



MEETING MINUTES

Wednesday, October 10th, 2018

9:00 am to 3:00 pm

Holiday Inn Express (210 N Third St, McCall ID 83638)

Commissioners Present:

Mark Nye
Bradley Ritts (proxy for Janet Nelson)
Neels Van der Schyf
Nathan Small
Paul Arrington
John Tippetts
Dr. Rebecca Casper
Fred Hughes
Bobbi-Jo Meuleman
Sam Eaton
Lawrence Wasden
Noel Bakhtian
Jeff Feeler
Harold Blackman
Rose Bernal

Staff Present

Elli Brown
Laura Conilogue
John Revier

Welcome and Introductions

Bobbi-Jo Meuleman called the meeting to order at 9:00am.

Bobbi-Jo Meuleman introduced Harold Blackman, the Interim BSU VPR, and new LINE 3.0 member. He replaced Dr. Rudin on the commission.

Bradley Ritts is the proxy for Janet Nelson.

City of McCall Welcome

McCall Mayor Jackie Aymon welcomed the Commission and gave ideas of things to do in McCall. Talked about speed limits in McCall.

Andrew Metzger, Executive Director, Western Central Mountains Economic Development Council, Response to what businesses need in their communities – challenges with broadband, talent retention, housing. Building things for tourism – sidewalks, and trails for mountain bikes between communities. Two surveys around McCall – what students want to do and what industry needs them to do – Gap Survey. Trying to build tiny houses. 3 out of 4 homes are owned as second homes in McCall.

Approval of Minutes

Lawrence Wasden moved to approve the May 24, 2018 LINE Commission meeting minutes.

John Tippetts seconded. All in favor. **Motion approved**

Doug Hunter, Utah Associated Municipal Power Systems (UAMPS) CEO gave an update on the Carbon Free Power Project. See PowerPoint.

UAMPS Q&A

Nye: What does it look like? 70ft by 15ft in, produces 60MW. Can be moved around.

Casper: Is the JUMP module part of the DOE 3 module minimum? Yes.

Hughes: Any local participation in manufacturing: there will be local participation. Chris Colbert answered: Want informed opinions about supply chains and logistical challenges.

Bakhtian: Can you transition from one to the other after started one way (dry cooling vs wet cooling)? No, will set it up in the way they will continue to cool it. They are looking at studies now to decide which way is best, can't change it later. Are leaning towards dry cooling.

Tippetts: Are the tribes still worried about spent fuel? Nathan Small: Have asked about locations about spent fuel, want to be involved in the picking of locations to not interfere with culture sites. Also concerns about how it will benefit the Sho-Ban tribe. All the power that is generated is sold to a grid. It does not come straight to reservation. Doug: you are connected through the Idaho power system, and must go through them, they are working on a plan with regional micro grids. Rebecca Casper: Idaho Falls Power is getting 10MW from UAMPS. Idaho Falls has been trying to build additional power lines, to help the reservation.

Tippetts: What is the position of the tribe about this project? Small: Leadership changes every year, last year and year before the leadership wasn't very supportive. New leadership that understands it more, are leaning towards support. But next June when we get new leadership, that may change. Tribe has a lot of issues with Idaho Power, would like to eliminate them, if possible. Have some questions about the quality/cleanliness of the water.

Bakhtian: If they are all off, can you start them, or do you need one to start the rest of them? No, can start them up without any being on. Will usually have one on at all times anyway, to power things in the plant.

John Wagner, Nuclear Science and Technology Associate Laboratory Director at INL, gave a report on using INL capabilities to support meeting the needs for HALEU. See PowerPoint presentation.

INL Nuclear Research Update Q&A

Tippetts: What is the hurdle for building a versatile test reactor? It is getting the approval of congress.

Blackman: Are you anticipating regulatory problems and policy and safety? Those underlie everything. INL has a great deal of political support, but another challenge is budget, and making sure they have a united community. Safety is fundamental, so important. So much has changed.

Revier: Global demand for these? And why is it important for Idaho to meet these demands and not let people get their nuclear energy from other countries? It is essential for Idaho to be leader in nuclear energy. Other countries are giving better deals to nuclear energy but want to work with US. US has better standard for safety, other countries do not have the same safety standards.

Small: What is the life of one of these fuel pellets? A traditional fuel reactor has about an 18-month energy cycle. Will need to refuel after 28 months.

Tippetts: The fuel you are looking at would have eventually been disposed of? Yes. It would have been waste, but it has been successful for being nuclear fuel. Are looking to make sure that it is safe.

Tippetts: Do we end up with a bigger waste problem from using this? No. It generates very little waste. The waste that does come off it is condensed into a small volume.

Tippetts: Liquid waste from step 2? Is that more or less than what would normally come out of it? This process will have 700 times less waste than previous processes. No liquid waste until Step 2, and by that point the volume you are dealing with is very small.

Casper: How does this compare with other countries that don't count spent fuel as waste? ZIRCEX is not being used anywhere else in the world. We are leading the charge on this. France is reprocessing a lot of spent fuel, more than INL would be able to do - they do not have the same safety standards as INL.

Van der Schyf: What kind of oil do you use in temperature mitigation? In the ZIRCEX process, no oil is used. Oil is only for heat.

Revier: Can you explain the TREAT restart? This is a reactor that is incredibly unique and was shut down in 94. Was just restarted last year in November. Under-budget, and ahead of schedule. This reactor is capable of power up to 20 Gigawatts in a millisecond. Helps to test how fuel will react during an accident scenario.

Casper: Tell us about the customers for Restart: Variety of private customers.

Jim Malmo gave a DOE ID Cleanup Update – IWTU, TRU Shipments, and ARP V. See PowerPoint presentation.

DOE ID Q&A

Tippets: Is it accurate to say that IWTU is a viable process going forward? Yes. Can run the plant for longer amounts of time than they had before.

Wasden: I am very hopeful about this technology. This has been a big effort by the Office of Environmental Management.

Bakhtian: This seems very reactive, is there anything proactive we can do before the process runs? That is the point of these tests, to see what needs to be done, and how problems can be minimized before the plant can be run.

Eaton: Can you describe the boundary issues during simulant run? Need to know temperature, boundaries of size, and where the sweet spot is. Each run is a training opportunity for operators.

Small: Is there any idea when WIPP is going to open? They are open, but they are still working on cleaning up after the accident. And Idaho needs to place waste into a contaminated area, and they were not used to doing that before, so it takes longer. Want to fill that area up, and then move to panel 8 where they won't have to do that.

Tippets: Some of the drums are deteriorating, what are you doing about that? Are you sending those first? Those drums have been isolated, have shipped most of them, the ones in the back log have been shipped. Have not generated any more of those. Have between 100 to 200 to ship of the drums with corrosion. Not making any new ones with that same problem.

Casper: Are we shipping those drums to another state, to send the problem to another place? WIPP is designed to handle those problems. And once a panel is full, WIPP closes the panel and no more air is allowed in, so there is no more off-gassing, which is the problem. It is encased in salt, it contains the waste, keeps water and air from infiltrating the waste.

Nye: Where are we with the settlement agreement, and when we'll get there? The intent was to be done in Dec 2018, but that will not be able to be met. They are shipping out waste whenever WIPP is ready for it, but it is not happening as quickly as they wanted. They will be shipping out waste until 2028. Tippets: The gov's office and DEQ has been negotiating with them a different schedule because of what happened in WIPP.

Tippets: Is ARP8 the last ARP you must do? Yes.

Bakhtian: What happened in 2010 and 2011 where so much more waste was exhumed than during other times? Had more crew working.

Bakhtian: When do you expect to know why your model was not correct about how the chemicals would react? We know what caused it, now going forward we don't want to create those same conditions. We need to know what is in the drums in the future. These drums that had the issue, were classified as "unknown", they did not know what was in them. That was part of the problem. These drums were from the 70's and were buried. When they unburied them, the identifiers on the drum were not legible any longer. They did not know exactly to expect from the drum.

Neels: the type of reaction usually occurs quickly, how long did it take this time? the chemicals were fine in the bags in the drum for 40 years, but when they were exposed to atmosphere, the chemical reaction happened. Once the chemicals were exposed to atmosphere, it was less than 8 hours before the lid came off.

Casper: Raised concerns about future of AMWTP -- while no formal announcement has been made, she learned in a recent trip to Washington D.C. that DOE was not intending to utilize the facility for treatment of waste from outside of Idaho. She thought an announcement could be made this fall and layoffs would begin in 2019. She believes there will need to be a collaborative effort between the state, community and industry to re-hire and/or retrain employees.

Justin Coleman gave update on the Advanced Reactor Supply Chain Report. See power point presentation

Subcommittee Updates

- *Research Development Demonstration and Deployment, Mark Peters*
 - Send supply chain report
- MIT Report on the Future of Nuclear Energy in a Carbon-Constrained World: executive summary in packet
- TREAT Recognition
 - Governor Otter TREAT Proclamation: October as Transient Reactor Test Month (in packet)
 - Congressional Record by Senators Risch and Crapo and Congressman Simpson (in packet)
- *Education and Workforce, Rick Aman and Amy Lientz*
 - Nuclear Employer Presentation. See PowerPoint.
 - Prezi Presentation – Hope Morrow
- *Safety and Environment and Risks, Harold Blackman*
 - Waste stream reports working with subcommittee – ongoing and alternative approach to need to run by subcommittee
 - Background primer
 - Policy maker pager
 - Energy Policy Institute (EPI) – Introduction of Kathy Araujo
 - HLW – definition change is proposed. Currently taking public comment. Staff will send Federal Registry to commission for their review.

Public Comment Period

No comments heard.

Commission Discussion

Casper: Where is the commission going? Hopeful the new governor wants to keep LINE going. One of the potential Governors is on the Commission, so he would probably keep it going.

Jan. 23rd is next meeting in Boise, with a reception.

Thanks and farewell to Neels Van der Schyf – retiring from ISU at end of 2018.

Closing Comments/ Adjournment

Lawrence moved to close meeting, Neels seconded. All in favor. Motion approved.

Meeting adjourned at 2:04pm.