

Minutes of the
RENEWABLE ENERGY COUNCIL

Tuesday, October 17, 2017 – 1:00 p.m.

Icelandic Conference Room, ND Department of Commerce, Bismarck, ND

CALL TO ORDER

Members Present: Jay Schuler, Al Christianson, Randy Schneider, David Douglas, Rod Holth, Terry Goerger

Members Absent: Mark Nisbet

Others Present:

Andrea Pfennig, Department of Commerce
Karlene Fine, Industrial Commission
Bonnie Malo, Department of Commerce
Rachael Flagstad, Department of Commerce
Matt Willard, North Dakota Soybean Processors
Dustin Willett, Red Trail Energy
Kerryanne Leroux, EERC
Gerald Bachmeier, Red Trail Energy
Charles Gorecki, EERC

Jay Schuler, Chairman, called the Renewable Energy Council meeting to order.

WELCOME AND OPENING COMMENTS

Schuler welcomed attendees.

APPROVAL OF MINUTES

June 26, 2017 meeting minutes were reviewed.

Schneider moved to approve the minutes as presented. Holth seconded the motion. All in favor. Motion carried.

PRESENTATION OF FINANCIAL SUMMARY

Fine presented the financial summary, which was also posted on the website. Fine presented information regarding the current biennium and the 2015-2017 biennium. At the end of the 2015-2017 biennium, about \$1.5 million were

uncommitted. In the current biennium, \$1.6 million are uncommitted. As of now in this biennium, some revenues have been received from the Resources Trust Fund. During the last legislative session, it was changed so the money is slower coming into the Renewable Energy Development Fund. The \$3 million maximum was approved during the session. The cash balance as of today is \$4.5 million, with outstanding commitments totaling a balance of \$1.6 million available. There are enough funds if the Council decides to fund the proposals presented today.

CONSIDERATION OF GRANT ROUND 34 APPLICATIONS

Pfennig explained for this grant round, four applications were received. One application was rejected at the staff level. Three applications were sent to Technical Reviewers for peer review. One was withdrawn after review; the applicant wanted to withdraw and resubmit based on the questions of reviewers. The Council is considering two applications today for a total amount of funds requested of \$845,000.

R034-D: “North Dakota Soybean Processors: Phase I Engineering”;
Submitted by ND Soybean Processors;
Principal Investigator: Scott Austin; Project Duration: 2 years; Total Project Costs: \$8,500,000; Request for: \$500,000.

Pfennig presented an overview of the project. She indicated the budget in the proposal is unclear. Also, APUC provided \$103,000 for preliminary engineering services by KFI. NDDF approved a \$2 million installment loan. The loan is anticipated to be funded in May.

The project objectives are that the result of the Phase I project will be the completion of detailed engineering drawings. Ultimately, the goal is to construct and operate a fully integrated soybean processing facility at Spiritwood with a soybean crushing plant: 42.5 million/year capacity; biodiesel refining and bleaching plant: 35 million gallons/year; food grade deodorization plant: 200 million pounds/year.

The overall reviewers' recommendations follow: Fund (192, 185) and Funding May Be Considered (142). The average weighted score was 173 out of 250.

Two reviewers were concerned about how well the project fits with program goals since the budget is unclear as to how much of program funds would go to biodiesel production versus the overall project. The applicant responded the North Dakota Industrial Commission funding will be used exclusively for the biodiesel portion of the overall project. However, this is not reflected in the budget.

Two reviewers felt the project was achievable. One reviewer was less sure and wanted more information, specifically regarding Task 1a, which includes four sub-projects. One of the four is the design of the biodiesel production unit which requires a feasibility study and a dedicated effort for a complete engineering design. The reviewer felt it was unclear if the project could be accomplished due to lack of information. North Dakota Soybean Processors responded that those items have to do with how the biodiesel plant will "fit" into the overall project and detailed specs on piping, automation, etc. There is not a new technical approach to refining being suggested.

Two reviewers felt the methodology was sound. All three reviewers felt the scientific/technical contribution was extremely significant.

Two reviewers had concerns about the awareness of current research activity. One reviewer felt unable to comment on the PI's awareness of the biodiesel industry status (security of feedstocks, availability of edible oil and biodiesel markets, etc.) due to lack of information. One reviewer also thought they were leaning on the parent company to use their current technology matrix and this is a soft spot in the proposal.

Two reviewers were comfortable with the knowledge of the project team. One reviewer felt the technical preparation (engineering design of different facilities and processes such as biodiesel) was lacking.

Two reviewers were comfortable with the project management plan. One noted milestones and corresponding achievability were not discussed.

Two reviewers felt the project had high value. One reviewer noted that the requested funds were an insignificant fraction of the project. NDSP responded that while the funding requested is a small portion of the overall project cost, all sources of funding are important. They believe that building North Dakota's first soybean based biodiesel facility fits very well with the objectives of the program.

Generally in an application, the applicant shows Industrial Commission funds separated, along with any matching funds. This applicant showed only a bulk budget.

Overall, one reviewer was concerned that NDSP did not indicate that agreements have been made with the farmers that would supply the feedstock. One reviewer thought the proposal failed to outline which markets will be targeted (in versus out of state) for both biodiesel and soybean meal. NDSP responded that the primary markets for biodiesel will be the West Coast, Canada, and Minnesota.

Soybean meal market is growing according to USDA forecasts. This plant will target the Pacific Northwest, West Coast, and Asia.

The technical advisor's recommendation is that funding may be considered. If successful, this would be a nice addition to the Spiritwood Industrial Park, add jobs to the region, and be another market for local soybean growers. NDSP is investing millions of dollars in North Dakota. However, a detailed budget has not been provided. While \$500,000 is a small part of their overall budget, it is quite significant for this program. If funded, the suggested contingency is that the applicant provides a revised budget that clearly outlines the expenses, along with where North Dakota Industrial Commission funds would be used and the source of the match that is being provided.

Matt Willard presented the project. (A copy of the presentation is available in the Department of Commerce and Industrial Commission files.)

In response to Schuler, Matt Willard stated the lead bank they use is CoBank out of Omaha, NE.

In response to Schuler, Matt Willard explained the engineering is about layout when building a plant like this. Therefore \$8 million is budgeted for engineering. It is not engineering of equipment, which is the part that is being duplicated from the Minnesota plant.

In response to Christianson, Matt Willard answered Crown has its own process guarantees for its equipment. He'll need to ask if KFI and McGough are doing guarantee on production.

In response to Schneider, Matt Willard explained they will not be processing CO2.

In response to Goerger, Matt Willard stated he was unsuccessful in receiving a budget that

breaks out the engineering costs by area. Matt Willard has told his company that this will be a condition if they are approved, after speaking with Pfennig.

In response to Schneider, Matt Willard stated they have not done anything at the Brewster, Minnesota plant with bio materials.

Break at 1:55 p.m.

Opened at 2:04 p.m.

FINAL REPORT

Final Report: R028-39; Integrated Carbon Capture and Storage for North Dakota Ethanol Production; EERC

Charles Gorecki presented the Final Report. Gorecki discussed the Phase I Scope, Results, and Conclusions. (A copy of the presentation is available in the Department of Commerce and Industrial Commission files.)

It was moved by Christianson and seconded by Schneider that under the authority of North Dakota Century Code 54-63-02 and 44-04-18.4 the Renewable Energy Council close the meeting to the public and enter executive session for the purpose of hearing and discussing the applicant's trade secret, proprietary, commercial and financial information that was provided as part of the Integrated Carbon Capture and Storage For North Dakota Ethanol Production Phase 1 Report.

Roll Call Vote:

Mr. Christianson – aye

Mr. Schneider – aye

Mr. Douglas – aye

Mr. Holth – aye

Mr. Goerger – aye

Mr. Schuler – aye

The vote is unanimous.

Schuler stated, I remind the Council members and those present in the executive session that the discussion during the executive session must be limited to the announced purpose for entering into executive session which is anticipated to last approximately 45 minutes. The Council is meeting in executive session to discuss trade secret, proprietary, commercial and financial information that was provided by Red Trail Energy for the Phase I report. If there is any action by the Council it will occur after it reconvenes in open session.

Council members, Department of Commerce and Industrial Commission staff, EERC and Red Trail Energy employees, will remain but the public is asked to leave the room.

The executive session will begin at 2:55 p.m. When the executive session ends the Council will reconvene in open session.

The Renewable Energy Council was back in open session at 3:23 p.m.

CONSIDERATION OF GRANT ROUND 34 APPLICATIONS CONTINUED

R034-C: “Integrated Carbon Capture and Storage for North Dakota Ethanol Production – Phase II”; Submitted by EERC; Principal Investigator: Kerryanne Leroux; Project Duration: 9 months; Total Project Costs: \$690,000; Request for: \$345,000.

Pfennig presented an overview of the project. The project objectives are to reduce knowledge gaps in regulatory processing and financial requirements and thus encourage investment toward integrating commercial CCS with ND ethanol production in order to realize CO₂ market credits from LCF programs.

The overall reviewers’ recommendations follow: Fund (230, 239, 220). The average weighted score was 230 out of 250.

All three reviewers felt the project was achievable. One reviewer thought the project would save other ethanol plants considerable time. One reviewer noted that CA and OR policy outreach may extend past the nine-month project schedule due to uncertainty.

Two reviewers felt the methodology was sound. One reviewer thought the project should include Canada’s LCA methodology as it could be another export market. This reviewer also felt the project should have included more information about the methodology for community outreach.

All three reviewers thought the scientific/technical contribution was extremely significant. One reviewer felt two areas stand out: establishing the permitting pathway within ND for Class VI CCS wells, and greater understanding of LCF programs and how they integrate with ND primacy. All three reviewers were comfortable with the knowledge of the project team.

All three reviewers were comfortable with the project management plan. One reviewer would have liked additional information on stop/go decisions and other key milestones. All three reviewers felt the project had high value. One reviewer stated North Dakota will continue to be a forerunner in the development of valuable expertise in this realm while providing opportunities for economic growth.

Overall, one reviewer thought this project has the potential to elevate North Dakota to a leader in the biofuels market. One reviewer felt this could have a global impact because it can clearly define the regulatory pathway for Class VI well permitting. The third reviewer had the following recommendations: revised financial analysis include potential revenues from other programs including British Columbia’s LCF policy, Canada’s proposed Clean Fuels Standard, and the proposed revisions to 45Q federal tax credits; potential inclusion of

Canadian LCA methodologies; greater focus on community outreach and education based on existing programs, such as the one in Decatur, IL.

The technical advisor's recommendation is to fund. This is an opportunity for North Dakota to be a leader in the nation. With recently proposed changes to the RFS, there is uncertainty facing the ethanol industry. This makes the opportunity to turn a waste stream into revenue stream for ethanol plants extra beneficial. This project partners a North Dakota research facility with a North Dakota industry. DOE is providing funding for the project, which enhances the significance and credibility of the project. The indirect cost is high. It would be nice if Red Trail would pay some of the indirect costs, as they have the most to gain from this proposal.

If funded, the suggested contingencies include a revised financial analysis that includes potential revenues from other programs including British Columbia's LCF policy, Canada's proposed Clean Fuels Standard, and the proposed revisions to 45Q federal tax credits. Also, the inclusion of Canadian LCA methodologies.

Charles Gorecki presented the project. (A copy of the presentation is available in the Department of Commerce and Industrial Commission files.)

DISCUSSION OF PROJECTS

R034-D: "North Dakota Soybean Processors: Phase I Engineering"

Schneider stated he thinks it is a good project, but he is concerned the funds granted by the Council will be spent on the biodiesel project, not elsewhere.

Holth added that a possible contingency is for NDSP to show what the renewable part contributes to the profitability of the business.

Douglas commented that it may not be easy to separate the budget and he thinks the project would continue operations without the renewable side. There is no direct correlation between operating the crush plant and profitability of biodiesel. They do not need the biodiesel to run the crush plant, if all their other assumptions come to fruition.

Schneider added that it should be possible to segregate costs associated with the construction of the biodiesel component of the facility. Douglas agreed. Since they are using a footprint they have used before, they should have a pretty good idea of what it costs.

Schuler suggested rejecting the proposal and reconsidering it if additional information is provided.

In response to Goerger, Pfennig explained that a special round will be held with a November 15th deadline, with the meeting held in January.

Holth added that before spending \$12.7 million on engineering, he would want to see if it is possible to raise the \$120 million that is needed to make sure it goes.

In response to Schuler, Douglas stated the crush margins are not that good. The presentation mentioned the last five years, which happen to be the best five years of soy crush historically. Quarter four of 2014 was most likely the vast majority of the profit for Brewster in the last five years.

Douglas also stated that North Dakota soybeans are the least expensive soybeans in the U.S. for a reason; typically, they have lower oil and protein content.

