

MINTUES

May 12, 2021

Commission Members in Attendance:	
John Wagner, Co-Chair	Tom Kealey
John Chatburn, Co-Chair	Steve Laflin
Lawrence Wasden	Jess Byrne
Janice McGeachin	Fred Hughes
Mark Peters	Scott Snyder
Brady Hall	Jim Woodward
Rebecca Casper	Paul Arrington
Hootie Langseth	Mark Nye
Harold Blackman	Chris Nomura
Nathan Small	Tony Pascoe (Premier Technology)
Terry Brog	
Doug Sayer	Staff:
Brian Wonderlich	John Revier
Wendy Horman	Elli Brown
Rick Aman	Nate Fisher Jr
Scott Snyder	

John Chatburn called the meeting to order at 8:03 am. Welcomed Thom Carter, Executive Director of Utah Office of Energy Development and Energy Advisor to Governor Cox to the Commission. Thom was nominated by Governor Cox to serve on LINE as an ex-officio member.

Attorney General Lawrence Wasden moved to approve the minutes from the January 27, 2021 meeting. Seconded by Wendy Horman. **Motion approved.**

Connie Flohr, Idaho Cleanup Manager, presented an Idaho Cleanup Project update. See PowerPoint.

Senator Crapo addressed the commission on actions taking place in Congress including his work on draft legislation entitled the Energy Sector Innovation Credit Act, a bipartisan energy tax proposal to encourage innovation in the clean energy sector.

Jess Gehin, Associated National Laboratory Director of Nuclear Science and Technology (NS&T) at INL, provided an overview of NS&T programs. See PowerPoint.

Q: Peters: How do you see advanced nuclear fitting in within the new administration?

A: This administration is committed to clean energy - nuclear is included in that. There are clear goals to achieve low carbon electricity. Support for nuclear is becoming more visible.

Ashely Finan, Director of National Reactor Innovation Center, gave an update on NRIC programs. See PowerPoint.

Finan moderated an Advanced Reactor panel with NuScale (Chris Colbert), Oklo (Caroline Cochrane), TerraPower (Chris Levesque) and X-energy (Clay Sell). Each company representative provided technology overview, timeline, needs and barriers to demonstration for their technologies. See PowerPoints.

Q: Finan: Oklo is looking to site their reactor at INL. What makes it the right location?

A: There are several things that are attractive to be at INL. First, we've appreciated the support and partnership from DOE. Second, some of the benefits of the INL location include fuel is on site and building a first-of-a-kind technology at a place that has the experience and history in building new reactors. Challenges include having a full commercial unit on government property.

Q: Finan: X-energy has done a lot of research and development work at INL but your project will be sited in Washington state? What factors lead you to choose Washington (WA)?

A: We're proud of involvement with INL but a commercial demonstration starts with a commercial market. WA is the most compelling market because of the Clean Energy Transition Act. This requires a phase out of technologies and pay to emit by certain dates. Nuclear must be a part Washington's long-term energy portfolio. Second, Energy Northwest is the only nuclear operator within the Northwest. Third, they have a good, supportive community with a long history with nuclear power cleanup. The crafts and trades are active and ready to move onto a next project. Finally, our relationship with Idaho and INL will continue in the future.

Q: Finan: X-energy will be focused on the commercial market - what role do you see VTR playing in our larger national objectives?

A: The U.S. needs to get back into the business of building nuclear reactors. VTR will have an important role in the future – to demonstrate US leadership. VTR can provide support to advanced reactors, similar to the role ATR has played over the past 50 years for the current fleet.

Q: Finan: Can you tell us a little bit more about Oklo's fuel needs?

A: Oklo is excited about the idea of recycling spent fuel. We've identified used fuel that could qualify for PURPA. Nuclear hasn't historically been eligible for such programs. This could be a policy change in the future to support smaller projects like Oklo and others that size.

Q: Peters: ARDP is a great opportunity on the federal level to support your project. Can you give us your thoughts and ideas on what the State of Idaho can do to leverage support for your concepts?

A: TerraPower has not determined a site location for the Natrium reactor. Site selection decision factors will be driven by a business decision (good grid connection, water availability, market mandates) The mountain region is over deployed on renewable and needs clean, firm sources like nuclear to supplement. Idaho should think beyond the demonstration reactors. Idaho has been doing a lot of the right things - INL is staying relevant by leading national programs like GAIN and NRIC.

A: X-energy: Idaho will have the most important nuclear energy laboratory, forever. INL will continue to grow and evolve. I would encourage commissioners to think about how you use that magnet (INL) along with land, commercial and tax incentives to drive investment from the supply chain to grow the private sector nuclear industry. Idaho has an opportunity to capitalize on the private nuclear enterprise and not just rely on the government enterprise.

A: NuScale: Idaho has done a lot to support the UAMPS/NuScale project. When you look at the landscape for the Carbon Free Power Project: Idaho Falls Power is a participant, policy adjustments were made a few years ago, using local companies to support the supply chain. In addition to the use of INL, the local universities have shown leadership and interest to support. The state, county and city level support has been tremendous. The international interest is going to be huge, the growth from that could result in a larger airport and other needs.

Q: Casper: What about the grid? Its difficult to build new lines. It takes a lot of time. What steps can be taken now by cities and counties to support your projects?

A: X-energy: Our feasibility assessment showed the transmission capacity is limited in the Idaho market – we saw that . as an added risk to the future of our project.

A: TerraPower: The U.S. has been able to get by with a fragmented grid to date but it will not be sustainable. The energy architecture of our country is changing. The thought leadership on integrated energy systems from INL is going to be critical for advising the U.S. government, regions, and utilities and what we need to do to enhance our grid and interconnection.

Q: Woodward: TerraPower: do you have a business model that can put nuclear in line with current competitive prices?

A: Economics is everything. Safety is what you need to show up, it is assumed. Economics needs to improve if we are going to compete. We need to talk about the value these projects are providing – beyond low cost. Our business model shows these plants are economical. We believe these plants will be in high demand when we get through the seven-year demonstration project.

Q: Small: Congressman Simpson's Columbia Basin proposal speaks to use of SMRs. Have you been in communication with the Congressman or his office?

A: X-energy: Currently the northwest has two main power sources (natural gas and hydro) with the phase out of natural gas it leaves with you with hydro. If you start talking about removing the dams it only enhances the value proposition of nuclear.

A: NuScale: If you're removing a clean power source, it's important to replace it with a clean power source.

Q: What should potential host communities be thinking about that as they are considering hosting these demonstration and commercial reactors?

A: TerraPower: There are opportunities to develop supply chain (high-end manufacturing) but any community that hosts projects like this will have tremendous amount of economic development and growth. One thing to consider is the non-technical parts of the economy (waste management, food service) that could benefit from the siting as well.

A: NuScale: The industries that grow and support the CFPP put those companies in position for major growth in the future. The local area will benefit from being a first-of-its-kind host.

Commission Discussion:

Kealey: Department of Commerce will be leading a Cybersecurity Task Force led by Director Kealey. Zach Tudor will be the co-chair.

Public Comments:

No public comments

Announcements:

Wagner and Chatburn recognized the retirement of Harold Blackman and thanked him for his service to the lab, research and education throughout Idaho and a tremendous career.

Next meeting will be Friday, August 20th. Meeting adjourned at 12:30 pm.