders) is going to be extremely important. I am encouraged with this generations commitment and passion to make a difference in this effort.

Q: Casper – we want a robust marketplace, and that requires your success. I'm hoping you can give us a sense of your barriers to success. Are there things that we, as a commission, can do? Or local communities can do to help you succeed? A: We've had a great experience in your community in southeast Idaho – want to continue the partnership and collaboration

A: While MARVEL is resource dependent, there is also a need to fill the resource gap. We have to prove we can take something from paper to engineering into a tangible piece is critical. We have a chance to impact the broader narrative about nuclear and advanced reactors – we are innovative, and we can move quickly.

Q: Wasden – We are fortunate to have these projects being supported and led by INL and in many cases located in Idaho, what do we need to do make sure there is the support needed to make them a reality? What efforts are needed to shift the negative public perception from decades ago?

A: It feels like things have significantly shifted within the last decade, there are thought leaders throughout the country that are excited about the future for nuclear. In many cases people can look to the future, instead of looking to the past. A: Things have shifted with the next generation; they believe nuclear is good for the environment. Politics seems to be changing as well, nuclear currently benefits from bi-partisan support. It is encouraging and needs to continue.

*Q:* Casper – Can you tell us about the environmental impact process you were able to utilize that allowed for the quicker timing?

A: The pathway was enabled by two things with the assistance from DOE-ID: MARVEL will utilize an existing facility and the reactor itself is very small (KW scale reactor) – therefore environmental impacts would be nearly insignificant.

# *Q:* Glenn – What is your long-term model: Is your plan to build and operate the reactor or is there a possibility of shifting the operation to the user of the reactor?

A: Right now we are planning to build and operate but we are open to the possibility of shift operations to the user.

Ashley Finan, Director, National Reactor Innovation Center, provided an updated on the program. See PowerPoint.

*Q:* Glenn – could you tell us more about the virtual test bed – how do you see it being used in the future? A: The virtual test bed is being used by innovators. It takes the modeling and simulation tools that have been developed at the lab and it applies them to example problems. We show how the tools can be integrated and address the gaps that are identified. The Nuclear Regulatory Commission is also utilizing the tool, it is a resource to them. With a registration process, it is publicly available online.

Q: Wonderlich – For the average observer, what would you tell them about the work taking place at the lab? Benefits of clean energy and safety of the facilities that are hopefully going to be built out at the site?

A: Overall, there is tremendous opportunity. We are seeing a boom in hiring for these projects, we are also seeing a lot of business interest coming to the Idaho Falls area to support the projects. The diversity of private coming to the area is exciting. Related to safety, we are approach everyday with safety as job number one at INL. As do the advanced reactor companies and NRC. It is top of mind. The new technologies address the safety in more innovative and reliable ways than have been addressed before.

*Q:* Casper – You mentioned the US and Idaho being a leader in nuclear energy. Are you working with only US companies or are you available to international companies that have strong US relationships?

A: Our resources are aimed at US innovators, but we do have some international partners. If we are building this capability, we should find ways to help others in the long-term.

Justin Coleman, Pele Project Manager, provided a Pele Project update. See PowerPoint.

Q: Nomura – If this is going to be deployed for military use, how stable is your configuration? What happens if it hits an explosion? Also, you mentioned the life cycle is about 3 years, are you planning to recycle the fuel or what will happen after the 3 years?

A: Determining what happens when there is an adverse effect is a significant part of the program. Our partners take that very seriously. In terms of the fuel, there could be opportunity to take this fuel out, that is not part of this program for now.

### *Q*: Wagner – why was TRISO fuel selected as the fuel for this project?

A: For few a reasons: we needed a qualified fuel, the robust nature of the fuel, and a fabrication capability to make the fuel that was ready and available.

#### Commission Discussion:

Casper – I was intrigued by the line of conversation from the panel about the need to change the narrative around nuclear. Eastern Idaho benefits from being familiar with the lab and nuclear, but that comfort isn't uniform across the state and certainly not across the nation. I'm wondering if the commission should play a role in being proactive in helping change the narrative.

Public Comments: No public comments

Closing Comments:

Next Meeting: June 2<sup>nd</sup>, Idaho Falls

Update on LINE State Nuclear Working Group: Currently there is a good list of LINE commissioners interested in Idaho specific effort, will schedule the first meeting this spring and will provide an update at the next meeting.

Meeting adjourned at 3:05 pm.