**Dear Marika Nell,**

This is EV2 section of Engineering 315 course in charge of three renewable energy projects: FAA IT Solar Charging Station, College of Fine and Applied Arts (FAA) IT Electric Cart, and Allerton Park Solar Charging Station.

This message is a request for reallocation of the funding that SSC has allocated last year to the aforementioned projects which promote campus sustainability in line with Ilinois Climate Action Plan (iCAP). Further studying of the project objectives and meeting with the partners has allowed us to redefine the projects and their priority. We have decided that reallocation of the budget for the solar charging station at College of Fine and Applied Arts towards the solar chaging station project at Allerton Park would net in more efficient allocation of our time and budget. The next paragraphs present the points and ideas behind our argument.

The first and foremost reason behind reallocation of the budget is the limitation in the remaining time for designing, approval, and installation for FAA Solar charging station, where numerous stakeholders and regulations make the project viability difficult. Over the last few weeks, we have met with various stakeholders partly responsible for the development of a solar charging station for the FAA IT department. From that meeting, we gathered that there are many campus sub-committees such as the Architecture review committee, Facilities and Services, Parking Department, as well as contracting an independent engineering consulting firm, et cetera with varying degrees of design review process. It is necessary to get an approval from each of these committes prior to installation of a solar panel structure we have planned for Archietecture Studio building. In addition, there are going to be additional cost incurred from the design review processes; while the cost for this process is not concrete, it is expected to be a significant amount-- especially due to the involvement of external consulting firms.

With Allerton Park however, its relative soverignity in decision making would allow faster design review and installation. Derek Peterson, Director of Operations at Allerton Park has already reviewed and provided a verbal authorization for instllation of the proposed solar charging station. In addition, Allerton Park already employs seasonal professional contractors who are experienced in instllation of various structures.

Furthermore, it was discovered that the project is currently grossly under budget and will need to apply for additional funding from the Student Sustainability Council. One of the bigger reasons is that students are not allowed to participate in the building process due to involvement of high-voltage direct current (DC) electricity and the resulting safety concerns. It was revealed to us this semester that professional electricians are strongly suggested and sometimes required for reviewing and installation phase of the project as without professional supervision the solar panel structure could be unstable and short-lasting. Last semester project did not consider this work hand cost into the variable; the previous estimate given to SSC only covered estimated hardware costs, with 10~15% of overhead for increased parts cost. To avoid the structure to become a potential danger to the constituencies on the heavily populated University of Illinois campus, significantly more funding would be needed for hiring the professionals for solar panel installation for FAA Solar charging station.

The reallocation of funding will reach the same goal as proposed in the original proposal from fall 2012. By placing more funding onto Allerton Park, we could install greater number of solar panels in Allerton Park. The amount of carbon emission into the environment from the university will be reduced, abiding by the goals of Illinois Climate Action Plan. Our ultimate objectives of reducing CO2 emission and promoting sustainability on campus will still be achieved.

The Funding Award and Acceptance Letter from SSC states that in order to remain eligible for the award, all funds must be spent by December 31, 2013. Since there is the possibility that ENG315- EV2 course that is currently responsible of the projects may not be offered in the Fall 2013 semester, there is a possibility that the funding awarded to FAA IT Solar Project in the amount of $9,723 may not be spent before December 31, 2013. To prevent ineligibility of this fund, we request that $9,723 be applied towards the Allerton Park Project to continue the project as planned for this semester.Having more funding allocated to the Allerton Park Project will improve the overall quality of the project by purchasing all the required parts in order to provide the required power output necessary to charge all six golf carts. Moreover, extra funding towards the Allerton Park Project will accelerate the project delivery time since the project implementation requires financial support as well.

Last but not least, Allerton Solar Project is an important project that can provide space for innovation and testing of new crops in a solar field. Specifically through the installation of solar panels on Allerton Park, Allerton Park can use the shade casted by the solar panel installations on researching plantations that could thrive without photosynthesis. The shade casted by the solar panels would be different from an ordinary lab environment in that the plants grown under the shade of the solar panels are under effects of actual climate conditions. An exemplary research subject could be about plants that grow under the shade of large trees. Through the reallocation of the funds from FAA Solar to Allerton Park project, more solar panels could be installed providing the benefits to community in the forms of reduction in CO2 emissions and increased space that could be used for research of plantations that grow in absence of solar energy.

**The funding breakdown and changes are as follows:**

SSC has awarded the following amount to each project as explained in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Project** | **Current Budget** | **Project Status** | **Proposed Budget** |
| FAA IT EV | $25,769\* | In progress | $25,769\* |
| FAA IT Solar | $9,723 | **Postponed** | **$0** |
| Allerton Park | $19,588 | In progress | **$29,311** |

*\* The financial needs of FAA IT EV Project are met.*

We look forward to SSC’s decision on our budget reallocation.

*Eng315- EV2 Team, Signed.*