**January 20, 2015**

**Roll Call**

**Board of Directors**

Carol Johnston, South Dakota State University; Department of Natural Resource Management

Erkan Istanbulluoglu, University of Washington

Brian McGlynn, Duke University; Division of Earth and Ocean Sciences

Anne Carey, Ohio State University, School of Earth Sciences

Todd Rasmussen, University of Georgia; Hydrology and Water Resources, Warnell School of Forestry and Natural Resources

Scott Tyler, Past Chair, University of Nevada, Reno; Geological Sciences and Engineering

Albert Valocchi, Chair, University of Illinois at Urbana-Champaign

D. Scott Mackay, University at Buffalo (SUNY); Department of Geography

Kamini Singha, Colorado School of Mines

David Hyndman, Michigan State University

Brian Waldron, University of Memphis (present by phone)

**CUAHSI Staff**

Rick Hooper

Martin Seul

Emily Clark

Minutes prepared by E. Clark.

**8:00 am Call to Order/Introductions (Al Valocchi)**

**Welcome and Meeting Procedures (Rick Hooper)**

Hooper provided a review of what a draft resolution means.

Valocchi – brings up point of looking over monthly minutes online and approve via email.

Hooper – Provided review of how to review minutes (Adam Ward posts minutes after the meeting, open for a week for any comments, send comments to Adam Ward via email, Adam Ward sends out formal request to vote on minutes, minutes are approved at the next meeting).

Tyler presented a gavel to Al Valocchi as new incoming Chair of the Board of Directors

No changes to the agenda requested.

**8:15 am Item 1: Budget Overview**

Hooper provided a budget overview.

Valocchi asked a question regarding whether CUAHSI gets money from other projects, as the budget shown represents the Cooperative Agreement.

Hooper explained that yes, there are small amounts of money that come from smaller projects – for example: a week or two weeks of salary. For these collaborations, CUAHSI tries to draw a line between how much will we do for free vs. when do we need a subaward. For example, if someone wants to present a cyberseminar on their research, we would ask him or her to host a cyberseminar series instead of giving just one cyberseminar. That would be done at no cost because the community benefits. If we are asked to organize a workshop, on the other hand,  we would need funds to cover workshop expenses and some employee time.

CUAHSI typically will not submit a proposal to an open competition and our policies require that we give notice to our members when we do. We don't compete against the membership for proposals, but the membership should use CUAHSI to make a stronger proposal. This is being pushed at regional meetings where attendees are encouraged to consider how CUAHSI can assist with Broader Impacts.

Hooper explained that the budget distribution includes gross costs.

Tyler brought up that NSF expressed concerns that CUAHSI board is 30% larger than others (IRIS, UNAVCO) and no one else compensates the chair.

Johnston asked a question about Figure 2 of the budget review – should money from JFF be listed as a funding source?

Hooper explained that this figure looks at Cooperative Agreements. JFF funds are very tiny and wouldn't show up on graph.

Hyndman asked for more information on indirect costs. Hooper explained that Jessica Annadale would discuss this further tomorrow. Also mentioned that he attended a facilities presidents' meeting and met with VP's of finance; discussed how they've navigated these and other issues.

Valocchi asked how the projected number for cloud service could change. Could it go up?

Seul and Hooper explained that the cost is steadily increasing, but increases by 5-10% range. Currently trying to cut costs by making agreement with Microsoft and becoming a bigger partner – this means a

longer term commitment. We could become more efficient in the way we deploy and develop services to control costs. Also, there is a steady increase in usage which is more reflective of development changes. This could change if more clients come on with large data bases, but there is some room to grow. We think 60K is a generous budget for next year.

Seul also discussed what it would take to move CUAHSI services to NSF's XSEDE infrastructure which now has its own cloud, in response to a question from McGlynn regarding what if NSF wants to use CUAHSI as a use case. If they provide infrastructure similar to the Microsoft cloud, wouldn't be hard to move to NSF cloud. The process of moving from one cloud to another is fairly streamlined

Carey asked if the NSF cloud would mean CUAHSI would lose services, such as being able to work with the Microsoft Engineers to help with organization and scaling?

Seul - If need be would have to pay a consultant to help. In long term it would be great to move off commercial cloud and onto NSF cloud, might be cheaper and more scalable. Should become more prepared in a year or two.

Valocchi – is XSEDE mainly for people doing research vs. a database that people could use?

Hooper – these are the questions. When Microsoft cloud was proposed as being the quickest, NSF was concerned that commercial cloud would be expensive. This may be a way around – private cloud or use NSF cloud.

Hyndman asked if this could be looked into near term.

Hooper - Yes, we want to have this discussion with NSF.

McGlynn – We should have a succinct answer that explains the challenges, how we would do it, and what it would take.

Seul – another question that comes out: do we need to migrate our code?

Hyndman suggested that there needs to be a transition idea:  towards NSF or what is fallback if operation grows to a certain size.

Hooper as we look at different sizes of databases, what are the tradeoffs. Right now we handle up to 5 to 10 GBs. We have seen databases up to a terabyte. To provide full database functionality is very expensive. What do we need to provide? Need users and informatics committee to help. Put together engineering considerations. This could make the cloud too expensive to use.

Seul explained that cloud transactions are cheap. Computing power is expensive (memory power). How do we deliver good service but stay in budget.  In the future we will probably see more detailed queries that will need more power.  Growing and making better quality for detailed information will be a challenge in the future.

A discussion about the current rate of indirect funds occurred. Hooper explained implications of indirect funds to NSF. Generally just gets rolled forward. This will matter during the NFIE – indirect costs should be billed at lower rate. When NSF approaches CUAHSI about setting a rate – will bring consultant in to negotiate. Shouldn't be a fixed rate, should have flexibility. We are allowed to bill at less than our fixed rate – propose we do this for the weather service.

Tyler – 67% overhead doesn't go over well with constituents, but actual costs are closer to 40%.

Hooper – there are some expenses that we're going to incur. Most of our peer organizations are running an overhead rate of 20-25%. We don't know when NSF will renegotiate our rate. Want to get a rate that is closer to being accurate.

**\*\*Brian Waldron joined via phone at this point\*\***

Hooper presented the following motion, **recognizing:**

1. The final budget for the Community Cooperative Agreement has not been determined by NSF.

2. The No-cost Extension for 07-53521 has not yet been approved.

3. The final budget for the WDC Cooperative Agreement will be determined in March, 2015.

**Considering** the objectives of the Consortium as laid out in the strategic plan.

**Concurs** with the budget as outlined in the briefing book

**Requests:**

1. The Executive Director report back to the Board when the Cooperative Agreement is signed and when the Year 2 funding has been awarded for the WDC.

2. The Executive Director reports any significant deviations from the proposed budget.

Tyler asked the question do we get reports for subawards, as we haven't seen them. Hooper explained that they are summarized and go into the annual report.

***Tyler – motion to accept the motion as is for budget for 2015. Hyndman – seconded the motion. All in favor – motions passed unanimously.***

**Action items:**

1. The Executive Director report back to the Board when the Cooperative Agreement is signed and when the Year 2 funding has been awarded for the WDC.

2. The Executive Director reports any significant deviations from the proposed budget.

    **1.**                                                **Item 2.1 Training**
       **Classes**

Clark gave overview of upcoming CUAHSI Training Classes.

Hooper explained the concerns with any CUAHSI training: CUAHSI name is on the course so needs to be executed well. Some proposals need further development.

**Action Item: Clark will firm up training classes for Summer/ Fall 2015.**

2.                                                                                                    **Item 2.2 HydroCLM**

Hooper – two pieces: Hydrologic Process Teams and hydrologic test suite – what is the data that we should put together to run CLM at a small scale. Data center would be involved in hosting data for test suites.

Mackay – issue with moving to the CZOs – only a handful have enough data that can be used for ET.

Hooper there is a lot of support at NSF. A dear colleague letter coming out to encourage applications to bridge atmospheric/ hydrologic domains.

Valocchi asked how else is CUAHSI involved in this effort? Hooper explained that CUAHSI will handle a community workshop in years two and three.

Valocchi – is there involvement of WDC with benchmark? Hooper explained yes, the WDC is hosting the test suites.

Tyler – how are funds written into the proposal?

Hooper explained that Ying Fan Reinfelder would like the funds for CUAHSI post-doc to be moved to Rutgers. CUAHSI is on the hook to do two workshops. That is our part of subaward. We are not being paid separately to host data. The group discussed Reinfelder's INSPIRE proposal and possible opportunities for CUAHSI to support this effort.

Valocchi should there be an EOS article to get the word out to the community. Are we doing anything?

Hooper – No, article as written by Arrigo was not accepted. [Follow-up. Martyn Clark is writing a paper for 50th Anniversary of WRR. Added 3 February 2015]

3.                                                                                                    **Item 2.3 Pathfinder**

Rasmussen gave review of Pathfinder evaluation process. He explained that there were two reviews per applicant, and that he used previous Pathfinder sponsors to get additional reviewers. The question that came up was should we fund slightly under or slightly over the budget amount (the difference between funding six or seven proposals).

Johnston commended Rasmussen for his job on review process.

Valocchi asked that if in the future, the Education and Outreach Committee should take a bigger roll?

Hooper asked if the two stage review process help to sort out the competitive proposals. Rasmussen said that yes, the process was modeled after the NSF review process. The second tier reviewers thought it was a good idea, and many would like to continue to help next year.

Hooper proposed the motion that the board:

**Recognizing** the review process, and **concurring** the adequacy of the committee, so moves to fund these applicants.

| Fellow | Institution (Advisor) (Dept/School/Institute) | Host | Topic |
|---|---|---|---|
| Scott Allen | Louisiana State (Richard F. Klein) (School of Renewable Natural Resources) | Clemson University (William H. Conner) | Controls over Evapotranspiration in Forested Wetlands |
| Theodore Barnhart | University of Colorado (Noah Molotch) (Geography) | University of California Santa Barbara (Christina (Naomi) Tague) | Snowmelt Partitioning Dynamics in Response to Climate Change |
| Elizabeth Chamberlain | Tulane University (Torbjorn E. Tornqvist) (Dept. of Earth and Environmental Sciences | Columbia University (Michael Steckler) | Validating optically simulated luminescence dating of fine grained fluviodeltaic quartz |
| Robert Mahon | University of Wyoming (Brandon McElroy) (Dept. of Geology and Geophysics) | Imperial College London (Vamsi Ganti) | Expanding our understanding of sediment and bedform dynamics in rivers from two-dimensions to three-dimension using wide-flume experiments at Imperial College London |
| Brett A Poulin | University of Colorado (Ryan Joeseph) (Dept. of Civil, Environmental, and Architectural Engineering) | United States Geological Survey – Boulder, CO (George R. Aiken) | Mercury cycling in sulfer limited ecosystems |
| Caitlin Rushlow | Idaho State University (Sarah Godsey) (Geological Sciences) | The Ohio State University (Audrey Sawyer) | Modeling the effects of precipitation variability on the coevolving thermal regime and hydrology of an Arctic hillslope |
| John Volk | University of Nevada, Reno (Scott Tyler) (Graduate Program of Hydrologic Sciences) | National Center for Atmospheric Research (Martyn Clark) | Towards Improving Global Earth Systems Modeling: Evaluation Methods for Groundwater Hydrology and Importance for Sub-grid Lateral Flow Routing |

*Carey moved to adopt the motion. Johnston seconded the motion.*

Hyndman asked if there was any feedback for individuals about their proposed budget. Rasmussen stated that the budgets were generally accepted, but there are some comments. Generally the budgets for the top seven were fine. Hooper explained that CUAHSI tries to be flexible about budget as far as logistics. It is a travel grant, so recipients need to document receipts as appropriate.

Hyndman also suggested that CUAHSI let the applicants know that the process was highly competitive, and the applicants did a great job.

Valocchi asked is there a chance to increase the amount of funds?

Hooper suggested that we could try to issue a longitudinal survey of pathfinders to document how effective the Pathfinder program has been. Hyndman asked if the Education and Outreach committee could be tasked with doing a lateral survey of Pathfinder fellowship recipients.

***10 directors accept the motion to approve to fund the applicants presented by Rasmussen. Tyler abstains from vote. Motion carries.***

Hyndman presented motion that Education and Outreach Standing Committee evaluate the Pathfinder Program, including a longitudinal survey of past awardees and development of other success metrics regarding the success of the program. Report back to the board in May of 2015.

***Johnston seconded the motion. No further discussion. Motion carries unanimously.***

4. **Item 2.4 Spring Cyberseminars**

Hooper reported that the cost of hosting a cyberseminar series has gone down because many people now connect to the audio via their computer vs. using the phone line.

Mackay is possibly interested in organizing a cyberseminar series, but we need to come up with a broader topic – previously tried the disparity between measured Evapotranspiration and predicted Evapotranspiration. Rasmussen stated that he didn't mind helping with the logistics of putting together the series. Mackay suggest a mix of people who are modelers vs. people who do measurements. Open up dialogue. He and Rasmussen will think about this and put together a list of names.

Hooper also mentioned that the data center will offer a series on LDAS products, NASA, and reanalysis data sets. Additionally, CUAHSI has hosted two Virtual Workshops and Virtual Poster Sessions.

5. **Item 2.5 Let's Talk about Water Challenge Grants**

Hooper gave an overview of LTAW program and explained that we have put money in the NSF proposal this year. Concept would be to move money to cover Challenge Grant fee to shift the funding around and add 2 awards so that Linda Lilienfelds' fee would be covered by JFF funds. Linda is paid $2,000 per event, which includes her travel. We asked for $9,000 in budget for LTAW events.

Winners of the Challenge Grant award were Duke University, Oregon State University, University of Illinois at Urbana-Champaign, and North Carolina State University (partial award of up to $2,000).

**6.** **Item 2.6 Regional Meetings**

Hooper explained that Midsouth, Intermountain West, and Northeast regional meetings happened this past year. 50-70% of university members are in that region. Try to do as fly in, fly out. Regions coming in 2015 – Midwest, High Plains, and Mid-Atlantic. Should we expand meetings to include some sort of training component? Need suggestions for meeting locations. Mid-Atlantic – possibly Drexel, Philadelphia - possibly Rutgers. High plains – maybe Colorado School of Mines?

Singha asked what are the goals of the regional meetings? Hooper explained that the goals are primarily member engagement. For example, we show services offered, how to access them, etc. We have no opportunity other than the Biennial to reach out and get feedback.

Valocchi asked what the next steps are. Hooper explained that we should set dates, send announcement to reps – we have up to three $500 travel grants for them to use to attend. Pick one site to do for the spring.

Singha suggested that Colorado School of Mines could possibly host the High Plains Meeting in the spring. Hooper explained that a meeting room, projector, lunch and overnight space would be needed.

Tyler suggested it might be helpful to hype up the data center. Could work with CUAHSI staff at the data center to have training at the meeting. Hooper stated that this would take time – is it worth holding an additional day? Hyndman suggested adding an optional second day. Seul thought the idea of doing a demo on the second day is valuable.

**Break**

**7.** **Item 2.7 Community Outreach**

Hooper reported on the AGU Early Career Luncheon - approximately 50 people attended; good feedback. There was also a mixer at Jillian's during AGU which was purely social and very well received.

Hyndman recommended looking in to Chevy's in San Francisco if we were going to repeat this event next year.

Hooper asked for any suggestions of meetings CUAHSI should attend. Johnston suggested the Society of Wetland Scientists meeting in Providence in June.

Hooper asked for directors to please provide feedback on the website.

**8.** **Item 2.8 Standing Committees**

Hooper gave overview of active standing committees – Education and Outreach, Instrumentation, and Informatics. The Instrumentation Standing Committee had a meeting at fall AGU. Currently surveying existing instrumentation facilities and how people access them (such as LEO, CTEMPS, USGS in March). One issue is how to overcome institutional barriers for access. Our community is not utilizing facilities that are there, but facilities that are there are highly used. What should CUAHSI's position be toward getting instrumentation to the CZOs? What can the committee do effectively, and how do we sharpen the charge for report, etc.

Hyndman – the discussion was centered around what works as an instrumentation node and why other nodes don't work.

Tyler – What other groups are out there, and how do they offer successfully? The node model is not functioning. What would it take to make the model successful or we shouldn't waste time supporting it.

Hooper – Russ wants a facility that hands out instruments, led by a director, write papers, etc. Are there other models that he would consider?

Tyler - What is the evolution [of those facilities]? Most instrumentation centers will be openly competed in 5 or 10 years?

Hooper – Funded facilities like continental drilling out of MN – should be important to community.

Tyler – It must be a community facility, not just a PI. Also, EarthScope is ending, there is a possibility for larger ideas. What is the $20 million proposal idea?

Hooper – We can charge the Instrumentation Committee with determining what are the workshops that should be put together, how to approach? Etc.? We need specific science questions. The committee should report back in March.

Hyndman suggested that the more timely issue is to a have larger picture question developed.

Hooper would like node issue to be resolved. For example, WyCEHG – what are their plans, what could CUAHSI do, etc.

McGlynn suggested to discuss what can CUAHSI do for a node, and what does CUAHSI expect from a node. Singha suggested that we need language as far as what being a node means. Hooper encouraged Dave Hyndman, board liaison to Instrumentation Committee, to revisit the language regarding being a node. It's not clear why aligning with CUAHSI would give a competitive edge.

Hooper – for the Informatics Committee, need more help moving it forward.

**Item 3. WDC Management Review**

**\*\*Holly Michael and Witold Krajewski  present via phone\*\***

Hooper asked for reactions from the draft of the WDC Management Review document.

Mackay commented that the most important paragraphs were buried. Hooper thought that the document focuses more on technical details vs. responses to the questions being raised. Tyler raised concerns that the questions were not addressed in a way that makes it easy for reviewers to respond to. Singha recommended addressing each bullet point on document to be sure each question that NSF asked was responded to.

McGlynn stated to that it was important to make clear that there is relationship between CUAHSI and WDC and one can't exist without the other. The set up that is lacking is that what is the data center, where we've come from, then the vision follows etc. Organizational structure wasn't in the draft.

Mackay recommended to start out with why does CUAHSI exist, ex: it's value within the community. Krajewski suggested a few sentences to show how we are different from Unidata. Hooper suggested including how the water data center compliment other facilities.

Hooper will restructure and resend. Need to get comments back over the weekend, so that it can be sent out on Monday.

**Conclusion – RH will restructure draft and send out Thurs/Fri for review and response of board; response will be due back by Sunday to finalize draft for submission due January 28th.**

*break for lunch*

**12:30 pm Lunch**

**1:00 pm Item 4. Recruitment of WDC Director**

Valocchi – suggests motion to appoint Martin Seul as acting Director of WDC effective immediately.

***Tyler – motion. Carey – seconded motion. All in favor – motion carries unanimously with no abstentions.***

**1:30pm Item 5. Process for Review of Executive Director**

**1:45 pm Item 6. Succession planning for Executive Director**

Valocchi discussed the future leadership of CUAHSI because Hooper will be stepping down in approximately 2 years. There is a need to plan ahead. The board has talked about different types of management options and formed exploratory committee (made up of Valocchi, Hyndman, and Krajewski) which aims to identify senior leaders in hydrologic sciences to see what ideas are. Suggestions and nominees for people who would like to lead CUAHSI.

Hooper requested that some decision on what his role will be would be made in advance. After stepping down, he would continue the presidency for a few years.

Valocchi – would like a report back from the Exploratory Committee in July. Valocchi would also like to be replaced on the Exploratory Committee as he is now Chair of the Board. He recommends Tyler as a replacement.

Tyler explained the charges to the committee: look over proposals of management and report back to the board and find out if people interested and who does the committee think would be a good choice. Additionally, ask the community how they see the management of CUAHSI?

Discussion about different types of applicants, career level, management experience, etc. for position of executive director.

Hyndman suggested that the board could learn from other organizations on how they did their process.

**Valocchi recommends Scott Tyler as a replacement to Exploratory Committee and would like the committee to report back on their findings in July.**

*Carey – motion. Mackay – second. Tyler – abstains. All others in favor. Motion carries. Scott Tyler will replace Al Valocchi on the Exploratory Committee; the Committee will report their finds back to the board in July.*

**2:30 pm Item 7. Personnel Issues (Closed session)**

**3:15 pm Break**

**2.8.4 WDC USERS COMMITTEE**

Hooper – provided review of WDC users committee and noted that it could be used more effectively.

Johnston noted that the Informatics Committee needs a new chair because Mackay was elected to the board.

Johnston provided a report on COPDESS – the Coalition on Publishing Data on the Earth and Space Sciences.

Hooper reviewed COPDESS and statement of commitment noting that it looks at how we work together to publish data, cite data, and how data is included in journals.

Johnston provided a review of the substance of the COPDESS statement: Commitments, Proposed accomplishments in 2015. This came out as an EOS article.

Hooper noted that CORPDESS seems in line with what we're doing and is an example of coordination that is incumbent of CUAHSI to participate in.

*Hyndman – motion that CUAHSI will be signatories to COPDESS statement. Johnston – second. All in favor. Motion carries.*

Mackay – will come on as board liaison to informatics committee

**2.8.5 Audit Committee**

Hooper reviewed the findings of the audit committee. They are finalizing report which will be considered at February board meeting.

Hooper – Jessica is finalizing materials for 2014 audit. One issue for the board – this is the third year we have used audit firms. It is considered best practice to change audit firm. The audit committee was asked if they wanted to change firms. The committee was comfortable not changing but the board should consider the option. The process is that we would go out for a bid and there would be a cost incurred for the first time. Hooper does not feel that it is a high priority at this time and that the firm has been good.

Hyndman stated that if Hooper is happy and committee is happy, then it's ok.

Rasmussen – what is the CPA's recommendation for the audit company?

**Hooper will check with CPA about whether we should move audit firms/ find out their thoughts.**

**3:30 pm Item 8. Nominations for President, Chair Elect, and ExCom**

Rasmussen – moved to nominate Hooper for president.

Hyndman – second.

All in favor.

Chair elect nominations:

Tyler – move to nominate Dave Hyndman as chair elect.

Carey – second.

Johnston –nominate Todd Rasmussen

Rasmussen – move to nominate Brian Waldron.

Tyler – move to close the nominations.

*Everyone was happy with informal process.

Runners up for chair-elect become at large members of executive committee.

**4:00 pm Item 9. Membership retention and recruitment**

Hooper reviewed membership retention and recruitment and raised the issue of what to do about unpaid dues (corporate members).

Istanbulluoglu –what is the benefit of membership?

Hooper explained that members can run for the board and have a chance to govern the organization.

**Tyler wanted to put the number of member universities in NSF management document (action item)**

Hooper expressed that we need help if someone wants to pursue corporate membership.

**Biennial**

Hooper noted that the 2016 Biennial will be done again at the National Conservation Training Center. It is not too early to pick a chair and choose themes.

Michael is willing to consider serving as the Chair of the Biennial conference.

Tyler noted that we didn't have quorum for annual membership meeting. Only item required was approval of minutes of last year, but the minutes can be deferred until December 2015 membership meeting.

**Action item: look into the number of phone lines that called in to membership meeting to see if quorum was truly achieved?**

**4:30 pm Item 10. Preparing for meeting with NSF**

Tyler started out by informing NSF of proceedings of last year.

Discussion proceeded about items to include in proposal to NSF, as well as questions to ask NSF.

Hooper explained what the science plan is. We think we need this type of community and here's the science justification….can we fold into what the instrumentation committee is doing? What are the big ideas? What hypothesis do we want to test? What processes do we want to observe that need to be explored by cross observatory analysis? We would need to have standardization across sites.

Tyler- characterizing the critical zone across the US was a big picture idea.

RH – focus the next science plan on what the ISC is doing. Working with ISC to develop what the concepts are for instrumentation needs and the next big idea.

Rasmussen suggested to build on the CZOs. Hyndman suggest to build on the CZOs and make something more. Hooper wonders how to collaborate with the CZOs to advance this discussion.

Hyndman - the CZOs, LTERs, LTARs, are sites that already have existing instrumentation. What could we do with these sites?

Tyler – asses impact of climate change on hydrology across the country using the CZOs and other aspects. What do you need to be able to do that?

**Wednesday January 20, 2015**

**8:00 am Call to order**

Erkan Istanbulluoglu

Brian McGlynn

Anne Carey

Todd Rasmussen

Scott Tyler

Al Valocchi

Scott MacKay

Carol Johnson

David Hyndman

Robyn Hannigan

CUAHSI:

Rick Hooper

Martin Seul

Jessica Annadale

Emily Clark

**8:05 am Item 11. Approval of Minutes from December meeting**

**Brian Waldron here via phone at this time**

*Rasmussen – move that minutes of December board meeting be approved. Tyler - second.*

Valocchi called for discussion or edits.

Hooper noted an edit of item 9A - change "a number of applicants" to "11" to be more specific.

Valocchi noted an edit of – item 4A – misspelling – should read UNAVCO.

*All in favor of amended minutes – 10 in favor. Hannigon – abstains. Vote passes.*

**8:15 am Item 12. Election of President, Chair and Executive Committee**

Candidates Hyndman, Rasmussen, and Waldron gave speeches for election.

**9:00 am Item 13. Administrative Review (Jessica)**

Annadale gave overview of policy changes based on the highlights of the "super circular."

Hooper noted that procurement change is the one that most effects CUAHSI.

Annadale explained that the procurement changes small purchase threshold was reduced from $25,000 to $3,000 which could impose a burden because of the small staff size

Hooper explained that he is worried that we don't have an approval procedure if we are exposed to a finding; could bring in outside person to do approval. Or outsource procurement approvals to someone like UCAR that has a staff to do it.

Hooper explained that the first thing that will come into play will be the Azure cloud – it costs over $3,000. We will have to document why we chose this. Proposed approach: not worry about outsourcing procurement, but will not do sole-sourcing. New hire office manager will help with this.

Discussion of procurement documentation continued.

Hyndman asked if there is currently documentation for procedure in place?

Hooper – no, because we did not have to do this before. The issue is not that the procurement is authorized, it is that the procurement is competed. Hooper will ask the auditor about this. Feel there is an exposure because of small size and we typically get a finding that the size is too small. Audit people have said not to worry about it.

Waldron is in favor of having UCAR issue contracts for CUAHSI.

Hooper UCAR will judge the purchase, but will not do the bidding for us.

Tyler asked if the auditor would have a problem with the chair of the board signing off?

Hooper responded that in the past, the auditor did not want to involve Directors in operational issues.

Annadale gave status on indirect rate. We are operating under an expired rate which expired at the end of 2013. Annadale made a contact at NSF and will work with them to get a new rate. She will get information to them this week.

Hooper – we want to keep a higher rate than we actually occur, but because of small size, they should give us a provisional rate so we don't have liability.

Discussion about indirect costs continued.

Tyler suggested to look at some of other organizations – UNAVCO, IRIS, PASCAL – their rates are lower. Rationale is that we're a smaller organization and our costs are fixed.

**Results of the election:**

Seul counted the votes.

President – Rick Hooper – 10 votes

Chair elect – David Hyndman – 8 votes

Brian Waldron – 3 votes

Executive Committee is made up of Hyndman, Tyler, Mackay, Rasmussen, and Waldron.

**\*\* Break \*\* Holly is present via phone\*\***

**9:30 am Item 14. Framing discussion with NSF**

Valocchi – put together bullet points of ideas discussed:

1. Important Accomplishments

    a.                                         WDC

    b.                                           Hydro-CLM

    c.                                           Pathfinder

2. Important Ongoing Activities

a. Instrumentation

b. WDC Director Search

3. Management Review

Discussion/ finalizing NSF presentation continued.

A discussion on the biennial occurred. Potential themes were discussed – something like Global Changes in Hydrology from Big Data.

**10:00 am Break/NSF Joins**

**10:15 am Discussion with NSF**

Tom Torgerson, Lina Patino, Russ Kelz joined for the NSF meeting. The board gave presentation based on the bullet points:

- Some important accomplishments of past year

    - WDC

    - Hydro-CLM Pilot

    - Pathfinder Awards

    - LTAW

    - Biennial

- Important ongoing activities

    - Instrumentation

    - NFIE –National Flood Interoperability Experiment

- WDC Director Search

- WDC Management Review

**12:00  Lunch**

**1:00 pm Results of NSF Discussion**

Valocchi gave debriefing of NSF discussion.

HydroCLM - Hydrologic test suites should be completed next January. Ying will hire post-doc. Need draft from working group – performance indicators of how to measure hydrologic models.

DH – do a watershed first – idea from Russ.

**2:00 pm Report on tasks/action items**

**3:00 pm Adjourn**

(adjourn 2:00 pm )