CALL TO ORDER

Tim Hennessy, Chairman, called the meeting to order at 11:00 am.

Commissioners Present by Phone: Tim Hennessy, Jim Traynor, Mike Ness, Tommy Kenville

Guests Present in Person: Jay Schuler, Holly Holt, Christopher Kalash

Guests Present by Phone: Mike Moore

APPROVAL OF MEETING MINUTES

The COE Commission meeting minutes from the November 15, 2017 meeting were reviewed. Mike Ness moved to approve the meeting minutes. Jim Traynor seconded the motion. The motion carried on a voice vote.

CONSENT AGENDA

Chris Kalash provided an overview of the consent agenda items:

- Disbursement Requests
  - Research ND - Unmanned Aerial Systems for Building Assessment $12,570.44
  - Research ND - Application of Unmanned Aerial Systems (UAS) to Electric Distribution Infrastructure Damage Assessment and Restoration $205,421
  - Venture Grant Phase I - 2,3-Butanediol Production via Fermentation, an Alternative Route to Chemical Synthesis, Using Synthesis Gas from Lignite Coal Gasification $50,000

Jim Traynor moved to approve the consent agenda items. Tommy Kenville seconded the motion. The motion carried on a voice vote.

COMMISSION BUSINESS

Chris Kalash asked to add the review of proposed changes to the Research North Dakota grant application form to the agenda as the last item of Commission Business. The Commission agreed to add this to 3.a.iv. under Commission business.

Chris Kalash presented the Commission Business.

- Change Request for timeline extension - Research ND - Application of Unmanned Aerial Systems (UAS) to Electric Distribution Infrastructure Damage Assessment and Restoration
  - There were delays in data acquisition (weather and budget), software compatibility issues with GE’s software that was shared for the project. This issue has been addressed by running the data analysis in the cloud rather than by sending it to an off-site supercomputer and then back to Xcel. This required additional time to get the proof of concept done and they are asking for 6 months to finish up the final tasks.
  - Kenville said that large data sets have caused bottle necks in many projects like this one. He said that compression of the data is a solution that is being explored.
Kalash said that this project has already received one extension for 6 months. They are asking for 6 months which is within the rules in policy.

Ness moved to approve the request. Kenville seconded the motion. The motion carried on a voice vote.

- Change Request for timeline extension - Venture Grant Phase I - Unmanned Aircraft System (UAS) Support to Environmental Assessments for Industry Applications
  - Previously received one extension for 6 months. They are asking for 6 months which is within the rules in policy. The reason for the request is that the M.S. student in Computer Science took a leave of absence in the Fall of 2017 to pursue an internship opportunity with Northrup Grumman in Grand Forks. His departure was too late for them to replace him on the team and bring a new student up to speed to complete the project. The student plans to resume full-time student status in January and finish tasks 4 and 5 of the project at that time.
  - Traynor stated that this is a big risk if the student chooses to not come back to school. Hennessy agreed.
  - Jay Schuler said that this is one of the things about the speed of technology that we want to address in these grants. If the project is delayed too long there is a chance that the technology will no longer be considered “new.”
  - Kalash provided an overview of the goals of the project.
  - Traynor said that he would like them to have a backup plan if the student does not return. This should include a job description for someone who could step in if this student needs to be replaced.

Traynor moved and Ness seconded provisional approval of this change request for a timeline extension. For full approval, the PI should provide notice that the student mentioned in the change request documentation has returned to school and will work on the project. The PI should also submit an alternate plan for next steps if this student does not return to full time student status and continue to work on this project. This plan should be received by the Department of Commerce by 12/31/2017. The motion carried on a voice vote.

- Change Request for timeline extension – Venture Grant Phase I - Development of Remote Patient Monitoring System-Vita WiPs -
  - This was tabled at the last meeting. Holly Holt thought that this project sounded familiar. Holt and Kalash did some research and found a group at the University of California at San Diego that has a similar project. Kalash said he was not able to find any evidence of a business built around that technology. The market analysis that was done for the PI was reviewed and it states that there is room for this technology in that space. There are many patents in this area. The launch of a new company is definitely an option.
  - In response to a question from Hennessy, Mike Moore said that since reading the market analysis, he feels that there is real potential and UND is planning to file patent paperwork to protect this technology.
  - In response to a question from Traynor, Moore said that no patent has been filed yet. It was going to be filed based on some of this research. Because this was a Venture Grant it was a startup analysis.
  - In response to a question from Traynor, Kalash stated that as of November 16, 2017 there was $29,491 was unspent. There has been money spent since then. The project is
currently scheduled to end December 31, 2017, so it is likely that if the extension is not granted some money would come back to the Research ND fund.

- Traynor stated that he does not see a terrible downside if this extension is granted.

Traynor moved to approve the timeline extension. Ness seconded the motion. The motion carried on a voice vote.

- Changes to the Research ND application form
  - Kalash said that one of the concerns with applications for Research ND has been understanding what impact a successful project will have on the state of ND. The suggested edits in the application form came from questions that Holt asked him when the latest set of applications arrived on November 17. Holt asked good questions and asked why these questions are not asked in the application process. These changes have a goal of getting a better idea of what the PSP will be doing in North Dakota if the Research ND project is successful.
  - Holt said that she looked at requirements of the Centers of Excellence Commission the Century Code. She felt that some things that the commission is responsible for are not being addressed in the application. For instance, it seems that the private party should be describing the benefits it expects to receive from a successful project.
  - Schuler added that Research ND was cut deeply in the last legislative session. What we need to do is show results. If we define what we want to see better, we should be able to get better information to provide results to the legislators.
  - Kalash said the changes include cleaning up some typos, adding some of the things that were changed in policy in September of 2017 and asking more specific questions of the private sector partner (PSP) in the application. Asking the PSP what they think success will look like will give the commission better information for decision making.
  - Holt asked if the commission would like more time to look at the application form.
  - Ness said as a commission, he thinks that it has been a struggle to assure that there will be economic impact from these projects. He felt that these changes may help to get better information for decision making.
  - Schuler said we need to make sure that besides wanting to improve the process, we need to bring some successes to the legislature.
  - Kenville said that the commission should survey some of the companies in North Dakota that have indirectly benefited from Research ND. He used Northrup Grumman as an example. He feels that this could provide some of the data that Shuler was talking about

Traynor moved approve the changes to the Research ND application form, as presented. Kenville seconded the motion. The motion carried on a voice vote.

Ness moved to ask the applicants from the August 2017 and November 2017 round of Research ND to amend their applications to include new information in the narratives that answers the questions in the new application form that was approved. Traynor seconded the motion. Kalash asked if there was a deadline for these amended applications. The commission agreed that they would leave that to the discretion of Commerce staff. The motion carried on a voice vote.

**ADMINISTRATIVELY APPROVED ITEMS**

Chris Kalash presented the administratively approved items.

- Change Request for Minor Budget Change
o An innovative approach to heal nonunion bone defects in humans (pg 45)
o Continued Development of Commercialization of Quality Characterization Technology for 3D Printing (pg 51)
o New Renewable Polymers from Plant/Vegetable Oils (pg 53)
o Development of novel anti-microbial materials for clinical and food processing applications (pg 57)

OTHER INFORMATION

Chris Kalash presented the other information.

- Fund Status
  - Chris Kalash provided an update on the fund status for the Centers of Excellence, Centers of Research Excellence, Research ND and answered questions from the Commissioners.
  - Chris Kalash also gave an update regarding Aviation Enterprise Resource Planning, Communications and Control – The PSP, SmartC2, in this Research ND project has ceased operations due to illness of one of the partners. There may be an opportunity to sell the software, but Janet, from SmartC2, noted that software support would still be necessary and could be an obstacle for the sale. This was part of an interim report. It is unlikely that a final report will be received.
  - Kenville said that it is sad that the partner got ill because they moved to North Dakota to be involved with the Test Site and because North Dakota is a leader in the drone industry. They were making good headway with their software.
  - In response to a question from Hennessy, Kalash said that this was a $300,000 project. Because the SmartC2 ceased operations, there may be no impact.
  - Kenville said that SmartC2 is no longer a tenant at the Center for Innovation. He suggested that Bruce Gjovig may have some insight into what plans they may have going forward. Because this software was intended to cover all aspects of flying (scheduling, billing, filing flight plans, etc) it was unique. It would be worth it to see if any of this could be salvaged.

- Research ND Interim Reports in the meeting agenda packet included:
  - Design and Development a low-cost, high reliability, high accuracy IMU (#1)
  - Additive Manufacturing for Mattress Comfort Customization (#1)
  - Application of Unmanned Aerial Systems (UAS) to Electric Distribution Infrastructure Damage Assessment and Restoration (#2)
  - Determining Crop Harvest Readiness Using UAV and Thermal Infrared Sensors (#4)
  - Using UAS Imagery to Identify Weed Infestations in Cropland (#5)

- Venture Grant Phase I Interim Reports the meeting agenda packet included:
  - Development of novel anti-microbial materials for clinical and food processing applications (#3)

GOOD OF THE ORDER

Holt thanked the commission for being open to the idea of making changes to the application form.

Holt shared that she has asked Kalash to put together a spreadsheet of the projects that serves as an at-a-glance explanation of the projects. The commission said that they would like to have that as a resource at future meetings.
ADJOURNMENT

There being no further business, Chairman Tim Hennessy adjourned the meeting at 12:01pm.

Tim Hennessy, Chairman  2/6/18

Christopher Kalaash, Recording Secretary  1/31/2018