Renewable Energy Initiative (REI) Committee Report

Prepared by Alyssa Rudolph, Parker Sloan, and Mike Dooraghi

on November 21, 2005

This document has been prepared to assist in the proceedings in recognizing the REI Committee's ability to make responsible decisions for the allocation of student funds. We understand that students have never before been in the position of being accountable for such large a sum of money and that there may be some hesitation on the part of the Administration. The following document is being provided to assure you that the decisions made on behalf of the Committee will be done in a thorough and legitimate manner. We are ready to fulfill the responsibilities that have been charged to us.

Included in this document is information regarding the history of the REI, the formation of its committee, the students' involvement, and the rules that govern the committee's decision making process. A set of appendices have been attached to provide further documentation of specified events. You will find minutes from the Board of Governors, the Faculty Senate, the REI Committee and other correspondence pertinent to the operations and decisions of the Committee.

We appreciate your help in resolving this issue. Thank you for taking the time to review our progress. Please let us know if there is any additional information that we can provide for you. We are excited to begin fulfilling our commitment to the student body through the implementation of renewable energies. With your help, we are able to stand proud behind Appalachian as it transforms into a more sustainable campus, and serves as a role model for other schools in the UNC system.

Summary of REI Actions

Purpose of Document

The following are discussed:

- 1. How was the original REI committee and its members established?
- 2. What individuals served on the original REI committee?
- 3. What individuals are serving on the current committee and what are the positions held by these members?
- 5. How are decisions made in the committee now and what is the voting process?
- 5. What projects are currently being pursued? Who are the project managers and the faculty advisors for those projects?

Outline of Events (Chronological)

February 2004

The original motivation for the Renewable Energy Initiative came from Ernie Hodgson, former President of ASU Sustainable Energy Society, based on a similar concept that was initiated at UNC Chapel Hill. With the help of other students interested in pursuing the initiative, he brought the idea before the Student Government who in turn approved a senate bill for the referendum. Miriam Makhyoun and SGA Senator Justin Pittman aided Ernie Hodgson, Cole McVey and Jeff Lauckhart in writing the enabling act for the referendum (SGA minutes: Appendix A).

The referendum read, "Do you approve the creation of a student renewable energy fund, a \$5 student fee collected per semester for 3 years, that will build renewable energy infrastructure at ASU? This fund will reduce the University's consumption of fossil fuels and minimize its impact on the Appalachian environment by using solar, wind, hydroelectric and biofuel technologies."

March 2004

Of the students that voted, 82% approved the increase in fees.

The Chancellor approved the students' decision over the summer of 2004 at which point the referendum was passed on to be approved by the Board of Trustees.

October 11, 2004

The Faculty Senate voted for two faculty members, Dennis Scanlin and Chuck Smith, to hold seats on the REI committee. (Faculty Senate minutes: Appendix B)

November of 2004

The Board of Trustees voted on and approved the referendum.

November 11, 2004

The REI committee had its first meeting. Those in attendance were Chuck Smith, Dennis Scanlin, Ben Winebarger, Patrick Beville, Mike Dooraghi, Brent Summerville, Alyssa Rudolph, Miriam Makhyoun, and Nick Albu.

Due to their involvement with the REI in its initial stages, Ben Winebarger of the Physical Plant and Patrick Beville of Design and Construction were asked to attend the meeting. Dennis Scanlin and Chuck Smith were the faculty representatives as voted by Faculty Senate. Brent Summerville and Mike Dooraghi were representing the ASU Sustainable Energy Society, Alyssa Rudolph was representing the SGA, Miriam Makhyoun and Nick Albu were the current SGA President and Vice President.

At this first meeting, Brent Summerville was named interim Chair, Alyssa Rudolph was named interim Secretary, and Mike Dooraghi was named interim Treasurer. The committee decided that the student committee members would need to facilitate an application process for choosing the 3 additional student body members to fill the committee. (Interim REI Committee minutes: Appendix C)

November 15, 2004

The students (Brent, Mike, Alyssa, and Miriam) met and confirmed the decision to invite Dr. Jeff Tiller onto the committee based his expertise, experience, and interest in the field of renewable energy. At this time, the students of the committee also composed an application to be distributed to those interested in applying for a position on the committee. Applications were available online, through the SGA and CSIL offices, and at the Green Think Tank meeting, a brainstorming session for renewable energy on campus. (REI Committee Application: Appendix D)

We received 13 student applications by the set deadline after which Brent, Mike, Miriam and Alyssa chose the three students best suited to fill the remaining open positions. Decisions were made based on the responses of the applicants to the posed questions. Lindsay Dula, Eric Mathis, and Mary Baker were invited to serve on the committee and accepted the invitation.

January 17, 2005

The full Committee had its first meeting. The committee was made up of 12 members, 5 faculty/staff and 7 students. Elections were held and the following positions were filled: Mike Dooraghi was elected as Committee Chair, Eric Mathis as Assistant Chair, Brent Summerville as Treasurer, and Alyssa Rudolph as Secretary. Faculty/Staff Members included Chuck Smith from the Department of Interdisciplinary Studies, Dennis Scanlin from Technology, Jeff Tiller from Technology, Patrick Beville from Design and Construction, and Ben Winebarger from the Physical Plant. (REI Committee minutes establishing committee positions: Appendix E)

At this meeting we determined that we would meet once a month. We also discussed a contingency budget to be used for supplies, advertising, and grant applications until student funds were collected.

We established project guidelines for students to submit ideas on ways in which the committee might allocate REI funds. It was, and remains to be, important that we received ample student body input for decisions that were to be made. At the February 7th Green Think Tank Event over 60 students turned out to help generate ideas on how the REI money could potentially be used. (List of ideas generated by the student body at the Green Think Tank: Appendix F)

We have encouraged student body involvement throughout the process. In addition to the Green Think Tank and The Greening of ASU, we were featured at an SGA Awareness Breakfast in March to answer any student questions or concerns. We also held two site assessment days in which we explored the campus to determine site resources for solar and wind power. During these assessments we taught students how to use basic instruments to determine the solar insolation of an area and what to look for when trying to place a wind turbine. We explored possible technologies such as solar thermal water heating, photovoltaic electricity, wind generated electricity, solar walls for space heating, and a renewable energy and sustainability information center.

A website was created to aid in supplying a source for information about the REI, its committee, and its actions. (Web address: http://asurei.org/)

March 18, 2005

The Board of Governors approved the fee package which included the \$10 per year fee increase associated with the REI. (Board of Governors minutes: Appendix G)

Over the next several months, the committee met regularly to discuss updates and changes. We began thoroughly researching ideas from the proposed list to determine the feasibility of the projects. After 5 months we broke for the summer, though the student research continued.

Fall 2005

At this point, there was a change in the committee members. Miriam Makhyoun's seat was filled by Parker Sloan, SGA Director of Sustainability, as decided by the SGA. In addition to holding a seat, Parker was elected in October to be media spokesperson for the committee.

It was this fall that we realized there were some complications which hindered our ability to begin making purchases with REI funds.

(Correspondence on this issue: Appendix H)

We have been working diligently to resolve this issue but have made little progress. In the mean time, the Committee has continued working hard and has made some very important decisions: 1. We have allocated \$7,000 to assist the students involved in the Biodiesel Processor Project. These funds will be used to supplement the grant that was received from the EPA to purchase parts and materials for the building and testing of the processor. (Discussion and voting on this issue: Appendix I)

2. Student Project Managers have been appointed for each of the 6 proposed projects we are researching. Each student will report to an appointed faculty advisor. Project Managers are responsible for providing the committee with detailed information regarding costs and specifications, an expenditure budget, and will be the spokesperson for the specified project. (Appointment of Faculty Advisors: Appendix J)

Lindsay Dula: Biodiesel Processor Project, advised by Jeff Tiller Eric Mathis: Biodiesel Pilot Project, advised by Ben Winebarger Alyssa Rudolph: Solar Thermal pool Heating, Advised by Patrick Beville Mary Baker: Raley Photovoltaic, advised by Chuck Smith Brent Summerville: Wind, advised by Dennis Scanlin Mike Dooraghi: Kiosk, advised by Jeff Tiller

3. The committee has allocated funding to purchase a 4,000 gallon fuel tank to be used for the Biodiesel Pilot Project. This project will enable an Appalcart bus, and two ASU vehicles, a truck and a tractor, to run on biodiesel for three months as a test for the fuel. Our intention is to receive a commitment that biodiesel will replace the diesel fuel currently used in ASU vehicles. Eric is working with Chris Turner and the Physical Plant to ensure the project's success. (Minutes reflecting the voting for this expenditure: Appendix J)

It was decided during the November 17, 2005 REI meeting that monies cannot be authorized for a project without faculty or staff signature. (REI Committee minutes regarding signing off for monies with faculty advisor: Appendix J)

Committee Procedures

The Committee makes decisions using Robert's Rules. A motion is made by an individual. If the motion is seconded then discussion will follow. Once the discussion has been concluded a vote will be taken. A 2/3 quorum was established to ensure that the voting procedures had adequate guidelines and were conducting with the majority of the committee present.

Further inquiries can be made to Mike Dooraghi, Committee Chair, @ 828/265-2709 or Alyssa Rudolph, Committee Secretary @ 828/265-3793.