

## **Energy Resources Council (ERC)**

### **Minutes**

November 15, 2019

7:30 AM – 1:30 PM

Hilton Garden Inn

## **JOINT SESSION – University of Wyoming (UW) Board of Trustees & the Energy Resources Council**

**Present:** Dave True, Neil Theobald, Jeffrey Marsh, John McKinley, Kermit Brown, Mel Baldwin, Brad Bonner, David Fall, Lara Schmid-Pizzato, Macey Moore, Dick Scarlett, Michelle Sullivan, WY Senator Jim Anderson, WY House Representative Mike Greear, Carl Bauer, Vello Kuuskraa, Dave Emery and Jeane Hull

The Energy Resources Council (ERC) met with the University of Wyoming Board Of Trustees preceding the regularly scheduled meeting. The work session opened with the UW Board of Trustees' Chairman Dave True welcoming the Board of Trustees and the members of the Energy Resources Council (ERC) to the meeting. ERC Vice Chairperson WY Senator Jim Anderson extended his welcome to everyone in attendance and shared the mission, responsibilities, and actions of the School of Energy Resources with the Board of Trustees. He then read ERC Chairperson Cindy Crane's report that summarized the executive search process for the new SER Executive Director.

### **SER Executive Director Search**

Currently, there is a list of six potential candidates who will be interviewed December 11 through December 13, 2019. UW Acting President Neil Theobald and UW Provost Kate Miller will be invited to the second round of interviews. The search committee is working with university administration and sending updates to the Board of Trustees.

Vice Chairperson WY Senator Jim Anderson recognized UW President Theobald and asked him to address the ERC members and the Trustees. UW Acting President Theobald asked the Trustees to review the state appropriations request that goes to the legislature in February (the UW FY2021-22 Biennium Annual Budget Requests totaling \$46M). Eight out of the twelve requests (totaling \$40.7M) relate to SER.

### **Dr. Northam Presentation – School of Energy Resources and Energy Resources Council Annual Update to the UW Board of Trustees**

ERC Vice Chairman WY Senator Anderson introduced SER Executive Director Dr. Mark Northam. Dr. Northam provided an extensive presentation overviewing the School of Energy Resources' current status and plans for the future. A copy of the presentation is available upon request.

The energy transition is taking place, SER is a leader in CO<sub>2</sub> management, and Wyoming is the best place for carbon capture, utilization, and storage. SER aims to advance UW's position in intellectual property to promote economic development in the state.

SER deploys funds in the state to faculty, students, and local businesses: CarbonSAFE Phase II injected \$4M into Campbell County; energy research at UW is funded both by state funds and federal grants; and SER oversees the new carbon engineering initiative to research and prove coal-to-products manufacturing in Wyoming. Future plans include demonstrations of technology (including an asphalt test and demonstrating a dry-methane reforming catalyst technology) and development of a carbon materials program led by

Professor Bob Bradley in collaboration with departments across campus (including Chemistry, Engineering, Physics, etc.).

FY2021/2022 Budget Requests for the benefit of SER include an increase to the standard budget by \$650,000 per year to hire an Academic Director, to reinvigorate the centers of excellence and outreach program, and to support the Center for Energy Regulation and Policy. The majority of funds from important grants will be spent on projects in Wyoming, including R&D of a flameless pressurized oxy-combustion (FPO) technology and CarbonSAFE.

In response to questions from the Trustees, Dr. Northam replied that this area of research is highly competitive. SER is forecasting potential outcomes in the future that will drive revenue for the state and UW through intellectual property. SER has large competitors in the CarbonSAFE program both in and outside of the state. The Energy & Environmental Research Center at the University of North Dakota (formerly a national lab and technology powerhouse) is a partner and competitor for CarbonSAFE. UW Acting President Theobald commented that neither the state nor the university will be successful without each other.

The Trustees questioned where SER stands with faculty members, staff, enrollment, and online courses.

#### **Faculty and Staff**

Dr. Northam responded that he felt he had adequate faculty and staff to pursue SER's current goals. However, it would be necessary to hire an Academic Director. If Wyoming CarbonSAFE progresses to Phase III, the Center for Economic Geology Research would need to hire additional staff. Currently there are 12 SER faculty members across campus, and there are two largely endowed chairs. SER has supported dozens of UW faculty, 140 grad students, and undergrad research but has had to scale back on funding. UW Acting President Theobald asked if there is a search for a match for endowed chairs. Dr. Northam explained that two chairs are currently vacant, and hopefully, one chair can fund two positions. However, there is not currently a faculty member focused specifically on energy policy and regulation.

#### **Enrollment**

Chairperson WY Senator Anderson informed the Trustees that the legislature formed SER thirteen years ago when they observed enrollment going down and saw a lack of focus on engineering and mineral extraction industries. The legislature wants to see enrollment increase and wants more engineers and petroleum engineers out there for the future.

The Trustees questioned if the expansion of clean energy and wind energy in the state is attracting new high school graduates. Dr. Northam replied that SER's new strategy is to communicate how professionals in renewables use the same skills in managing assets as professionals in oil and gas. There are great careers in Wyoming and nationwide in both oil and gas and in renewables. Pam Henderson stated that UW might start to see changes and improvements with the connections between UW and the community colleges under the leadership of the new Director of the Transfer Success Center, Amanda Reeder. Dr. Northam emphasized that hiring a new Academic Director within SER will assist in addressing these issues. He further explained that this generation of students associate energy with harming the environment. However, what SER teaches about oil and gas management applies to renewables. The same land management, business models, environmental impact statements, building construction, and management of projects apply. Mrs. Henderson stated that academics has changed its recruitment focus and has found that students are more willing to talk to them. Students in the urban community college program in Denver showed interest in the degree program.

Wyoming Representative Mike Greear stated that SER degrees transfer well to the renewable energy sector. Landmen use the same skill sets. There is a concern regarding the deeper fundamental issue for the state and its higher education. UW and the community colleges are competing instead of working together. Adding additional credit hours to the SER degree program may make it more difficult for students to complete an additional year of college.

UW BOT Chairman True expressed a need for quantitative data to show the number of degrees across campus that SER touches, so that legislators and others are not just looking at the enrollment in the Landman program. Dr. Northam replied that Nielson funds provide scholarships and stipends for students. SER faculty develop curriculum in geophysics, geology, petroleum engineering, engineering, etc. SER faculty exist in all colleges at UW with the exception of Agriculture and Health Sciences.

The community colleges and UW are working together to provide the opportunity for students to start in community college and transition to UW to get out in four to four-and-a-half years. Data shows that community college students may have more than 60 hours when they transfer and have eaten up possibly five to six semesters of their Hathaway Scholarship. By the time, they come to UW; they have a heavy load of credit hours that may not assist them towards a degree program. This highlights the importance of a more collaborative effort between the community colleges and UW, where the community colleges provide that portion of the education and UW provides the capstone. If SER vamps up online courses, it may help community-college students' work toward their degree. Additionally, it was noted that some new degree programs are employing strategies to reach a broader base of students. One strategy involves stackable certificates that students can earn before working toward a bachelor's or master's degree. Trustees inquired whether SER had considered this possibility. It was added that financially vulnerable students with Pell eligibility who do not qualify for Hathaway, because they are working during high school and taking care of children, oftentimes come to UW having used up a significant amount of their Pell eligibility. These financially vulnerable students from Wyoming are at risk of being in debt and not getting a degree, because they cannot afford to complete it. Trustee Tully asked for SER's partnership for helping the BOT to lead critical collaboration as the BOT explores strategies to address this.

### **Online Courses and Degrees**

UW BOT Chairman True stated that UW has a reinvigorated focus on distance learning, but the infrastructure is not where it needs to be. With UW Acting President Theobald's leadership and others, there will be a real seed change in deliverability in outreach. Dr. Northam explained that many faculty say they cannot teach what they teach in the classroom in online courses. The infrastructure to upload full lectures to online classes is not there. Dr. Northam stated that SER has good relationships with Western Wyoming and Central Wyoming, and there are those in Casper and the community colleges who would like to participate in the energy resource management degree remotely. SER has arranged a meeting with the Elbogen Center and SER faculty and is at the beginning of the process to get online courses in the degree program. A discussion has recently taken place with SER faculty about how to move into the online world. SER may be able to offer online courses for a fee to other programs that do not have the staff to teach them.

UW BOT Chairman True called for any final discussion. Seeing none, the joint session concluded at 8:45 AM. Members of the Board of Trustees moved onto other meetings, and members of the ERC prepared for their regular session.

## **CALL TO ORDER:**

The regular ERC meeting was called to order at 9:00 AM by Vice Chairperson WY Senator Jim Anderson.

## **ATTENDANCE:**

**Present:** WY Senator Jim Anderson, WY House Representative Mike Greear, Carl Bauer, Vello Kuuskraa, Dave Emery, and Jeane Hull.

**Absent:** Tom Botts, Cindy Crane, Mindy Benson, Dave True, Neil Theobald

**SER Staff in Attendance:** Mark Northam, Scott Quillinan, Rob Hurless, Trish Steger, Pam Henderson, Rachel Ferrell, Emma Jane Alexander, Kyle Summerfield, Samantha Velez, Fred McLaughlin, Cindy Ishkanian, Cydney Yost, and Carrie Ver Burg

**Others in Attendance:** Cameron Wright and John Small

## **MEETING ITEMS BY DETAIL:**

### **Approval of Agenda**

*Action:* A motion was made by WY House Representative Mike Greear to accept the agenda as presented. Jeane Hull seconded it. Motion passed without objection.

### **Approval of August 2019 Minutes**

*Action:* A motion was made by Carl Bauer to accept the minutes with the following change: Page 9, FPO Update – change “has purchased to in process of purchasing.” Mr. Kuuskraa seconded the motion. Motion passed without objection.

### **SER Budgets**

*Additional Comments:* Rachel Ferrell explained the budget is 20% over committed according to the charts presented. This is typical for the SER operations budget as it is based on projections and will even out over the next two quarters with some areas spending less than projected. The projections for the FY21 SER budgets will be starting soon, and she will plan to report those new budgets in March 2020. The SER Gift reports provides the most up-to-date information available to the accounting team; however, it is not an accurate reflection of the available funds according to Ms. Ferrell. SER will continue to work with the UW Foundation to improve their ability to provide the most accurate reporting of funds available. The Grants Report indicated there are 15.9 million dollars in active grants at this time. Ms. Ferrell explained that the negative amounts on the report do not reflect SER cost share nor does the report indicate rollover to next year’s funding.

### **Division Updates**

Full copies of all SER division reports are available in the **November 2019 ERC Notebook** or upon request.

### **Enhanced Oil Recovery Institute (EORI)**

*Summary:* Due to the receipt of Department of Energy (DOE) awards, EORI was able to hire two geologists, Amy Freye and Graeme Finely. Ben Cook’s replacement economist is Chris Allen.

EORI has advanced the DOE project. This project will drill a well in ROC Fairway at Salt Creek and integrate technologies to assess the Wall Creek ROZ Fairway resource. The project will also examine CO<sub>2</sub> injection and flooding design to optimize oil recovery as well as conduct an analysis of the viability of using CO<sub>2</sub> enhanced oil recovery. The total award budget for this over the next 2 years is \$4,538,183.

The new DOE-NETL Grant was kicked off after teaming with World Energy partners and the Center of Innovation for Flow through Porous Media. This is a field-based research project to develop two large shale oil formations, the Mowry Shale and Belle Fourche Shale. Andy Finley and George Koperna are also on the project team. The total award budget over the next 4 years is \$14,365,908.

EORI has been meeting with the boards of the Wyoming Infrastructure Authority and the Wyoming Pipeline Authority to advance the development plan for the WEA and the Governor's Energy policy, focusing on CO<sub>2</sub>-EOR, CCUS, and issues with 45Q and UIC Class VI wells. EORI met with the Governor and staff in November 2019 to discuss the budget. They presented the budget to JAC in December. The budgets grand totals were as follows:

- Est. Reserves- 479-509
- Incremental Production- 74
- Est. Severance +Ad Valorem Taxes- \$2,717-\$2,837
- Est. Other Taxes- \$453-\$473
- Est. Royalty Payments- \$1,101-\$1149
- Est. Total Mineral Payments- \$4,270-\$4,459

### **Academic**

*Summary:* Two new employees have been hired: Jen Paintin as the College Relations Representative and Alyson Sounding Sides as a student ambassador.

The Energy Summer Institute program, a recruiting tool for the school, was re-instituted last summer, and seven high school seniors attended. Of those seven, six submitted applications to UW, four were accepted, and one has confirmed their enrollment. The majors declared included Energy Resource Management and Development, Environmental System Sciences, Outdoor Recreation and Tourism Management, Mechanical Engineering, and Petroleum Engineering. The 2020 program is scheduled for July 12-17 with applications opened in November.

Eleven SER students are expected to graduate the program in the 2019-2020 academic year: four in December and seven in May.

The student recruiting activities included: a visit from Rock Springs High School Energy Academy; a packet about the Energy Resource Management and Development program and contact information mailed to every Wyoming guidance counselor; working with the Admissions Office to add energy as an interest on the application; student ambassadors hosted a table at the Union for Energy Awareness month; Pam Henderson and Alyson Sounding Sides attended the Native American College and Readiness Summit; Mrs. Henderson visited Casper College; Ben Wood and Katrina Clymer visited classes; and Jen Paintin attended college fairs in different states as well as all over Wyoming.

There were 31 inquiries for the program in 2019 and 36 in 2020. Of these, nine students were admitted in 2019 and eleven in 2020, with three students from each year confirming their enrollment.

Due to the participation in the Native American College and Readiness Summit, Mrs. Henderson and Ms. Sides were invited to attend the planning meeting for the Native American Summer Institute in hope to be part of the program next summer (June 2020).

Mrs. Henderson attended the Articulation Summit in October 2019 to talk about the proposed transfer planning guides. Once they are finalized, they will be used to recruit community college members by showing them how classes they have taken will transfer over to the Energy Program. The UW Transfer Success Center is standing up a workflow program to smooth out the process for these planning guides. The goal was to have the workflow program in place by December 19, 2019.

During the October 2019 faculty and academic staff meeting, a draft of the Energy Resource Management minor was completed, including nine credit hours of core courses. Then students select a track, either Energy Land Law or Renewable Energy, and complete 21 credit hours. The minor was discussed during the November meeting. Ken Driese agreed that the minor could be an approved minor in the Geospatial Information Science and Technology program once approved by the school.

Mrs. Henderson and Mrs. Clymer met with the Education Abroad to review possible programs for SER students. Short-term programs include: Spain, Costa Rica, Italy, Czech Republic, Australia, Netherland, Greece, and England. The EM Strasbourg Business School might also be a possibility as well as the London Semester taught by UW faculty.

Noble Energy visited campus in October and offered an internship to one student, which the student has accepted. Plans for Meet the Industry Days are underway for the Fall 2020 semester.

#### **Center for Energy Regulation and Policy (CERP)**

*Summary:* There was no report for the Critical Matters and Administration and Budget. Kipp Coddington is serving on the Governor's new task force "Power Wyoming." Coddington also chairs the task force's policy working group whose members include: Kara Fornstrom, Jason Begger, Renny Mackay, and Randall Luthi.

Campbell County officials invited Mr. Coddington to assist in a nascent effort that would invest in commercializing mineral-related technologies and projects in the state.

With funding from SER, CERP was launched in July 2019 with Mr. Coddington as the Director and Rob Godby as the Deputy Director. In addition, three faculty members are providing support: Roger Coupal, Temple Stoelinger, and Tara Righetti. The following GA's are also assisting: Rohini Ghosh, Ann Hardin, and Maurits Kees from the Department of Economics and Thomas Garvie, May Pettit, and Jen Thompson from the College of Law. CERP is working hard to identify ways to collaborate with the College of Engineering & Applied Sciences with meetings held by Jonathon Naughton and Erica Belmont. Consistent with the CERP Plans, the following studies were identified:

- The first effort will develop an analysis of the current energy transition to determine potential impacts to Wyoming and to develop effective policy strategies to deal with these potential outcomes.
- The second effort will examine case studies of the different energy transition approaches and policies adopted by the four states on the western edge transmission network.
- The third effort will examine regulatory and policy mechanisms to maximize the qualification and use of exports of Wyoming energy into regional markets.
- A gap analysis of existing short- and long-term low-carbon pathways/scenarios to assess what is

commercially realistic and economical. To aid in this effort, CERP will identify industry, academic, and governmental and non-governmental partners to aid in this research and to participate in a series of annual policy symposia to report key findings.

CERP is also expected to provide energy policy services to State policymakers going forward. Meetings with UW Institutional Marketing and IT have been held to discuss requirements for setting up a separate website populated with energy-related data and analyses of relevance for Wyoming policymakers. This would require hiring a website developer, so they decided for now to explore more traditional communication tools, such as newsletters and email lists.

Mr. Coddington has been appointed a Non-Resident Fellow at the Payne Institute at the Colorado School of Mines as well as an Affiliate of the EPI at Boise State University. He is also co-chairing the policy initiative launched by the Center for Advanced Energy Studies.

Mr. Coddington and John Harju from the Energy and Environmental Research Center in North Dakota are co-chairing the National Coal Council's next study. The paper is to be delivered to the Secretary of Energy in April 2020. Five different energy regulation research studies are underway, led by Professor Tim Considine and with the financial support of the Charles Koch Foundation and Double 4 Foundation.

## Research

*Summary:* Wyoming CarbonSAFE Phase II at Dry Fork Station near Gillette, Wyoming began in September 2018. The total award amount for this two-year project was \$12.2M. The project team successfully collected 625 feet of geologic core from nine formations and fluid samples from six formations. Multiple descriptive, geochemical, and petrographic analyses have been completed on the core collected from the UW PRB #1 Well. Many analytical tests are ongoing. The Center for Economic Geology Research (CEGR) intends to prepare and file an application for Phase III in January of 2020. CEGR is separately teamed on the previously awarded Phase II CarbonSAFE grant, of which their share is \$517,854. All of CEGR's work on the project is complete.

The School of Energy Resources continues its work with the Joint U.S.-China Clean Energy Research Center- CERC-ACTC. Year 4 of Phase II of CERC began May 1, 2019, and the project will run through April 30, 2020.

Research activities include:

- Joint study to develop a commercial scale integrated CCUS demonstration project in the Ordos Basin, China.
- Development of low-cost, low-energy CO<sub>2</sub> capture solvent.
- CEGR is teamed with the Energy and Environmental Research Center in North Dakota in the PCOR Partnership.

Projects include:

- **Rare Elements in Produced Water:** CEGR applied for and was approved for an extension to the Wyoming Water Research Program's work.
- **Rare Earth Elements in Coal and Coal By-Products:** Coal core collected from the Powder River Basin in collaboration with Peabody was described and correlated to log data.

● **Critical Materials:** Dr. Erin Phillips presented results of a Critical Materials Study at the Rocky Mountain Section Meeting of the American Association of Petroleum Geologists.

● **Rare Earth Elements in Unconventional Minerals and Uranium Roll Front Deposits:** CEGR is co-advising a Geology graduate student, Garrett Gay, with SER Professor John Kaszuba. The project is focused on quantifying rare earth element concentration in two environments.

● **Critical Materials in the Phosphoria Rock Complex:** CEGR staff are working with Drs. Sumone Runyon and Kim Lau to evaluate the rare earth element potential of the Phosphoria Formation.

● **Unconventional Hydrocarbon Assessment of the Mowry Shale Within the Powder River Basin:** CEGR continues to take a first order look at the Mowry petroleum system, no new activity.

● **Engineered Water and Gas Flooding Approaches for Improved Oil Recovery in Wyoming's Powder River Basin:** This project seeks to develop engineered techniques to address problems inherent to improved oil recovery in the Powder River Basin. Private support for this project is anticipated to grow with additional SER investment.

CEGR is supporting six students to work on the Wyoming CarbonSAFE project. The student in engineering working on CEGR's water project has done so successfully. CEGR is preparing the Phase III proposal for this project; the components are: CO<sub>2</sub> Capture Assessment, NEPA Analysis, Subsurface Characterization, Class VI permit, and Business Case Development.

### **Outreach**

*Summary:* SER continued to engage with key stakeholders over Fall 2019 by hosting and facilitating meetings between industry, state, and federal entities. SER hosted the U.S. Future Leaders Seminar in Energy and Natural Resources in the Energy Innovation Center in September. The American Association of Petroleum Geologists (AAPG) provides publications, conferences, and educational opportunities to geoscientists and disseminates the most current geological information available. They have grown to 40,000 members in 129 countries. SER sponsored a booth at the AAPG Rocky Mountain Section 2019 Annual Meeting in September.

The Rocky Mountain Rendezvous, co-hosted by UW Geology and Geophysics and SER, took place in September. It attracted 103 geoscience students from 37 universities as well as 38 recruiters from eight companies. The Energy Law & Public Policy in the Rockies Conference was co-hosted by SER and the College of Law's Center for Law and Energy Resources in the Rockies in October. The attendance was 225, up from 185 in 2018.

SER joined with Learfield Sports to sponsor Energy Day in September at a UW football game. This was SER's seventh year sponsoring the event.

On Fridays during the noon hour, SER hosted nine speakers as part of the SER Fall Lunch and Learn Series. Attendance ranged from 16 to 46 people.

### **3D Visualization Lab**

*Summary:* The 3D Viz Center was established in 2014 from donations totaling \$3 million. It is now in expansion mode. Three new positions have been advertised, and interviews will be held before January 2020. Furnishings and equipment purchasing plans are underway for the new Simulation Suite. The 3D Viz Center provided research collaboration and services at the Plains Anthropological Annual Conference presented by Professor Lynch. Classes held in the 3D Viz Center include the Honors College, Tourism and



Recreation, Norcross Biology, and Anthropology. A collaborative project between the 3D Viz Center, the UW Art Museum, and the American Heritage Center is being established with the goal of preserving a rapidly deteriorating cinema relic. 3D Viz Center Manager Emma Jane Alexander is leading the project.

### **Emerging Technologies**

*Summary:* Robert Bradley joined the faculty in the Department of Mechanical Engineering in the College of Engineering and Applied Sciences. Dr. Bradley will be undertaking a thorough review on ongoing research and technology development activities and develop the next phase of carbon engineering research and technology.

Three internationally eminent speakers in coal and carbon products presented at SER Distinguished Speaker Series. These speakers include Dr. Brian Rand, Dr. Weiping Wu, and Jonathan Matthews. Each of these individuals met with UW faculty leading Carbon Engineering funded projects to better understand areas of common interest.

Over the first six months of the financial year, the emphasis of endeavor has been to scale up proven laboratory experimental results into material technology solutions. Two pilot plants were constructed and were currently being commissioned. The developments permit the process engineering improvement and development of the UW patented thermo-chemical processing of coal technology.

The pilot plant is to evaluate the long-term performance of the UW dry-methane reforming catalytic process will soon be operational and commissioned. This pilot plant testing is a critical stage to fully demonstrate, at small scale, the functionality and engineering of the fundamental manufacturing platform to produce intermediate products from Powder River Basin.

There are seven carbon engineering projects being funded in 2019-20. Two of them are the thermo-chemical processing of coal and dry-methane reforming. The other five relate to manufactured products that are specifically yielded from the thermal processing of coal.

Currently, a review of the intellectual property status of the inventions that have been divulged over the past four years is underway. A six-month plan is being developed in concert with the UW Legal Counsel and Office of Technology Transfer to make sure all intellectual property is secured. The energy policy advisors of Senator Barrasso have given input on a new bill being drafted for the Department of Energy to invest funding to coal-based carbon products research and technology.

A meeting with Campbell County and the City of Gillette leadership was held in November to discuss their vision to establish Wyoming as the "Carbon Valley." Achievements and plans for the carbon engineering initiative were shared as well as the role and contributions of SER and UW.

### **Introduction of Cameron Wright**

Cameron Wright was introduced to the ERC members. Dr. Wright is director of the Wyoming Information, Signal Processing, and Robotics Laboratory. He is a licensed Professional Engineer in Wyoming and California, a senior member of the Institute of Electrical and Electronics Engineers, and a member of the American Society for Engineering. His areas of expertise include image processing, signal processing, biomedical instrumentation, real-time embedded computer systems, wireless

and satellite communications. Dr. Wright has been appointed to serve as interim dean for the College of Engineering & Applied Sciences following the resignation of Dean Michael Pishko.

**Pilot Plant RFP**

The ERC members were provided a copy of the draft RFP for the pilot plant. The proposal will open on December 2, 2019 and close on February 14, 2020. Proposals will be received by the SER office, evaluated by outside entities (TBA), and then reviewed by the ERC for recommendations to the Governor.

**Executive Session**

At 12:18 PM, Carl Bauer made a motion that the ERC enter into an executive session for discussing personnel. Jeane Hull seconded the motion. Motion passed without objection.

**Adjournment**

The council returned to regular session and Carl Bauer made a motion to adjourn the meeting. Vello Kuuskraa seconded the motion. Motion passed without objection. The meeting was formally adjourned at 1:25 PM.

Respectfully Submitted:

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Cindy Crane  
Chairwoman

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James Anderson  
Vice-Chairman