

South Dakota Science and Technology Authority Board of Directors
Meeting Minutes
Tuesday, June 30, 2015
Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 8:34 AM Mountain Time (MT) on Tuesday, June 30, 2015 in the 2nd Floor Vault Conference Room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE

Dr. Ani Aprahamian
Mr. Paul Christen
Vice Chairperson Dana Dykhouse
Secretary/Treasurer Patricia Lebrun
Chairperson Casey Peterson
Vice Chairperson Ron Wheeler
Dr. Heather Wilson

MEMBERS OF THE BOARD NOT IN ATTENDANCE

Mr. Thomas Adam

SDSTA STAFF

Mr. Tim Engel, Legal Counsel
Ms. Nancy Geary, Chief Financial Officer
Mr. Mike Headley, Executive Director
Ms. Sharon Hemmingson, Business Services & Contracts Manager
Ms. Mandy Knight, User Support Office Manager
Ms. Leatta Mathis, Contracts Specialist
Mr. KC Russell, Cultural Diversity Coordinator
Mr. Noel Schroeder, Environment, Health and Safety (EHS) Director

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Ms. June Apaza, Education and Outreach Director (BHSU)
Ms. Muffy Christen, Board Member's spouse
Ms. Elizabeth Freer, Oppenheim Lewis
Mr. Michael Ledford, Lewis-Burke Associates
Ms. Patti McNamara, Board Member's guest
Mr. Denny Sanford, philanthropist
Mr. Joshua Willhite, Long Baseline Neutrino Facility Far Site Conventional Facilities (LBNF FSCF) Project Manager

ITEM 1. – CALL TO ORDER

Chairperson Peterson called the meeting to order at 8:34 AM (MT). Roll call was held. All members were present except Mr. Adam and Dr. Wilson, who joined the meeting at 8:38 AM.

Chairperson Peterson asked audience members to introduce themselves. Chairperson Peterson welcomed Mr. Michael Ledford of the SDSTA's advocacy firm Lewis-Burke Associates and lauded their efforts in obtaining federal funding for the project.

ITEM 2. – APPROVE AGENDA

Chairperson Peterson asked for a motion to approve the agenda.

Motion by Mr. Wheeler and second by Mr. Christen to approve the agenda as presented. Motion passed unanimously.

ITEM 3. – APPROVE MINUTES

Chairperson Peterson asked for comments, changes or corrections to the Minutes of the March 20 and May 11, 2015 meetings. Hearing none, a motion to approve was requested.

Motion by Mr. Dykhouse and second by Ms. Lebrun to approve the Minutes of the March 20 and May 11, 2015 meetings as presented. Motion passed unanimously.

ITEM 4. – AUDIT COMMITTEE

Ms. Patricia Lebrun reported that she and Mr. Paul Christen had participated in the audit close-out teleconference with SDSTA Chief Financial Officer (CFO) Ms. Nancy Geary. She and Mr. Christen also reviewed the Audit Committee Charter and concurred no revisions were necessary.

Motion by Ms. Lebrun and second by Mr. Christen to accept the audit report as presented. Motion passed unanimously.

Ms. Lebrun and Mr. Christen accepted Chairperson Peterson's appointment to continue to serve on the Audit Committee. Chairperson Peterson voiced his appreciation of their service on this important committee.

ITEM 5. – FINANCIAL REPORT

SDSTA Executive Director Mr. Mike Headley and CFO Ms. Geary provided an overview of the Fiscal Year (FY) 2016 budget including any increases or decreases from the FY 2015 Operating and CAPEX budgets, carry-over CAPEX project amounts, and the overall sources of funding for the new fiscal year.

Ms. Geary noted the \$10 million for the Ross Shaft rehabilitation and the \$3.5 million slated for LUX-ZEPLIN (LZ) surface facility upgrades and xenon gas purchase were not funded at this point. Mr. Headley advised that up to \$10 million is expected from the Department of Energy (DOE) through Fermilab upon Congressional appropriation.

Motion by Mr. Wheeler and second by Mr. Dykhouse to approve the FY 2016 administration, CAPEX and federal budget, with expenditure authority for the \$3.5 million LZ surface facility upgrades and xenon gas purchase subject to securing funding. Motion passed unanimously.

Ms. Geary reported the May financials are in good shape. She said revenue looks especially good, thanks to the \$3.95 million South Dakota Legislative appropriation and nearly \$2 million from Future funds. Mr. Headley advised that all the raw steel material to complete rehabilitation of the Ross Shaft has been purchased. The budget for the Visitor Center increased approximately \$150,000 over the \$5 million authorized by the board.

Mr. Joshua Willhite, Visitor Center Project Manager, provided an overview of the newly approved FY 2016 CAPEX "Davis Ring Tribute" line item. Sturgis sculptor and South Dakota artist laureate Mr. Dale Lamphere is designing the Davis Tribute, utilizing pieces of the original water tank from Ray Davis's Nobel Prize-winning neutrino experiment. A celebration commemorating the 50th anniversary of Davis's work on the 4850L of the Homestake Mine is planned for later this fall when the tribute has been installed at the Visitor Center.

Vice Chairperson Wheeler thanked Mr. T. Denny Sanford for his flexibility in allowing the Board to re-direct Gift #3 funds, and for his encouragement and advice to leverage that amount by raising an additional \$3.5 million from other private funds.

Motion by Mr. Christen and second by Mr. Dykhouse to accept the financial report. Motion passed unanimously.

ITEM 6. – REPORT FROM THE EXECUTIVE DIRECTOR

Mr. Headley proclaimed excitement that the SDSTA's safety performance continues to improve, as evidenced by completing the first six months of 2015 without a recordable injury, for a total of nine months since Sanford Laboratory's last recordable injury. Mr. Headley emphasized that the federal partners are very pleased by Sanford Laboratory's progress. Members of the recent Environment, Health and Safety Oversight Committee (EHSOC) review were impressed with the safety culture developing at Sanford Laboratory, which stands as a testament to EHS Director Noel Schroeder, the EHS team, and the entire staff.

Mr. Dykhouse congratulated the entire staff on this milestone achievement, noting everyone must be involved to accomplish a safety culture as Sanford Laboratory is now experiencing.

Mr. Headley reported trips underground have risen to 50 – 60 daily, including researchers and contractors. He noted this number rises significantly with tours like those scheduled for the board and selected guests later in the day.

Mr. Headley recognized Mr. Willhite and Project Controls Analyst Ms. Pamela Hamilton, who stepped in as Exhibit Project Manager, for their efforts on the Sanford Lab Homestake Visitor Center project.

On the science front, Mr. Headley reported the MAJORANA DEMONSTRATOR (MJD) was transitioning to a physics data collection mode. LUX has completed well over one-third of the 300-day data collection run currently underway.

The completion date for the Compact Accelerator System for Performing Astrophysical Research (CASPAR) and the Black Hills State University Underground Campus (BHUC) projects were set back four days due to curtailed operations necessitated by receiving 18 inches of rain over a two week period.

Mr. Headley continued that the SDSTA team did a great job meeting the challenges presented by receiving this much moisture. He explained that areas where water might pond in upper levels of the underground are monitored to ensure safe working conditions for staff, researchers, and contractors working below. Operations were curtailed at the 4850L for the first time in two years. In response to a question from Chairperson Peterson, Mr. Headley advised inflow in the upper levels above the 3650L increased from an average of 250-300 GPM to 1000 GPM during the rain event. He advised a project slated to be funded by the Long Baseline Neutrino Facility (LBNF) would install piping across the 2000L from the Ross Shaft to No. 5 Shaft, which would increase the ability to handle large inflows.

The LBNF/Deep Underground Neutrino Experiment (LBNF/DUNE) work is moving forward. The LBNF project team is refreshing the Conceptual Design Review in preparation of the Critical Decision One (CD-1) Review with the DOE to be held July 14-16 at Fermilab.

The Ross Shaft refurbishment is 55 percent complete. The project remains on schedule for completion by May 2017.

Mr. Headley noted Communications Director Connie Walter and her team of volunteers have plans well underway for this year's event-packed Neutrino Day festivities on July 11.

Mr. Headley announced nine scholars were selected for this year's Davis-Bahcall program. The scholar's five-week experience began by working with researchers at Sanford Laboratory and continued with visits to 3M's Aberdeen plant, Minnesota's Soudan Underground Laboratory, the University of Wisconsin, and the Argonne National Laboratory and Fermi National Accelerator Laboratory in Illinois. Later this week, the scholars will travel to Gran Sasso National Laboratory in Italy. 3M funds 50 percent

of the program. It was discussed that we need to stay in closer contact with 3M regarding the program to encourage them to keep funding the program.

Mr. Headley introduced Education and Outreach (E&O) Director June Apaza. He explained that Dr. Ben Saylor is still actively involved with the E&O program, while Ms. Apaza leads the E&O team efforts on a daily basis. Ms. Apaza advised that six teachers are assisting with the development of curriculum modules this summer. Two units for grades 3-5, grades 6-8, and grades 9-11 showcasing the science being conducted at the Sanford Lab will be completed later this year. The six curriculum units will be made available to schools statewide in a manner similar to how the Center for Advancement of Mathematics and Science Education (CAMSE) shares its curriculum. Mr. Headley noted distribution will ultimately extend beyond state borders. He continued that plans are underway to expand undergraduate efforts through interaction between the Sanford Lab, BHSU, and South Dakota School of Mines and Technology (SDSM&T).

Ms. Lebrun suggested generating a report which follows the Davis-Bahcall scholars as they pursue their education and career paths would be an excellent assessment tool and resource to gain monetary support for the program. Ms. Apaza advised that data following scholars for 4-5 years beyond their participation has been collected since the beginning of the program. Mr. Headley said the reports would be shared with the board.

*Motion by Mr. Wheeler and second by Ms. Aprahamian to accept the Executive Director's report.
Motion passed unanimously.*

Ms. Lebrun advised that the South Dakota Research, Excellence: A Critical Hallmark (REACH) Committee governs research programs sponsored in South Dakota and coordinates the Experimental Program to Stimulate Competitive Research (EPSCoR) projects in South Dakota. She and fellow Committee members Dr. Wilson and Mr. Headley attended the mid-June REACH Committee meeting held in Sioux Falls. Ms. Lebrun commented it is amazing how South Dakota research projects have matured to create jobs, generate knowledge, and achieve goals set over the past decade.

Chairperson Peterson thanked Ms. Lebrun, Dr. Wilson, and Mr. Headley for their involvement on the REACH Committee.

Mr. Headley noted Mr. Willhite would transport the board to the Visitor Center immediately following the meeting for a brief tour of the facility. The building dedication ceremony will begin at 11 AM.

ITEM 7. – CAPTIVE INSURANCE UPDATE

SDSTA Legal Counsel Mr. Tim Engel explained he is part of the group working to have the captives in place and providing coverage by September 1. The SDSTA's existing policies have been extended to September 1 with pro-rated premiums based on last year's rates. Overall, the captive insurance program is progressing quite well.

Mr. Engel reminded the board the Property Donation Agreement (PDA) requires SDSTA to create and to maintain \$75 million in general liability coverage. For the captive, the first \$1 million of coverage will be capitalized by repurposing \$2.5 million of the Indemnification Fund, with the next \$4 million provided through reinsurance purchased by the captive. The South Dakota Office of Risk Management (ORM) will assist with the purchase and administration of the umbrella policies comprising the final \$70 million. In addition to the general liability coverages, the captive will also provide directors and officers, employment practices, and errors and omissions liability coverages. The coverage provided by the captive will be on an occurrence basis. Cost to the SDSTA is anticipated to be comparable to existing premiums, with exception of a one-time \$24,000 charge to purchase nose coverage for the gap period between existing claims-made liability coverage and the captive's occurrence-based claim coverage. Ultimately the SDSTA will have better coverage and better control over cost and the claims process.

ITEM 8. – THIRD AMENDMENT TO PROPERTY DONATION AGREEMENT

Mr. Engel reported Homestake/Barrick has graciously agreed to repurposing \$2.5 million of a \$10 million indemnity fund required by the PDA to capitalize the captive in a Third Amendment to the PDA. Its companion document is the Notice of Amendment to Deed, which merely incorporates the changes from the three PDA amendments into the original 170-page Deed for the public record.

Mr. Engel explained the Legislative action which appropriated the \$10 million limited its use to the Indemnification Fund. It was therefore necessary to amend the appropriation legislation to allow repurposing the funds. The Governor has approved this amendment.

Mr. Engel asked for a motion approving both amendments as presented and authorizing the Executive Director or the Chairman to execute the documents. He noted the amendments are designed to be self-executing once the Division of Insurance issues the Certificate of Authority in September.

Motion by Mr. Wheeler and second by Mr. Christen to approve the amendment as presented and to authorize the Executive Director or Chairman to execute on behalf of SDSTA. Motion passed unanimously.

ITEM 9. – ANNUAL REVIEW OF POLICIES AND PROCEDURES

Mr. Headley discussed the updated, revised and retired policy recommendations; all had been reviewed by Mr. Engel.

The following policies were recommended for approval:

- Manual Contents Page (*updated*)
- Policy 1:1 Authorization (*updated “SDSTA” only*)
- Policy 1:2 Policies and Procedures (*updated “SDSTA” only*)
- Policy 3:8 Salary and Hourly Payroll Policy (*incorporated policy 4:2:1 Business Hours*)
- Policy 4:1 Personnel Benefits Policy (*added “Policy” to title and updated*)
- Policy 4:2 Outside Employment and Political Activity Policy (*retitled and updated*)
- Policy 4:3 Holidays Policy (*added “Policy to title and updated “SDSTA” only*)
- Policy 4:4 Leave Policy (*added “Policy to title and updated “SDSTA” only*)
- Policy 4:4:4 Years of Service and Longevity Pay Policy (*retitled and incorporated policy 4:4:3*)
- Policy 4:4:5 Military Policy (*added “Policy” to title and reworded for clarity*)
- Policy 4:5 Employment Policy (*retitled and incorporated policy 4:5:1. Created new Employment Procedure 4:5A*)
- Policy 4:6 Resignation Policy (*retitled and updated*)
- Policy 4:8 Workers Compensation Policy (*added “Policy” to title, reformatted and reworded for clarity*)
- Policy 4:12 Progressive Discipline and Termination Policy (*reformatted and reworded for clarity*)
- Policy 4:13 Inclement Weather Policy (*added “Policy” to title, updated “SDSTA,” reformatted, and reworded for clarity*)
- Policy 4:14 Temporary Job Transfer (*removed “Procedure” from title and added “Policy,” and reworded for clarity*)

The following policies were recommended for retirement:

- Policy 4:2:1 Business Hours
- Policy 4:4:1 Accumulated Vacation and Sick Leave (*Section A moved to Policy 4:10*)
- Policy 4:4:2 Vacation Leave while Traveling for Business (*incorporated with Policy 4:4*)
- Policy 4:4:3 Years of Service (*incorporated with Policy 4:4:4*)
- Policy 4:5:1 At-Will Employees (*incorporated with Policy 4:5*)
- Policy 4:7 Training (*incorporated with Policy 4:1*)

- Policy 4:9 Personal References (*incorporated with Policy 4:6*)
- Policy 4:10 Hiring Process (*incorporated into new Procedure 4:5A*)
- Policy 4:11 Moving Allowance (*incorporated into new Procedure 4:5A*)

The following procedure was presented for informational purposes only.

- Procedure 4:5A Employment Procedures (new)

Mr. Headley asked if there were any questions or comments. There were none.

Motion by Mr. Dykhouse and second by Ms. Lebrun to approve the new, updated and retired policies as presented. Motion passed unanimously.

Chairperson Peterson asked if there were any questions in regard to the Conflict of Interest Statement each board member is required to sign annually. There were none. The forms were signed and handed to Mandy Knight at the meeting.

ITEM 10. – EXECUTIVE SESSION

Motion by Mr. Wheeler and second by Ms. Lebrun to enter into executive session to discuss personnel matters and to consult with legal counsel concerning contractual matters. By roll call vote, the motion passed unanimously.

The board recessed at 9:29 AM for Executive Session and reconvened at 10:03 AM.

ITEM 11. – REPORT FROM EXECUTIVE SESSION

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

Motion by Dr. Aprahamian and second by Mr. Christen to approve the executive session report. Motion passed unanimously.

ITEM 12. – REPORT FROM NOMINATING COMMITTEE

Mr. Dykhouse reported he and Dr. Ani Aprahamian, comprising the Nominating Committee, propose the following slate of officers for the fiscal year beginning July 1, 2015.

Chairperson: Mr. Casey Peterson
 Vice-Chairperson: Mr. Dana Dykhouse
 Vice-Chairperson: Mr. Ron Wheeler
 Secretary Treasurer: Ms. Patricia Lebrun

ITEM 13. – ELECT OFFICERS

Chairperson Peterson asked if there were nominations from the floor. There were none and following the prescribed election procedure a motion was made:

Motion by Mr. Christen and second by Mr. Wheeler to accept the report from the nominating committee and to elect the slate of officers as presented. Motion passed unanimously.

ITEM 14. – CONFIRM DATE AND TIME OF NEXT MEETING

Chairperson Peterson asked if anyone had concerns with the next board meeting scheduled for Thursday, September 17, 2015 at 9:00 A.M. (MT). There were none.

ITEM 15. – BOARD COMMENTS

Ms. Lebrun commented on the impressive progress made each time the group meets. She complimented Mr. Sanford, Barrick/Homestake, and all the interested parties for the flexibility exhibited in making the changes needed to move the Sanford Laboratory forward.

Mr. Dykhouse thanked Chairperson Peterson for serving another year as chair and for his efforts to ensure the board runs professionally and effectively.

Mr. Christen reiterated the sentiments expressed by Ms. Lebrun and Mr. Dykhouse. He voiced his support of Mr. Headley's dual role with SDSTA and Fermilab, and commented the SDSTA's future has never looked brighter.

Mr. Wheeler thanked Mr. Sanford for his flexibility in allowing adjustments to gift agreements, expressed his appreciation to Ms. McNamara for attending today, and complimented Mr. Headley for his leadership in building an excellent organization.

Mr. Headley agreed that the SDSTA's future looks amazing and recognized that its bright future is the direct result of the foundation built by this board, people like Mr. Sanford and Ms. McNamara, and the entire SDSTA team. He stated his appreciation to be a part of this amazing team and thanked everyone for their support.

Dr. Wilson expressed her excitement that physics and research were truly coming to the forefront in South Dakota. She noted first the board's support in co-sponsoring the recent Research Conference. Over 100 researchers from around the world attended and five South Dakota universities presented on panels featuring the world's best researchers. Secondly, she reported her gratitude for the dialogue between SDSM&T researchers and Fermilab representatives in South Dakota for the National Environment Policy Act (NEPA) review. There are exciting opportunities for chemical, civil, and electrical engineering research during construction of the LBNF facility, ranging from rock mechanics to pumping liquid argon a mile underground. Lastly, she proudly reported that SDSM&T has 21 doctoral Physics students and over 50 undergraduate students registered for the fall semester.

Dr. Aprahamian said she is honored to work with this board. She noted it has been an impressive six years and the future looks fabulous.

Mr. Engel agreed that the group has indeed come a long way in nine years, which is really a very short time to have progressed so far.

Chairperson Peterson reported that Mr. Tom Adam was unable to attend the meeting, but would be presented a certificate for his dedicated service on the board. He reminded members to extend their personal thanks to Mr. Adam.

Mr. Sanford expressed deep appreciation to the board for the time, effort, and dedication in keeping the project alive, working around obstacles, and continuing to move forward.

Mr. Peterson thanked Mr. Sanford for his comments and for his part in taking the Sanford Laboratory from a survival phase to a growth phase. He too noted the project has been blessed with support from Mr. Sanford, the State of South Dakota, and the entire SDSTA team.

ITEM 16. – ADJOURN

Chairperson Peterson asked if anyone had any other questions or comments, then called for a motion to adjourn.

Motion by Mr. Dykhouse and second by Mr. Christen to adjourn. Motion passed unanimously.

Meeting adjourned at 10:15 AM.