Minutes of the  
RENEWABLE ENERGY COUNCIL  
Monday, January 5, 2009  
WSI Boardroom, ND Department of Commerce  
Bismarck, North Dakota

CALL TO ORDER  
Shane Goettle, Chairman, called the Renewable Energy Council meeting to order at 1:06 pm.

Members Present: Shane Goettle, Al Christianson, Terry Goerger, Mark Nisbet, and Randy Schneider.

Others Present:  
Jim Boyd, Department of Commerce  
Andrea Pfennig, Department of Commerce  
Karlene Fine, Industrial Commission  
Joleen Leier, Department of Commerce  
David Dunham, EERC  
Kerryanne Leroux, EERC  
Ted Aulich, EERC  
George Stroh, Tesoro  
John Berger, Tesoro  
Ron Day, Tesoro

WELCOME  
Shane Goettle welcomed the members of the Renewable Energy Council. Roll call was taken and introductions were made by those present.

APPROVAL OF MINUTES  
August 27, 2008 meeting minutes were reviewed. Al Christianson moved to approve the minutes. Randy Schneider seconded the motion. Motion passed.

Goettle reviewed a couple changes in the agenda.

PRESENTATION OF FINANCIAL SUMMARIES  
Fine reported that $807,213.00 in funds remains prior to this grant round and that if all applications are approved at the meeting, $131,695 would be available for the next round. Fine also spoke about the Renewable Energy Fund being used prior to the Biomass Incentive and Research Fund. Next round is scheduled for May.

Fine reviewed the balance of the Biomass Incentive and Research Fund. There is currently $1,970,000 funds available.

Goettle introduced Commerce Staff. Pfennig spoke about grant options.

Fine spoke about the ND Lung Association application that was previously approved. The Lung Association did not meet their January 1 deadline to raise matching dollars, therefore, they have requested a 30-day extension in order to raise matching dollars. If they are not able to raise funds, cutting the grant back is an option. Goettle suggested extending the deadline until February 1 or March 1, since the Commission has to sign off and their next meeting is January 21. Schneider and Christianson have a conflict with this matter. Christianson moved to extend the deadline to March 1, 2009 and they must meet the match or submit a modified proposal. Nisbet seconded the motion. The motion was approved on a voice vote.

CONSIDERATION OF GRANT ROUND 4 APPLICATIONS  
R004-C: “Renewable Oil Refinery Development for Commercialization”; Submitted by Energy & Environmental Research Center; Principal Investigator: Chad Wocken; Project Duration: 12 months; Total Project Costs: $1,000,000; Request for: $500,000; Tesoro Support Letter.
Pfennig reviewed the objective of this grant. All three reviewers felt funding may be considered. The average weighted score was 195 out of 250. Pfennig reviewed some of concerns and comments made by the reviewers.

Pfennig recommended funding based on the following contingencies: (1) Industrial Commission and the Renewable Energy Program will receive recognition in all literature and other project related public relation efforts with the following reference: “Funded in part by the ND Industrial Commission Renewable Energy Program.”; (2) Proposed match from DOE is secured with documentation demonstrating the matching funds, including letters of commitment; and (3) the project data and reports shall be provided to the Department of Commerce & Renewable Energy Council in both electronic and hard-copy formats with permission for unrestricted distribution. The electronic versions shall be in a suitable format for hosting on the Department of Commerce and Renewable Energy Council web sites.

Ted Aulich presented on behalf of Chad Wocken. Aulich covered the overall objective of this project. Aulich stressed that need for the fuels to be integratable with Tesoro. Main objective is to create bid-ready design for a pilot-plan with Tesoro.

John Berger from Tesoro was present at the meeting to express support for this project. Berger stated the demand for diesel is great and no modifications are needed to supply this fuel to Tesoro.

In response to a question from Goettle, Aulich stated there is a lab in Kansas City to provide services to receive approval needed.

In response to a question from Goettle, Aulich stated they reviewed the process of the specs prior to dispensing. Jet fuel testing is very stringent.

In response to a question from Schneider, Aulich stated this process would also be working towards getting jet fuels from 19 to 1 kind of fuel.

In response to a question from Schneider, Crambe has an advantage for diesel fuel.

Aulich explained they received a grant from Department of Defense, and must match 50/50. Funding for his project from the Renewable Energy Program will allow them to match those monies.

In response to a question from Goettle, Aulich stated they can do the 50/50 match. Tesoro has no financial commitments, however, they are willing to host the biofuel. This is significant.

In response to a question from Goettle, Aulich stated that price of project is reduced since Tesoro currently has a facility.

In response to a question from Schneider, Aulich stated they have all the equipment needed. EERC and Tesoro have not worked out all arrangements of the process at this time. Recommending to build with expansion in mind.

In response to a question from Georger, Aulich explained they use the water in cooling towers, can recycle. Ron Day commented this process is similar to crude oil.

Georger commented that “Renewable Diesel” name has already been used.

In response to a question from Georger, Aulich stated Crambe is available in the lab immediately. Will be running tests this week or next. Would like to use it as unrefined as possible.

In response to a question from Georger, JPA, 975 Standard for diesel for #2 diesel. Target to meet #1 diesel.
Christianson moved to adopt contingencies laid out by Pfennig with the deletion of DOE in Contingency #2. Motion seconded by Goerger. Motion passed by roll call vote.

R004-E: “Mobile Biodiesel Production Facility”; Submitted by Energy & Environmental Research Center; Principal Investigator: David Dunham; Project Duration: 12 months; Total Project Costs: $150,000; Request for: $75,000.

Pfennig reviewed the objectives of this grant request.

Reviewer 2A recommended funding, Reviewer 2C recommended funding may be considered, and reviewer 2B recommended not to fund the project. The average weighted score was 169.33 out of 250.

Pfennig recommended funding may be considered. If funded, the following contingencies were recommended: (1) Industrial Commission and the Renewable Energy Program will receive recognition in all literature and other project related public relation efforts with the following reference: “Funded in part by the ND Industrial Commission Renewable Energy Program.”; (2) Proposed match from DOE is secured with documentation demonstrating the matching funds, including letters of commitment; and (3) the project project data and reports shall be provided to the Department of Commerce & Renewable Energy Council in both electronic and hard-copy formats with permission for unrestricted distribution. The electronic versions shall be in a suitable format for hosting on the Department of Commerce and Renewable Energy Council web sites.

David Dunham presented for EERC. Dunham reviewed the process of making biodiesel. He also outlined the benefits of ultrasonic production, as well as the project goals and benefits to North Dakota.

In response to a question from Goettle, Dunham stated they proposed a match on DOE application.

In response to a question from Schneider, Dunham explained the ultrasound process in more detail.

In response to a question from Schneider, Dunham stated they have test products at the center to ensure they meet STM standards.

In response to a question from Goettle, Dunham stated there is a manufacturer from Germany. There has been no partnership discussed, and they have only discussed costs, not cost share.

In response to a question from Goerger, Dunham stated this has not been taken into a farm and producing. He also stated ultrasonic has a possibility to replace batch production. There has been biodiesel made with ultrasonic process; not continuous flow. Biodeisel has not accepted it.

In response to a question from Goettle, Dunham stated there has been some interest by a private producer, but not financial interest at this time.

R004-B: “North Dakota Biomass Feasibility Studies”; Submitted by Energy & Environmental Research Center; Principal Investigator: Kerryanne Leroux; Project Duration: 12 months; Total Project Costs: $201,036; Request for: $100,518.

Pfennig gave an overview of the grant request. Reviewer 1A recommended funding, Reviewer 1B recommended funding may be considered, and Reviewer 1C recommended not to fund the project. The average weighted score was 157.33 out of 250.

Pfennig reviewed her comments. Pfennig recommended that they revise their proposal for the next round.
Kerryanne Leroux presented from EERC. Leroux outlined the goals of the project. Accomplish in 5 tasks: 1-Resource Assessment, 2-Fuel & system profile, 3-Equipment & Technology, 4-Economics, and 5-Results Dissemination.

Leroux stated GIS Interactive Map can be created to go on the website; currently available biomass resources by location, location of public facilities, regions of economic viability, and links.

In response to a question from Goettle, Leroux stated they have spoken with many public peoples. They do not have financial support, but are willing to provide labor support. Industry is more interested in specific approaches, however, this is a broader approach. Industry involvement would be the next step. Christianson, suggested that this should be part of a larger effort utilizing weatherization needs.

In response to a question from Goerger, Leroux stated a ND Forester requested a previously conducted biomass study; USDA paid for it. Results averaged 50% savings.

In response to a question from Schneider, Goettle clarified this is submitted under renewable energy portion not biomass. Leroux has no preference as to how it is funded. Would not be opposed to it being funded under biomass. Fine stated Education cannot be done under biomass.

The board made recommendations to the applicants that did not receive funding.

**ADMINISTRATIVE BUSINESS**

Upcoming Legislative Session: Did adapt our recommendations to merge programs. Governor has put budget recommendations for $5 million.

Pfennig distributed a brochure on the Renewable Energy Program for legislators.

Special Round Meeting for March is scheduled on **March 4, 2009, 8:30 am.** Location to be determined (Christianson offered Great River Energy).

The July Council Meeting is scheduled for **July 13, 2009, 10:30 am.** Location to be determined (Christianson offered Great River Energy).

**ADJOURNMENT**

It was moved by Christianson, seconded by Schneider and carried on a voice vote that the **meeting be adjourned.** Chairman Goettle adjourned the meeting at 3:47 pm.

---

**COMPLETION OF BALLOT**

<table>
<thead>
<tr>
<th>R004-C Renewable Oil Refinery Development for Commercialization Fund:</th>
<th>5</th>
<th>Do Not Fund:</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>R004E Mobile Biodiesel Production Facility Fund:</td>
<td>1</td>
<td>Do Not Fund:</td>
<td>4</td>
</tr>
<tr>
<td>R004-B North Dakota Biomass Feasibility Studies Fund:</td>
<td>1</td>
<td>Do Not Fund:</td>
<td>4</td>
</tr>
</tbody>
</table>

Shane Goettle Date Chairman

Joleen Leier Date Acting Recorder