

USRRL Meeting Minutes 2-26-2025

The meeting began with a roll call and approval of the agenda and minutes. The primary discussion focused on two grant proposals. The first, a \$6 million grant from Curio Solutions for nuclear fuel recycling, \$960,000 budget for USREL, requires a 20% cost share cash and in-kind from the lab, totaling \$192,000. The second proposal, a \$40 million grant from DOE with Nusano for uranium enrichment and high assay low enriched uranium (HALEU) production, involves upgrading facilities and obtaining an NRC license to test Nusano's plasma enrichment process (PEP) technology for HALEU fuel. \$200,000 USREL cost share is required for the Nusano grant. Both proposals were approved unanimously.

Action Items

- Ensure MOU with Curio Solutions includes provisions for continued use of the equipment by the research center.
- Coordinate with Nusano on facility upgrades and NRC licensing requirements.
- Provide quarterly budget reviews to the board.
- Complete the required annual board member training video.

Outline

Roll Call and Meeting Start

- Jeremy initiates the roll call, listing the attendees: Emy, John Morehead, John O'Neill, Lynn Sitterud, Erin Rothwell, Laren Huntsman, and Steve Ellis. Andrew Fry (absent), and Jefferson Moss (absent)
- Emy thanks everyone for attending and officially welcomes John O'Neill as a follow-on to President Cantwell.
- Laren motions for the agenda approval and Lynn seconds that. The agenda was reviewed and approved by Emy, John M., John O., Lynn, Erin, Laren, and Steve.
- Lynn motions for the minutes from the last board meeting to be approved and Erin seconds that. The meetings are approved unanimously. Emy, John M., John O., Lynn, Erin, Laren, and Steve.

DOE Fuel Cycle Research Grant Proposal with Curio

- Emy hands over the discussion to Jeremy regarding the fuel cycle research grant proposal with Curio Solutions.

- Jeremy explains the proposal, which includes a \$6 million award for the research center, with a 20% cost share from the center, with \$100,000 in cash and \$92,000 in-kind contributions.
- The project aims to establish equipment at the San Rafael Energy Lab for recycling used nuclear fuel and conducting research with Idaho National Lab.
- Jeremy details the multiple steps Curio Solutions will undertake to commercialize their technology, including cold and hot pilot tests.

Benefits and Strategic Importance of the Proposal

- Jeremy highlights the strategic importance of the project, including the potential for Utah to host the commercial industry.
- The project is expected to create jobs and bring under a million dollars of equipment to the lab.
- Jeremy emphasizes the strong track record of Curio Solutions and their success in securing significant funding.
- The proposal aims to expand the center's capabilities and position it to work with national leaders in the recycling industry.

Discussion on Security and Equipment Usage

- Laren raises concerns about security and whether the project will conflict with other security measures.
- Jeremy assures that the security measures will fit under the current license and additional measures will be taken if needed.
- John O'Neil asks about the long-term use of the equipment and whether there are agreements in place.
- Jeremy confirms that Curio Solutions anticipates using the pilot facility as a training center for their commercial operations.

Approval of the Fuel Cycle Research Grant Proposal

- Emy calls for a motion to approve the proposal. John O makes a motion to approve
- The motion is seconded by Erin, and the roll call confirms the approval of the proposal. Emy, John O., Lynn, Erin, Laren, Steve, and Laren all voted in favor and John M. did not vote on this matter.
- Emy thanks Jeremy and hands over the discussion to Jaron regarding the Nusano proposal.

Introduction to Nusano Proposal

- Jaren introduces Nusano, a medical isotope company recently moved to West Valley City, Utah.

- The company is developing plasma enrichment technology for the production of HALEU fuel for advanced nuclear reactors.
- The grant would fund the production of 100 grams of Halo, with initial testing at Nusano's location and subsequent testing at the research center.
- The grant includes a \$40 million award from DOE, with a 50% cost share, including a \$200,000 cost share from the research center.

Details of the Nusano Proposal

- Jaron explains the budget and the need for facility upgrades and an NRC license.
- The grant would fund two full-time engineers for the duration of the project.
- The project aims to expand the research center's capacity to handle nuclear materials and secure an NRC license.
- Jaren highlights the importance of security upgrades due to the nature of the HALEU material.

Discussion on Security and Equipment Ownership

- Erin inquires about the time required for NRC approval.
- Jaron estimates the approval process to be between two and three years.
- Laren asks about the proof of concept development and its transfer to the research center.
- Jaron confirms that the initial development will take place in California, and the research center will handle the qualification testing.
- John O., ask if the equipment will remain at the research center after the project is completed.
- Jaron confirms that Nusano prefers to retain ownership of the equipment but is open to long-term partnerships.

Approval of the Nusano Proposal

- John M. motions to approve the Nusano proposal.
- The motion is seconded by Laren, and the roll call confirms the approval of the proposal. Emy, John M., Lynn, John O., Lynn, Laren, and Steve voted in favor and Erin did not vote on the matter.
- Emy thanks Jaron and hands over the discussion to Jeremy for the next part of the agenda.

Review of Meeting Process and Future Improvements

- Jeremy reflects on the review process and suggests improvements for future meetings.
- John M. and Erin express satisfaction with the review process and the detailed presentation.

- Emy supports the idea of having a board member follow up on projects to anticipate questions and streamline the process.
- Steve suggests adding a section on asset disposition at the end of the review document.

Financial Review and Additional Suggestions

- Laren requests periodic financial reviews to keep the board informed.
- Emy proposes quarterly budget reviews, which is agreed upon by the board.
- Jeremy and Emy discuss the possibility of adding a tab for other items in the agenda.
- Jeremy mentions the need for board member training videos and the importance of completing them annually.

Adjournment of the Meeting

- Emy asks for any final comments from the public.
- Hearing none, Emy calls for a motion to adjourn the meeting.
- The motion is seconded, and the meeting is adjourned.