student sustainability committee

Funding Award and Acceptance Letter

April 28, 2014

Project Leader: Nathan Deppe

Project: Energy Shade Curtains-Phase III

Re: Cleaner Energy Technologies Fee - Award Recommendation

Dear Mr. Deppe:

On behalf of the University of Illinois at Urbana-Champaign Student Sustainability Committee (SSC), I would like to thank you for considering the funds raised by the Sustainable Campus Environment Fee to implement a project that improves the sustainability of our campus. SSC is pleased to inform you that we are recommending to the Institute for Sustainability, Energy, and Environment (iSEE) that the Energy Shade Curtains-Phase III receives \$71,000.00 in grant funding.

In order to remain eligible for this award, you must agree to the following conditions:

- 1. All funds must be spent by December 31, 2015.
- 2. A final report of all work completed should be provided by January 31, 2016.
- 3. Project status updates and detailed account statements must be provided at the end of each semester until the project is completed.
- 4. Any substantial modifications to project scope, budget, or timeline must first be approved by SSC. These requests must be submitted in a formal letter to the Chair and Program Advisor.
- 5. All projects will be expected to follow campus policies and procedures as well as any applicable State and Federal laws.
- 6. SSC reserves the right to revoke funding if the project does not comply with the terms and conditions outlined in this letter.
- 7. Upon implementation, signage must educate the public about the project and its impact on campus.
- 8. Any signage involving the project or events surrounding this project should include SSC's logo and/or a statement of which fee funded the project.
- 9. Any press releases involving the project should acknowledge SSC funding.
- 10. SSC will be directly funding this project and will be actively exploring the possibility to have the avoided costs contributed to the campus revolving loan fund.

If you agree to the terms and conditions for the funding, please sign on the designated line at the bottom of this letter. If you have any questions regarding these requirements please contact the Chair, Marika Nell, at nell2@illinois.edu or the Interim SSC Program Advisor & Student Programs & Activities Assistant Director, Dementro Powell, at dementro@illinois.edu. You will be notified when the Institute for Sustainability, Energy, and Environment officially approves this project. Again, thank you for your interest in improving the sustainability of the University of Illinois at Urbana-Champaign. We look forward to working with you in the future.

SSC Signatories

March Mell 4/29/14

Marika Nell

Chair, Student Sustainability Committee

Katilkinlay 4/29/14 Kathryn Kinley

Treasurer, Student Sustainability Committee

Awardee Signatory

Mathan A. Deppe

Office of Research/Plant Care Facility

iSEE Signatory

Dr. Evan DeLucia, Director

Institute for Sustainability, Energy, and Environment

Project Information

Project: Energy Shade Curtains-Phase III

Funding Source: Cleaner Energy Technologies Fee

Funding Amount: \$71,000.00

Award Code: 1-302571-483013-483140-483ESC

Receiving Campus Unit: Office of Research/Plant Care Facility

Unit Financial Contact: Natalie Bush, Manager of Financial Operations

E-mail: ncb@illinois.edu Phone: (217) 244-2842

Primary Contact Person: Nathan A. Deppe

E-mail: ndeppe@illinois.edu Phone: (217) 333-3058

Project Description: Energy shade curtain systems operate by user programmable settings governed by outdoor temperature and solar radiation (light intensity). As temperature and/or solar radiation levels increase, curtains close incrementally to shade crops from an overabundance of light and helps maintain temperatures from exceeding thresholds. Conversely, as temperatures decrease in late evening, curtains close to provide a thermal barrier from the outside environment. In turn, this helps to mitigate overuse of heating inputs required to maintain temperature. Another inherent benefit of curtains is the ability to optimize natural lighting to crop canopy. This allows us to maximize use of natural lighting and minimize activation time of high intensity discharge lights. The SSC has provided the Plant Care Facility with funding for two phases of curtain installation. A zero percent interest loan and grant funds have provided for twenty-two curtain systems in the past. I am requesting additional grant funds from the SSC to install 7 additional curtains (phase III) in the Plant Sciences Laboratory Greenhouses. The project goals are to successfully install and program new curtains so that we can decrease unnecessary overuse of energy needed to heat, cool, and power greenhouse rooms. There are two desired outcomes for this project. The first outcome is to reduce use of natural gas energy consumed by Abbott Power Plant to heat greenhouses. The second outcome is to mitigate use of electricity to power cooling equipment and HID lights. Curtain systems do provide these benefits.