

**South Dakota Science and Technology Authority Board of Directors**  
**Meeting Minutes-DRAFT**  
**Thursday, September 19, 2024**  
**Lead, South Dakota**

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 8:00 a.m. Mountain Time (MT) on Thursday, September 19, 2024, in the Administration Building 2<sup>nd</sup> Floor Vault conference room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota. A conference number was posted on the agenda with an invitation for members of the public to participate in the meeting by telephone or videoconference.

**MEMBERS OF THE BOARD IN ATTENDANCE**

Vice-Chairperson Dana Dykhouse (in person)  
Dr. Chris Fall (videoconference)  
Secretary/Treasurer Patricia Lebrun (videoconference)  
Mr. Roger Musick (videoconference)  
Chairperson Casey Peterson (in person)  
Mr. Ron Wheeler (by phone)  
Mr. Steve Elliott, ex-officio (by phone)

**MEMBERS OF THE BOARD ABSENT**

Dr. Ani Aprahamian  
Dr. Lance Roberts, ex-officio

**SDSTA STAFF PRESENT IN PERSON DURING ALL OR PART OF THE MEETING**

Ms. Christine Burger, Human Resource Manager  
Mr. Tim Engel, SDSTA General Counsel  
Ms. Stacie Granum, Program Manager for the Institute  
Mr. Mike Headley, SDSTA Executive Director and SURF Laboratory Director  
Dr. Jaret Heise, Science Director  
Ms. Michelle Kane, SURF Foundation Director/Donor Relations Manager  
Mr. Bill Kelly, Contracts & Procurement Manager  
Ms. Kelli Kirk, Sanford Lab Homestake Visitor Center Director  
Ms. Mandy Knight, Administrative Services Manager  
Ms. Ann Metli, Communications Director  
Mr. Terry Miller, Chief Financial Officer  
Ms. Stacy Sandgren, Administrative Assistant  
Ms. Wendy Straub, Interim Operations Director  
Ms. Deb Wolf, Outreach & Culture Director

**ALSO PRESENT DURING ALL OR PART OF THE MEETING**

Ms. Wendy Pitlick, Journalist for Black Hills Pioneer (in person)  
Mr. Patrick Malone, Chief Sustainability Officer for Dakota Gold (in person)  
Mr. Bob Mercer, Capitol Bureau Journalist for KELOLand (videoconference)  
Dr. Ben Sayler, Director of Sanford Science Education Center for BHSU (by phone)  
Dr. Robert Wilson, Board of Director for the SURF Foundation (by phone)

**ITEM 1. CALL TO ORDER**

Vice-Chair Dana Dykhouse called the meeting to order at 8:00 a.m. (MT). Roll call was held and a quorum declared. Chair Dykhouse was present in person. Dr. Fall, Ms. Lebrun, Mr. Musick, Mr.

Wheeler, and Mr. Elliot (ex-officio) joined remotely. Dr. Ani Aprahamian and Dr. Lance Roberts (ex-officio) were absent.

Vice-Chair Dykhouse asked guests to introduce themselves.

## **ITEM 2. APPROVE AGENDA**

Vice-Chair Dykhouse asked if there were any modifications to the agenda and there were none.

*Motion by Mr. Wheeler and seconded by Mr. Musick to approve the agenda as presented. Motion passed unanimously.*

## **ITEM 3. APPROVE MINUTES**

Vice-Chair Dykhouse asked if there were any comments on the June 20 and July 19, 2024, Minutes. Hearing none, he asked for a motion to approve the minutes as presented.

*Motion by Mr. Musick and seconded by Ms. Lebrun to approve the June 20 and July 19, 2024, minutes as presented. Motion passed unanimously.*

## **ITEM 4. GENERAL CONFLICT OF INTEREST DISCLOSURE**

SDSTA General Counsel Mr. Tim Engel invited members of the Board to disclose anything that might be construed to be a conflict of interest with respect to items under consideration at today's meeting.

No conflicts of interest were disclosed.

## **ITEM 5. DISCLOSURES AND WAIVER UNDER SDCL CH. 3-23**

Mr. Engel said he contacted all Board members before the September 19, 2024, board meeting and asked them to make any disclosures required by SDCL CH. 3-23. He said no disclosures were provided and there are no waiver requests requiring action by the board.

Vice-Chairperson Dykhouse referenced Item 1C—Public Comments—and said if anyone from the audience had any questions or comments for the Board to address, to please complete the public comment form located at the sign-in table and time will be given at the end of the agenda to discuss. No comment forms were submitted during the meeting.

## **ITEM 6. AUDIT COMMITTEE – REPORT UPDATE**

Ms. Lebrun said the Audit Committee convened on August 12 to discuss the external audit and the minutes from the committee meeting were included in the board packet. She said no changes to the audit charter were recommended. Also, Eide Bailly is performing the audit again this year and the cost to the SDSTA will be \$9,500.00.

*Motion by Dr. Fall and seconded by Mr. Wheeler to accept the audit committee report as presented. Motion passed unanimously.*

*Chair Peterson joined the meeting in person at 8:08 a.m. and took over as presiding officer.*

## **ITEM 7. FINANCIAL REPORT**

### **ITEM 7A. REVIEW FINANCIAL STATEMENTS**

Chair Peterson invited Mr. Miller to discuss the financial statements. Mr. Miller began by referring the board members to the information provided in the SDSTA board packet, highlighting a few key points:

- The Cooperative Agreement (CA) is approaching the end of its initial five-year term and CA No. 2 is expected to be approved by the Department of Energy (DOE) in the next week.

- The Scheduled Performance Actuals (SPA) cumulative expenses for the CA are at \$116.6 million, which is lower than the budgeted \$118.2 million, by \$1.6 million. This will be spent or obligated by the end of federal FY2024 for expenses yet to be incurred, most of which have been held pending the new federal budget.
- In regard to the Balance Sheet, of the \$13 million appropriation—Senate Bill 35—for the underground expansion, \$8.3 million has been spent on phase I of this project, primarily to Thyssen Mining Inc (TMI) and all funds will be spent by the end of September.
- On the Income Statement, contractual services are \$2.1 million, primarily due to the underground expansion expenses of \$1.6 million. This project will be capitalized when complete in FY2025.
- The Comparative Balance Sheet shows total local checking is lower by \$2.4 million from this time last year, which is primarily from prepaids in IT, prepaids in insurance, and SDSTA asset purchases as well as the current CA underrun.
- In regard to the Comparative Income Statement, total revenue for year-to-date July 2024 compared to year-to-date July 2023 has increased by \$371,000.00. This increase is primarily from DOE Infrastructure Improvement Projects (IIPs) billed for expenses in July: the 3650L pump room, Yates Hoistroom roof, Rotating Biological Contactor (RBC) replacement, and a small amount to the dewatering systems PLC. Labor expense has increased primarily due to salary increases.
- The Operating Budget Analysis is under budget overall by \$635,000.00 primarily from indirects and federal projects.

Mr. Miller answered questions from the board. Vice-Chair Dykhous asked if the xenon is at SDSTA's cost or if it is at the current value and Mr. Miller replied it is at our cost.

*Motion by Mr. Dykhous and seconded by Mr. Wheeler to accept the financial report as presented. Motion passed unanimously.*

#### **ITEM 7B. AMEND FY2025 BUDGET**

Mr. Miller said the FY2025 budget approved by the Board at the June 2024 meeting has been updated as CA No. 2 was still being drafted and reviewed by the DOE. Also, in June, there was a plan to move QA/QC and Environment staff from the indirect budget to the CA budget. The DOE representative recommended not to make those changes immediately and wait until a later date. In addition, the SDSTA funded budget was updated due to change to the 4850L underground expansion phase 1 project as SDSTA experienced lower expenses to TMI than anticipated in June 2024; those costs will be realized in FY2025. Other FY2025 line items budgets were reviewed, and adjustments made where needed.

Chair Peterson asked if the owner's interest policy (OIP) insurance premium for the Deep Underground Neutrino Experiment (DUNE) project, payable during FY2025, is a one-time budget item; Mr. Miller replied it is a one-time expense.

*Motion by Mr. Dykhous and seconded by Mr. Musick to approve the amended FY2025 budget. Motion passed unanimously.*

#### **ITEM 7C. SD INVESTMENT COUNCIL LETTER**

Mr. Miller referred to the SD Investment Council letter included in the board packet noting the rate of return last year was over 4%, resulting in earnings of approximately \$863,000. He said approximately \$713,000 will go towards the SDSTA operating fund that exists with the state. The remaining amount will be go towards restricted funds also with the state.

Chair Peterson asked Mr. Miller for his recommendation regarding the FY2025 interest accrual. Mr. Miller said last year management used a 1.75% rate accrual for these earnings, and he recommended a 2% rate this year. Mr. Wheeler, Ms. Lebrun, and Chair Peterson concurred with Mr. Miller's recommendation.

*Motion by Mr. Wheeler and seconded by Ms. Lebrun to accrue interest on SDSTA's funds with the Investment Council at 2%. Motion passed unanimously.*

#### **ITEM 7D. FISCAL YEAR END INVENTORY ASSET LISTING**

Mr. Miller said annually a June-end inventory asset listing is provided to the board for informational purposes. He pointed out the external auditors review the report and in the last two years, assets have been reconciled using an asset software tool called ManagerPlus, which is managed by the Operations department. A different system is used to track and depreciate assets; both systems have been reconciled.

No questions were raised.

#### **ITEM 7E. FISCAL YEAR END PER DIEM LISTING**

In regard to the fiscal year end per diem listing, Mr. Miller reported that there was nothing new or noteworthy to mention. No questions were raised.

#### **ITEM 8. SURF FOUNDATION**

##### **ITEM 8A. FOUNDATION UPDATE**

SURF Foundation Director/Donor Relations Manager Ms. Michelle Kane shared the successes and activities of the Foundation. She began her presentation by reminding the board the Foundation is the nonprofit supporter of SURF. The Foundation raises funds to support many activities focusing on four pillars: 1) The Institute for Underground Science at SURF, 2) Community Engagement and Events, 3) Education and Student Development, and 4) Friends of SURF Initiative.

Ms. Kane said she held the director position for a year and a half and has realized the SURF Foundation needs a new strategy and new leader. The \$100 million capital campaign to build the Institute requires a leader with extensive nationwide experience to execute the capital campaign. With this change, Ms. Kane is transitioning into a new role as Donor Relations Manager. In this role, she is focused on preparation for successful onboarding of a new director and making sure processes and procedures are up to date. She is also focused on funding opportunities for current programs and Institute programming, public outreach efforts, and Foundation marketing planning.

Other areas discussed in Ms. Kane's presentation included: Foundation fundraising goals, donations and grants received, and upcoming grant opportunities. She highlighted 2024 Neutrino Day sponsorships, intersections and partnerships, the Neutrino Day VIP Party, the new multimedia screen at the Sanford Lab Homestake Visitor Center (SLHVC), interactions between SDSTA and Foundation board members with Center for Theoretical Underground Physics \*and Related Areas (CETUP\*) participants, the August 15 LBNF/DUNE celebration, and Quantum Partnership Mixer.

She concluded her presentation with activities for the next three months: 1) Wrap up the Deep Roots series and begin discussing new sculpture ideas. 2) Continue updating content on the new multimedia screen at the SLHVC. 3) Identify and pursue new grant opportunities. 4) Initiate sponsorship discussions for public outreach events planned for 2025. 5) Deliver presentations to Road Scholars, SDSU Extension, and explore other speaking opportunities. 6) Continue updating the website and refining marketing materials. 7) Support successful onboarding efforts for the new Foundation Director.

## **ITEM 8B. APPROVE REELECTION OF SURFF BOARD OF DIRECTORS**

Mr. Engel said under the Foundation Bylaws, board members are nominated by the Foundation board and are approved by the SDSTA board at its June meeting, but the approval was not on the agenda for the June meeting. At this time, it is requested to approve the following new terms: Dr. Bob Wilson's new term will expire June 2027; Mr. Evans and Dr. Szczerbinska's new terms will expire September 2027; and Ms. Olson's new term will expire December 2027.

*Motion by Mr. Dykhouse and seconded by Mr. Musick to approve the following existing SURFF board members with terms expiring in 2024 to each serve an additional 3-year term, commencing at the expiration of their current terms — Dr. Bob Wilson, Mr. Linn Evans, Dr. Barbara Szczerbinska, and Ms. Julie Olson — retroactive to the June 20, 2024, SDSTA board meeting. Motion carried unanimously.*

## **ITEM 9. REPORT FROM EXECUTIVE DIRECTOR**

### **ITEM 9A. SDSTA QUARTERLY UPDATE**

Mr. Headley provided a SURF update and said it has been a very busy quarter with notable accomplishments. He reported on the following:

- FY2025 federal budget is marked at \$36 million (Senate), \$37.5 million (House), and a continuing resolution is expected for at least three months.
- CA renewal negotiations have been completed. An agreement is ready to sign at \$208 million for base operations and includes limited IIP.
- A record setting Neutrino Day 2024 was held on July 13. There were 2,200 participants, which is a 10% increase from last year. The event relocated down to Main Street the last couple of years, which consolidated the footprint of the event and made it more convenient for visitors to participate.
- An LBNF excavation ribbon cutting was held on August 15 in partnership with Fermilab. TMI demobilization has been completed. Regarding the ceremony, BH Pioneer journalist Ms. Pitlick wrote an excellent article on the event and has provided great news coverage overall.
- The Ross Shaft transitioned to LBNF infrastructure construction, with KAJV as the general contractor, and cryostat installation planning.
- Yates Shaft heavy maintenance is approaching 2600L and is on track to reach 4850L in early 2025.
- Expansion excavation has been completed and an additional 100 feet of drift has been completed within allocated funds. A smaller ribbon cutting was held on September 12 with SDSTA and TMI staff. There was no interruption or impact to the LBNF/DUNE project during this project. TMI demobilization will be completed before the end of September.
- The Institute for Underground Science at SURF programs include expanding partnerships with SD universities. Ms. Stacie Granum, Program Manager, will provide a brief presentation shortly.
- Infrastructure improvement planning discussions were held in mid-September with DOE and included Yates Hoist upgrades and Yates Shaft refurbishment.

Mr. Headley concluded his report with photos of events and milestones from the last quarter.

Mr. Wheeler sought an update on the potential government shutdown in Washington. In response, Mr. Headley said he plans to meet with Mr. Miller in the coming week to run numbers and consider the timing of payments in order to plan for this contingency.



## **ITEM 9C. SANFORD LAB HOMESTAKE VISITOR CENTER (SLHVC) UPDATE**

SLHVC Director Ms. Kelly Kirk provided an update to the board. The presentation included: 1) SLHVC by the numbers for visitations, buses, and events—events include both SURF sponsored events such as Deep Talks, Deep Roots, and outside entities. The numbers shown on the slide are from 2022 when SDSTA purchased the SLHVC through end of August of 2024. 2) A few key events were highlighted: Neutrino Day and Department of Education South Dakota Road Trip—100 K-12 educators travel across SD for a week. SLHVC and Communications team members interfaced with them in many ways including using the augmented reality googles to “see” the new generation LUX-ZEPLIN experiment and compare it to the older generation experiment LUX. 3) Museum Growth: SLHVC would like to inspire curiosity in the exhibition space and is centering efforts in three areas: Focus to expand family activities, develop interactive exhibits (example is “dewatering the underground” exhibit created by Operation team members), and grow year-round programming options.

Ms. Kirk said SLHVC is enhancing ways to engage with SURF. For example, the “Ask a Scientist” program has expanded due to its popularity and was a site for the Kool Deadwood Nites poker run. Scientists interacted with over 150 visitors during that time. Tour and docent offerings have also been built up. Ms. Kirk concluded by announcing the development of the programmatic calendar. She said SLHVC is one of three museums in South Dakota registered to participate in the annual “Worldwide Day of Play” on September 28, sponsored by Nickelodeon Television. The event is designed to encourage children and parents to turn off the television and play. In addition, SLHVC is collaborating with other museums and organizations to share resources and brainstorm ideas for events and expand offerings.

Chair Peterson referred to the first slide in the presentation and said he had heard buses were unable to book hotel rooms and perhaps that was the reason for less traffic this summer. Ms. Kirk concurred and said there were very few buses in July due to hotel pricing, but bus tours have already picked up in September.

Ms. Lebrun asked if the numbers on the first slide represented calendar years or fiscal years, and Ms. Kirk replied they are calendar years. Comparing the numbers from 2023 and 2024, the SLHVC is doing quite well.

Chair Peterson congratulated Ms. Kirk and her team on a great job.

## **ITEM 9D. THE INSTITUTE FOR UNDERGROUND SCIENCE AT SURF (THE INSTITUTE) UPDATE**

Program Manager Ms. Stacie Granum began her presentation by stating that The Institute is three months shy of its one-year anniversary. She reported that The Institute is building intellectual community by expanding program vision. The formula for success includes vision to foster interdisciplinary collaboration, strengthen passionate partnerships, expand education opportunities, construct a path for future generations, and build intellectual community.

Ms. Granum discussed programs that have been completed this year: 1) Higher Education Connection Networks—both educators and researchers. This was a great opportunity to build connections and look at Established Program to Stimulate Competitive Research (EPSCoR) opportunities. 2) QuarkNet Lead Teacher Cornerstone Workshop were held in May. This program is managed by Fermilab and Notre Dame. The Institute/SURF partnered with BHSU as a designated QuarkNet center and was a great success. 3) Deeper Talks: SURF Seminar Series throughout the Summer. This series is at a higher level and is multi-disciplinary (not open to public). 4) CETUP\* was held June 17 to July 19, which was its second year under the Institute. The community outreach was impactful. 5) Quantum Partnership

Workshop in July. This has led to bi-monthly virtual meetings to further discussions, opportunities, and initiatives.

Lastly, Ms. Granum reported “What’s Next” with the Institute: 1) One Year Anniversary Event in December or possibly January. 2) 2025 Programming - All Programs Highlighted earlier plus International Particle Physics and Cosmology Conference (June 23 – 28, 2025). This will bring in 100-150 participants. It was held in Deadwood over a decade ago. 3) 5-Year Program Plan referenced the Institute scope and stated the importance of receiving feedback from all of the partners and individuals that have been involved with the Institute programs this last year.

Chair Peterson asked what opportunities are available for SURF with BHSU’s \$997,000 research grant that was awarded? Ms. Granum deferred to Ms. Deb Wolf, SDSTA Outreach and Culture Director as she has been working closely with BHSU staff. Ms. Wolf said there has been discussion concerning the Higher Education Workshop, and the team spent two days working on the E-CORE grant, which is an \$8 million, four-year grant, with approximately 15 partners across SD. She said several participants from the Higher Education Workshop are part of E-CORE leadership team. In addition, Dr. Brianna Mount received an approximately \$1 million grant for post doc/graduate students, and Ms. Wolf said she would like to learn from Dr. Mount as she implements the grant. Mr. Headley interjected that SDSTA is partnering with Dr. Mount for additional internship opportunities at SURF paid with Research Experiences for Undergraduates (REU) funds. Ms. Wolf gave kudos to BHSU, Dr. Mount, and Dr. Ben Sayler for their grant efforts.

*Motion by Mr. Dykhouse and seconded by Mr. Wheeler to accept the Executive Director’s report as presented. Motion passed unanimously.*

#### **ITEM 10. EXECUTIVE SESSION**

*Motion by Mr. Dykhouse and seconded by Ms. Lebrun to enter into executive session to discuss personnel matters and to consult with legal counsel concerning legal and contractual matters as permitted by SDCL 1-25-2(1), (3) and (4) and 19-19-502. Motion passed unanimously.*

*The Board recessed at 9:21 a.m. for a ten-minute break followed by executive session.*

*Mr. Elliott departed executive session at 9:50 a.m.*

*The Board reconvened in open session at 10:26 a.m. and a quorum was confirmed.*

#### **ITEM 11. REPORT FROM EXECUTIVE SESSION**

Chairperson Peterson reported that the Board discussed personnel matters and consulted with legal counsel concerning contractual and legal matters. No action was taken.

*Motion by Mr. Dykhouse and seconded by Dr. Fall to approve the executive session report. Motion passed unanimously.*

#### **ITEM 12. RATIFY LBNF LOGISTICS CONTRACT**

Mr. Headley said SDSTA has entered into a new logistics contract with Fermilab, similar to the contract entered into previously. Due to the timing of the contract, SDSTA accepted the first increment of \$900,000.00, which was within the Executive Director’s limit, with the plan for the board to ratify his signature at the September meeting. This main activities in this contract are for infrastructure technicians, hoist operators, and a few others who operate the shaft. He noted it pays for 80% of their time in support of the project and the remaining percentage is charged to the CA for general maintenance of the shaft.

Mr. Engel said there is one small adjustment he would like to recommend and suggested that the motion include authorizing the executive director, in consultation with legal counsel and the chair, to negotiate final terms and conditions of the contract.

*Motion by Mr. Wheeler and seconded by Mr. Dykhouse to authorize SDSTA executive director, in consultation with legal counsel and the chairperson, to negotiate final terms and conditions, and to sign the LBNF Logistics contract with Fermi Research Alliance with a contract amount up to \$14,112,430.00, and to ratify the executive director's signature on the first funding increment of the contract. Motion passed unanimously.*

### **ITEM 13. APPROVAL OF COOPERATIVE AGREEMENT RENEWAL**

Mr. Headley said it is time for the renewal and extension of the CA for another five years. He said a proposal was submitted in January and technically reviewed. A few months ago, the proposal was negotiated with the DOE and in September, it was reviewed by DOE senior management, and it is ready to be signed.

Mr. Headley said the total amount is \$208 million and includes approximately \$15.5 million for infrastructure improvement projects, which is lower than hoped. However, he said there were good discussions with DOE in the last week and they understand the needs of SDSTA. Mr. Headley reported that SDSTA will be adding approximately 30 FTE within the next five-year period to address operational needs.

He noted the relationship between SDSTA and DOE Office of Science has been strong. He thanked Dr. Fall for his work on the first five-year CA. Mr. Headley said the CA renewal runs from FY2024 to FY2029 and has been incrementally funded on a quarterly basis in the past.

*Motion by Mr. Dykhouse and seconded by Dr. Fall to authorize SDSTA executive director to sign the Cooperative Agreement renewal. Motion passed unanimously.*

### **ITEM 14. CONFIRM DATE, TIME, AND LOCATION OF NEXT MEETING**

Chairperson Peterson said there is a change to the next SDSTA board meeting. It will be held on Friday morning, December 13 in Washington, DC at the office of Lewis-Burke Associates. He said details will be forthcoming and the public will be able to join via Zoom.

### **ITEM 15. PUBLIC COMMENTS**

Chairperson Peterson said he did not receive any public comment request forms during the meeting and there was no one present in the room asking to provide public comment.

### **ITEM 16. BOARD COMMENTS**

Mr. Dykhouse apologized for not being able to attend the August 15 ribbon cutting. He said the project seems to be going well.

Dr. Fall said he is glad to hear the CA renewal is in place.

Ms. Lebrun said the publicity that SURF is getting is wonderful. She said her son had pointed out a recent NY Times's article on SURF. Also, the SD Mines Hard Rock magazine had a one-page article about DUNE, and it was a good piece that helps SURF stand out. She concluded by saying today was a good meeting.

Mr. Musick said it was a good meeting.

Mr. Wheeler said he appreciated the updates from staff regarding the SLHVC, Foundation, and Institute.



Mr. Headley thanked the staff for their great work over the last quarter and thanked the Board for their strong support.

Mr. Engel referred to the NY Times article and said he thought it was one of the better explanations about DUNE.

Chairperson Peterson said he appreciated the SDSTA team and the board. He said seeing and hearing the enthusiasm relating to the Foundation, Institute, and SLHVC, he is very excited about the future of SDSTA/SURF.

#### **ITEM 17. ADJOURN**

Chairperson Peterson called for a motion to adjourn.

*Motion by Dr. Fall and seconded by Mr. Dykhouse to adjourn. Motion passed unanimously.*

**Meeting adjourned at 10:36 a.m.**