South Dakota Science and Technology Authority Board of Directors Meeting Minutes Thursday, March 20, 2025 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, March 20, 2025, in the Education and Outreach (E&O) Building Conference Room at the SDSTA, 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 in person or join by telephone or videoconference.

MEMBERS OF THE BOARD IN ATTENDANCE

Dr. Chris Fall (in person)

Secretary/Treasurer Patricia Lebrun (by videoconference)

Chairperson Casey Peterson (in person)

Mr. Ron Wheeler (by videoconference)

Dr. Brian Tande, ex officio (in person)

MEMBERS OF THE BOARD ABSENT

Dr. Ani Aprahamian

Vice-Chairperson Dana Dykhouse

Mr. Steve Elliott, ex officio

Mr. Roger Musick

SDSTA STAFF PRESENT DURING ALL OR PART OF THE MEETING

Ms. Annie Averitt, SURF Foundation Director (in person)

Ms. Christine Burger, Human Resources Manager (in person)

Mr. Sean Crooks, IT Operations Manager (in person)

Mr. Tim Engel, SDSTA General Counsel (in person)

Ms. Kim Flock, Controller (in person)

Ms. Stacie Granum, The Institute Program Manager (in person)

Mr. Mike Headley, SDSTA Executive Director and SURF Laboratory Director (in person)

Ms. Jayme Hunt, HR Generalist (in person)

Ms. Michelle Kane, SURF Foundation Donation Relations Manager (in person)

Ms. Mandy Knight, Chief of Staff (in person)

Mr. Christopher Kreitzinger, Science Support Associate (by phone)

Ms. Ann Metli, Communications Director (in person)

Mr. Terry Miller, Chief Financial Officer (in person)

Ms. Ashlyn Pearson, HR Generalist (in person)

Mr. Mike Ray, Media Relations Manager (in person)

Ms. Nicol Reiner, Education & Outreach Director (in person)

Ms. Wendy Straub, Chief Operating Officer (in person)

Ms. Becky Wilcox, Senior Administrative Assistant (in person)

Ms. Deb Wolf, Outreach & Culture Director (in person)

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Mr. Clayton Hollowell, DOE HEP SURF Program Manager (in person)

Ms. Wendy Pitlick, Black Hills Pioneer Journalist (in person)

Mr. Tom Regan, Retired SDSTA Employee (by phone)

Dr. Ben Sayler, BHSU Director of Sanford Science Education Center (by phone)

Dr. Robert Wilson, SURF Foundation Board Member (in person)

ITEM 1. CALL TO ORDER

Chair Casey Peterson called the meeting to order at 8:00 a.m. (MDT). Roll call was held.

Dr. Chris Fall, Chair Casey Peterson, and Dr. Brian Tande were present in person. Ms. Lebrun and Mr. Wheeler joined via Zoom. Dr. Ani Aprahamian, Vice-Chair Dana Dykhouse, Mr. Roger Musick, and Mr. Steve Elliott were absent. Chair Peterson introduced Dr. Tande as the new President of South Dakota School of Mines and Technology (SD Mines) and welcomed him to the SDSTA board. He then asked guests to introduce themselves. He said if any of the guests had any questions or comments for the board to address, time will be given at the end of the agenda to discuss. No public comment forms were submitted.

ITEM 2. APPROVE AGENDA

Chair Peterson asked for a motion to approve the agenda.

Motion by Mr. Wheeler and seconded by Dr. Chris Fall to approve the agenda. Motion passed unanimously.

ITEM 3. APPROVE MINUTES

Chair Peterson asked if there were any comments on the December 13, 2024, Minutes. Hearing none, he asked for a motion to approve the minutes as presented.

Motion by Ms. Lebrun and seconded by Dr. Fall to approve the December 13, 2024, minutes as presented. Motion passed unanimously.

Chair Peterson asked if the business-critical jobs mentioned during approval of the Compensation Philosophy Policy in the December meeting had been further defined. Mr. Headley replied a list of jobs (essential personnel) has been developed and will be added to the policy.

ITEM 4. GENERAL CONFLICT OF INTEREST DISCLOSURE

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.

There were no disclosures.

ITEM 5. CONFLICT OF INTEREST DISCLOSURE AND WAIVER UNDER SDCL CH. 3-23

Mr. Engel said, in regard to disclosures and waivers under SDCL Ch. 3-23, he polled the board members prior to the meeting and no disclosures were made.

ITEM 6. REPORT FROM AUDIT COMMITTEE

ITEM 6B. AUDIT COMMITTEE - REPORT UPDATE

Ms. Lebrun referenced the Audit Committee minutes in the board packet and said the committee convened on February 10 to discuss the SDSTA Financial and Compliance Audit and the potential Internal Control Audit of the SDSTA Information Technology (IT) department.

Ms. Lebrun said Mr. Engel verified based on policy that SDSTA can contract with Eide Bailly, and a sole source justification is not required. Mr. Paul Kane, partner auditor for Eide Bailly, confirmed he plans to be the audit partner for the SDSTA audit, and they do not require a rotation of audit partners

with governmental entities. Ms. Lebrun said the committee is pleased to maintain Eide Bailly as SDSTA's audit firm.

Regarding the IT internal control audit, the IT department contracted with Marco a few years ago for a procedural review and made recommendations that were implemented by the IT team. SDSTA would like to pursue this review again with Marco. Also, IT Operations Manager Sean Crooks has worked with a company (STACKTITAN) for penetration testing to provide security controls against hackers and plan to pursue that as well.

Mr. Headley replied SDSTA is proceeding with both through regional vendors and appreciates the board's support.

ITEM 6B. AUDIT REPORT-FISCAL YEAR ENDED JUNE 30, 2024

Ms. Lebrun said the audit report was presented to the Board at the December 13, 2024, meeting for discussion and it is now being presented for approval.

Chair Peterson congratulated the SDSTA Finance team for a clean audit as well as Ms. Lebrun for her service and bringing the audit to a completion.

Motion by Ms. Lebrun and seconded by Mr. Wheeler to accept the Audit Report for the Fiscal Year Ended June 30, 2024, as reviewed and discussed at the December 13, 2024, board meeting. Motion passed unanimously.

ITEM 7. FINANCIAL REPORT

ITEM 7A. JANUARY FINANCIAL STATEMENTS

SDSTA Chief Financial Officer Mr. Miller said financial statements for the January 31, 2025, reporting period were included in the board packet and consist of the Cooperative Agreement (CA) SPA Curve Analysis, Balance Sheet, Income Statements, and Comparatives.

Ms. Lebrun asked to include page numbers to reference financials on the agenda in the future and Ms. Knight agreed.

As of January, the SPA Curve Analysis shows actual cumulative expenses for the CA are at \$131.2 million, which is lower than the budgeted \$132.9 million, by \$1.75 million. Mr. Miller said this was due to a large share of assets budgeted in fiscal year 2025 which have not yet been purchased. Due to the possible government shutdown, some spending was deferred; SDSTA is now moving ahead and will purchase those assets by the end of September.

Mr. Miller said on the balance sheet, the SB35 appropriation of \$13 million for the 4850L expansion has a balance of \$12.8 million. There is a small balance remaining that is being spent down and should be capitalized by June 30. Regarding fixed assets, there is a current balance of \$107 million. Fixed assets activity since last month included recording a LT270 Komatsu loader, a portable diesel generator, three assets surplused (bolter, feed assembly, pump motor), and depreciation expense—all for a decrease of \$347,000.00. Other payables increased from the prior month by \$801,000.00, primarily from borrowing \$716,000.00 to pay liability insurance costs.

Mr. Miller said on the income statement, there is a net loss of \$4.9 million, primarily from the 4850L expansion costs not yet included in the Work in Progress of \$4.6 million, year-to-date. The plan is to have this project capitalized by June 30.

Mr. Miller noted a few items on the Comparative Balance Sheet, Comparative Income Statement, Available Resources and Operating Budget Analysis and asked if there were any questions.

Chair Peterson asked about material changes in February. Mr. Miller replied cash decreased slightly due to the purchase of xenon insurance.

Chair Peterson said he noticed cryostat and lead were sold to another experiment but after further review, it was confirmed that those items and the proceeds were owned by the MAJORANA DEMONSTRATOR experiment, not SDSTA. Chair Peterson asked if there were any further questions and there were none.

Motion by Dr. Fall and seconded by Ms. Lebrun to accept the financial report as presented. Motion passed unanimously.

ITEM 7B. APPROVAL TO INCREASE SDSTA LINE OF CREDIT

Mr. Miller noted several years ago, SDSTA qualified for a \$5 million line of credit. With the potential government shutdown in early March, discussion ensued to increase the line of credit to \$8 million, which would carry the SDSTA through a quarter and offset any delay in funding through the CA. He reported that First Interstate Bank has approved an increase in the line of credit to \$8 million; SDSTA is awaiting the paperwork for Chair Peterson and Mr. Headley to sign. The fee to increase the line of credit is 25 basis points or approximately \$15,000 per year.

Chair Peterson thanked Mr. Miller for his efforts.

Motion by Dr. Fall and seconded by Mr. Wheeler to approve an increase in line of credit with First Interstate Bank from \$5,000,000.00 to \$8,000,000.00, as presented, and to authorize the executive director and SDSTA board chairperson to sign the loan documents. Motion passed unanimously.

ITEM 8. SURF FOUNDATION STATUS UPDATE

Mr. Headley introduced new SURF Foundation Director Ms. Annie Averitt.

Ms. Averitt thanked the board and gave a brief synopsis of her background, mentioning she has just shy of 20 years of experience as a professional fundraiser, with an emphasis on fundraising for engineering, theoretical computer science, and primary math research. She is the former Director of Advancement and External Relations for the Simons Laufer, Mathematical Sciences Institute in Berkeley, California (formerly known as MSRI). She said at Simons Laufer, the priority was to build the endowment fund from \$26 million to \$100 million. When she departed, the endowment campaign had yielded approximately \$100 million, which was \$26 million above the goal. In addition to that campaign, fundraising was undertaken for other programs, bringing in an additional \$44 million.

Ms. Averitt earned degrees in public communication, mechanical engineering, physics, and rhetorical studies and said she is most at home when talking with people about math and science, and, luckily for her, SURF brings all of this together.

Ms. Averitt then provided a brief update on the following: 1) SURF Fundraising Assessments – The First 60 Days, 2) SURF Fundraising Actions – The First 60 Days, 3) SURF Fundraising Metrics – Measuring success to lead to increased financial support, and 4) The Year Ahead.

In conclusion, she thanked the board for their support. Chair Peterson welcomed Ms. Averitt and said he is glad she is working for the SURF Foundation.

ITEM 9. REPORT FROM EXECUTIVE DIRECTOR

Chair Peterson deferred Item 9A to the end of the executive director's report.

ITEM 9B. SDSTA QUARTERLY UPDATE

Mr. Headley began his presentation recognizing notable staffing changes to include Ms. Wendy Straub as the SDSTA Chief Operating Officer, Ms. Mandy Knight as SDSTA Chief of Staff, and Ms. Annie Averitt as SURF Foundation Director and congratulated them in their new senior roles.

He then reviewed SURF highlights: 1) The FY2025 funding is expected to remain flat at \$35 million with the year-long continuing resolution; FY2026 is to be determined. A letter requesting an increase in funding is being prepared in collaboration with Fermilab and Mr. Michael Ledford, SDSTA's advocate.

- 2) SDSTA's top priority remains Long-Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE) construction support and safe underground access. A steady transition is being made from excavation work into outfitting. The installation of the first cryostat will start in January of 2026.
- 3) The Ross Shaft staff continues to support infrastructure construction (undertaken by Kiewit Alberici Joint Venture) and cryostat install planning. An Installation & Integration ("I&I") workshop is scheduled next week with LBNF/DUNE and SURF staff, with several people attending from Fermilab and CERN.
- 4) Yates Shaft heavy maintenance has reached the 4850L and the Yates has returned to full operations for regular access.
- 5) There was strong outreach to the South Dakota Legislature this Session. Fundraising outreach is ramping up as well. Mr. Headley and Ms. Averitt met with potential donors in San Francisco last week and will be heading to San Diego next month.
- 6) K-12 Education and Outreach performance remains strong. Eight Davis-Bahcall scholars were selected from over forty applicants. Ms. Wolf said the scholars are made up of five university freshman students and three high school seniors from around the state. Mr. Headley said the K-12 outreach team has been incredibly busy this year and showed a table listing numbers of field trips, classroom presentations, curriculum units, and student contacts from school year 2019 through February 2025.
- 7) DOE continues to consider approval of Yates Shaft refurbishment as a formal DOE project. Mr. Headley said although SDSTA is not required to follow the DOE Orders that apply to major capital projects, SDSTA will follow the intent of those orders. SDSTA is working through the initial approval process.
- 8) SDSTA has been designated a partner in the U.S. Senators Rounds (SD) and Heinrich (NM) initiative known as American Science Acceleration Project. (https://www.rounds.senate.gov/ASAP). The idea is to build momentum within Congress for more support for basic research and to try to accelerate the pace of research in a number of areas, including the type of work performed at SURF.
- Mr. Headley announced a few attendees participating in next week's I&I workshop: Fermilab Interim Laboratory Director Young-Kee Kim, leadership from the LBNF/DUNE team, and Marzio Nessi and Olga Beltramello from CERN.
- 9) The American Physical Society held a conference in Los Angeles this week in which Science Director Jaret Heise is participating and said there are over 15,000 people in attendance. A local company produced a short SURF introduction video that is playing during the conference, which is great exposure for SURF. Mr. Headley said it is a well-done video he will share the link with board members.

Dr. Fall excused himself from the meeting at 9:02 a.m.

ITEM 9C. YATES TOP-DOWN MAINTENANCE UPDATE

Ms. Straub began her presentation by recapping the Yates Shaft Short Term Timeline of top-down maintenance ("TDM") activities. She noted the following:

In 2012 pre-July, TDM began in the cage compartment. The Yates Shaft crew focused on TDM on nights and weekends in the cage compartments. When a Stop Work Order was issued, there were 19 sets remaining to complete to the 4850L.

In July 2021, a Stop Work Order was issued; during a routine shaft inspection, the Yates Shaft crew discovered a broken wall plate in the northeast utility compartment at set #251.

In December 2021, the Yates Shaft returned to operations on schedule. The Yates Shaft crew secured and completed TDM from the 1700L to the 2600L in the northeast utility compartment.

Then, in October 2022, a boulder was discovered below the 4100L. A dust plume was reported at the 4850L Big X and shaft inspection revealed a large boulder pushing against lacing just below the 4100L. Monitoring showed movement two weeks later and the shaft was idled for normal operations. After further inspection, it was decided to go to TDM. During this time, all structural timbers were repaired or replaced, including rock bolting, installing J Hooks and turnbuckles every 7 to 8 sets to anchor the structure into the rock, and additional work.

Ms. Straub shared several photos illustrating the TDM progress, including a return to operations checklist that was reviewed with SDSTA's QA/QC Integrated Management System to verify all work was covered. She said Caterpillar was re-established on the 1700L in March of 2024. Also, two key stations were rehabilitated. She said there are a few checklist items that are remaining on the return to operations, but they are not critical items.

Dust has been an issue in the Yates Shaft. The crew has been able to divert material away from the cage compartment by physically mopping the debris into five-gallon buckets, dumping them into skips, hauling it to the surface, and disposing of it.

Referring back to the boulder in October of 2022, she said she was thankful for the backing of Mr. Headley and those that supported the work. She shared several photos illustrating the work and methods for ground support and the two rebuilt shaft stations leading up to the return to operations at the Yates Shaft. In conclusion, she said this milestone was achieved safely and on time and she is proud of the crew members. She asked if there were any questions and there were none.

Mr. Headley interjected that the goal is to refurbish the Yates Shaft so it is in good shape for the next five years, and then all of the timber will be removed in the 2030 timeframe when the shaft is rebuilt with steel sets.

ITEM 9D. THE INSTITUTE FOR UNDERGROUND SCIENCE AT SURF UPDATE

Program Manager Ms. Stacie Granum began her presentation by reflecting on the last year of the Institute and the programs that were implemented. She said it is exciting to see the impact and the vision of building an intellectual community. She reiterated eight Davis Bahcall scholars were selected and shared a story about an inspiring 2025 scholar named Mr. Wyatt Schell from MacIntosh, SD, stating that this is what the program is all about.

Ms. Granum discussed other programs, focusing on researchers, educators and students, with the intention of these programs being to intersect with different communities. She said six programs were launched (2 ongoing and 4 new) with 360+ participants representing twenty-four countries. The Quantum Partnership workshop is a great example where researchers and educators were brought

together. She said there have already been some really great results, including expanding from a one-day workshop to three days with additional attendees.

Ms. Granum showed the "Celebrating the First Milestones" video the Communications team created for the Institute. She then discussed what is next for the Institute, including: 1) developing a five-year program plan, 2) 2025 program line-up, 3) implementing new programs, 4) expanding current programs, and 5) working closely with the Foundation Director on Institute Funding. In conclusion, Ms. Granum asked if there were any questions; there were none.

ITEM 9A. DECLARATION OF SURPLUS

Mr. Headley referred to Item 9A that was skipped and referenced the Declaration of Surplus included in the board packet. He said the projector has reached end-of-life and will be donated to the Historic Homestake Opera House. He asked if there were any questions and there were none.

Chair Peterson deferred Item 9 to approve the executive director's report until a quorum was reestablished.

Chair Peterson deferred Item 10 to discuss approval of policies and procedures until a quorum was reestablished.

ITEM 11. DISCUSS GOVERNANCE CHARTER

Chair Peterson said SURF Foundation board members Linn Evans and Foundation Chair Beth Massa led an effort to create a governance charter for the Foundation and directed the board to the draft included in the board packet. He asked if the board would be interested in creating a Governance Committee along with a charter and policy for the SDSTA. For example, Chair Peterson said he reviews the Executive Director's performance annually, and the Governance Committee could assist with these reviews.

Mr. Engel then explained the draft Foundation Charter is written specifically for a not-for-profit foundation whereas some SDSTA board duties are created by statute. The draft charter would need to be refined for the SDSTA and to keep in mind the discretion to appoint a board member lies with the Governor. The draft charter could allow for recommendations and could be a starting point.

Mr. Headley said the charter would be value-added and encourage the board to proceed.

Chair Peterson asked the board if they would like to pursue this, and he restated that a governance charter would formalize the executive director review process and allow the board to provide input of future board members for the Governor to consider. The board then agreed to purse drafting a charter. Chair Peterson asked Mr. Engel to prepare a draft SDSTA Governance Charter for consideration by the Board.

ITEM 12. SELECT NOMINATING COMMITTEE

Chair Peterson said he asked Mr. Dykhouse and Mr. Musick to serve on the nominating committee and both agreed to serve. The nominating committee will report to the board at the June 26 annual board meeting when the election of officers will be held.

The board recessed at 9:15 a.m. for a ten-minute break.

The board reconvened in open session at 9:25 a.m. with a quorum.

Relating to Item 9:

Motion by Mr. Wheeler and seconded by Dr. Fall to accept the executive director's report as presented. Motion passed unanimously.

ITEM 10. APPROVE SDSTA POLICIES AND PROCEDURES

Mr. Headley said Policy (PY) and Policy-Procedure (PP) updates were included in the board packet and briefly reviewed the updates. He also pointed out that the Diversity, Equity, and Inclusion Policy is being retired from the manual. He asked if there were any questions and there were none. (Mr. Engel reviewed all the updated policies and procedures.)

Motion by Dr. Fall and seconded by Mr. Wheeler to approve the following revised policies and procedures: Equal Opportunity Employer Policy, Equal Opportunity Employer Policy-Procedure, Flexible Work Options Policy, Flexible Work Options Policy-Procedure, Leave Policy, Use of SDSTA Technology Resources and Internet Policy and to retire the Diversity, Equity, and Inclusion Policy from the SDSTA Manual, as presented. Motion passed unanimously.

ITEM 13. EXECUTIVE SESSION

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

The board entered into executive session at 9:26 a.m.

The board reconvened in open session at 10:29 a.m.

ITEM 14. REPORT FROM EXECUTIVE SESSION

Chairperson Peterson reported the board consulted with legal counsel concerning legal and contractual matters. No action was taken.

Motion by Ms. Lebrun and seconded by Dr. Fall to approve the executive session report. Motion passed unanimously.

ITEM 15. APPROVE REVISED MOU BETWEEN SDSTA AND FERMI FORWARD DISCOVER GROUP, LLC

Mr. Headley said at the last meeting, the board approved an update to the Memorandum of Understanding (MOU); those changes related primarily to transferring responsibilities from Fermi Research Alliance (FRA) LLC to Fermi Forward Discovery Group, LLC (FermiForward). Further changes to the MOU have been proposed in coordination with Fermilab; the changes are primarily housekeeping items. He said there are a few additional comments to review, but any further changes should be straightforward and consistent with the overall intent of the MOU.

Motion by Dr. Fall and seconded by Mr. Wheeler to approve the Memorandum of Understanding between SDSTA and Fermi Forward Discovery Group, LLC as amended, and to authorize the SDSTA Executive Director to negotiate final terms of the agreement and sign the MOU. Motion passed unanimously.

ITEM 16. CONFIRM DATE AND TIME OF NEXT MEETING

Chair Peterson reminded the board of the next meeting, scheduled for Thursday, June 26, 2025, at SURF in the Administration Building's 2nd Floor Vault conference room.

ITEM 17. PUBLIC COMMENTS

Chairperson Peterson said he did not receive any public comment request forms and there were no questions.

ITEM 18. BOARD COMMENTS

Dr. Fall said it was a great meeting and is super impressed with Mr. Headley and his team's ability to run SURF.

Ms. Lebrun said it was a good meeting and welcomed Dr. Tande and said SD Mines is important to this operation.

Mr. Wheeler echoed Ms. Lebrun's sentiments. He thanked the board, congratulated Ms. Straub and Ms. Knight, and said their promotions were well deserved.

Dr. Tande said he listened and has a lot to learn but is happy to be part of this board and unique facility.

Mr. Engel had no comments.

Mr. Headley thanked the board for the support over the last quarter. He thanked Ms. Knight and Ms. Wilcox for assistance with the board meeting.

Chair Peterson thanked Foundation board member Dr. Bob Wilson for attending the SDSTA meeting. He also congratulated Ms. Knight and Ms. Straub for their promotions. He thanked the board and said he appreciated the SDSTA team, including the finance team, having to work under a time of duress.

ITEM 19. ADJOURN

Chairperson Peterson called for a motion to adjourn.

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

Meeting adjourned at 10:34 a.m.