# *Thank you for your commitment to green initiatives at the University of Illinois. One of the ongoing requirements listed in the terms of the funding agreement for your project is the submission of semesterly reports with key information about your project. In addition to this form, please provide additional financial documentation and/or progress photos if available.*

# *Please be as accurate as possible in describing the project (including possible setbacks or challenges in meeting the initial goals of the project). Not fully meeting your project's goals will not disqualify you from making future funding requests as long as your reports are as complete and accurate as possible. If you have any questions, please contact the Student Sustainability Committee, at* *sustainability-committee@illinois.edu**.*

**Project Name:** KCPA Theatre Lighting Upgrade

**Date of Report Submission:** 12/15/2017

**Project Purpose:**

The replacement of incandescent lighting in the audience chambers of each of the three major performance spaces in KCPA has a threefold purpose. Its primary purpose is to remove from service incandescent lighting that has been in place for nearly 50 years and is very energy inefficient. Beyond the energy efficiency issue is the efficiency of personnel who maintain the facility because of 1500 light bulbs in question that have to be changed frequently, plus the safety issues involved in accessing many of the ceilings that are 35 to 56 feet above the floor. With new LED lighting, lamps will require replacement only every several years. This is a marked improvement over the current weekly to monthly requirement, not to mention the decrease in energy consumption of the LED lamps over the incandescent lamps which are rated from 25 W to 500 W. The goal and the outcome are to increase energy efficiency, decrease labor requirements, and increase safety conditions. Three large audience spaces are involved in three distinctly separate parts of the building. The project could be split into as many as three separate projects for funding and installation purposes.

**Detailed Accounting of Expenditures to Date:**

This information will follow; awaiting information from the KCPA Accounting office. In summary, we can say that the $403,000.00 that was awarded for the project has been spent/obligated and supplemented with a $130,000.00 loan from the F&S Revolving Loan Fund and will be applied toward the third theatre lighting upgrade which will completed in summer 2018.

**Project Progress to Date:**

Great Hall LED Houselight install:

                All of the work was completed last summer.  All of the 39 overhead fixtures and all of the (c.1400) wall wash lamps were replaced with LED counterparts.  We were extremely pleased to see that the overall color temperature of the lighting remained warm and soft after the installation was completed.  We are also very happy with the dimming curve of the new LED sources.

                The energy savings for this room is the greatest between the three theatres being updated.  In the Great Hall we were able to reduce the energy consumption by 600 amps.  This is equivalent to 6 households, with the average electrical service being a 100 amp supply.

                An added benefit with the install is the reduction in ambient noise in the hall.  This was especially noticeable by our Audio Department during recording sessions.  This is because the previous Tungstun lamp filaments emitted a high pitched sound, especially while being dimmed or brought to a lower level than full.  This does not occur with the LED fixtures/lamps.

                The completion of the project has not only decreased energy consumption, reduced ambient noise, given us a much needed upgrade to our dimming/control system, but it has also given the Great Hall a new and more vibrant energy.  The new wall wash lamps spread the light further down the walls with helps to increase the ‘size’ of the room and at the same time giving it a more dramatic apearance.

Playhouse Theater LED Houselight install:

                All of the work has been completed and tested.  All of the new control equipment and LED House Lights are performing as expected.  I am very pleased once again with the quality of the House Lights.  The color temperature is excellent as well as the overall coverage.  The dimming curve is as expected, smooth and even.  Because we had to upgrade the control systems as well as installing the LED fixtures, we were able to make the space safer and much more user friendly.   Safety was improved by adding control switches at the major point of entry in to the backstage area.  This was accomplished by placing the switches near the ‘people’ doors located backstage right and backstage left.  Before this upgrade, you had to walk in to a dark space and find the light switch on the stage managers console.  Also, beforehand, there was only one switch that would accomplish this, now there are two and they are on identical positions near the ‘people’ doors.

                Another simple but very useful upgrade to the control system was the ‘tour light’ switch.  The Krannert Center does daily tours.  In the past, the tour operators would come into the Playhouse Front of House area, turn on the switch which turned on the House Lights.  After giving the tour, they would move on to another venue, and never come back and turn off the House Lights.  This meant that we could not control the House lights by any other means (lighting console) until that switch was deactivated.  At least twice a year a call was received a frantic call was received from a student before a show that the house lights were broken and they couldn’t turn them off.  This is now a situation of the past with the new control system.  One does not need to deactivate the current switch go gain control.  We were also able to add a number of lighting network access points to alleviate many problems we had with the older system.

                While the overall number of previous fixtures being replaced with LED fixtures is considerably fewer than the Great Hall, we still should see energy reduction.

Festival Theatre LED Houselight install:

                This project is still in the design process.  We did not have enough time this current summer to start/complete this theatre.  The Playhouse Theatre and Lobby install filled the summer months.

                The LED fixtures for the space have been purchased and are on site.  We have had a theatrical engineer in the space, and he has presented plans for the upgrade to the dimming system and the control of the LED fixtures.  This is the same contractor we have used on the Great Hall and the Playhouse projects who are becoming very familiar with our needs.

                The funding for this project is available next summer through a revolving loan with the University.  We plan to have the work done during the summer of 2018.  The system and final results will mirror the system and final results of the Playhouse Theatre.  Reduced energy consumption, improved dimming/control system, better end user accessibility, and still maintaining the needed quality and quantity of light for the space.

**Student Involvement and Outreach to Date:**

Students already benefit from the upgraded lighting systems in the Great Hall and the Playhouse Theatre in their academic worlds of study and performance in the spaces. Some students who are studying theatre have continuing opportunities to learn how to operate the updated lighting controls for the major spaces which they likely will experience after graduation in theatres around the world.

**Marketing and Promotion Efforts to Date:**

The Krannert Center communications team has begun and will continue to promote the completed project widely, using the Center’s established, effective communications infrastructure and working collaboratively with the Student Sustainability Committee to ensure best possible targeting and distribution. Over 30% of the tickets sold to Krannert Center events are sold to University of Illinois students, and every day over 600 students attend classes and/or work in the Center. University of Illinois faculty and staff represent another significant portion of the Center’s ticket-buyers and daily constituents. This combination of forces creates a highly desirable market for positive communications about the work of the Student Sustainability Committee.

In addition to standard recognition for the Student Sustainability Committee as a major supporter of Krannert Center, the project communications campaign will include:

• Ad in Krannert Center performance programs

4” x 3.25”; ad will be included in print programs distributed at over 125 performances throughout the year, reaching over 60,000 people annually

Copywriting and design cost covered by Krannert Center ($300 value)

Annual space/print cost $2,310

• Print ad in one issue of Krannert Center print newsletter

Mail distribution to 23,000 local/regional households

Copywriting and design cost covered by Krannert Center ($300 value)

Space/print cost per issue $2,500 value, for one issue

• Print signage/communications pieces at key locations within Krannert Center

Reaching hundreds of weekly visitors to the cafe, shop, and bar

Copywriting and design cost, and space placement value, covered by Krannert Center ($1,800 value)

Print production cost $1,200

• Ad on video screens in Krannert Center lobby

Exposure to hundreds of thousands of visitors annually

Item placed for one year

Copywriting and design cost, and space placement value, covered by Krannert Center ($3,000 value)

• Press release to local and regional media outlets (print, radio, online, and more)

Copywriting and distribution cost covered by Krannert Center ($300 value)

• News item on KrannertCenter.com

Approximately 20,000 sessions, and 15,000 users, per month

Item placed for one year

Copyrwiting and technical cost, and space placement value, covered by Krannert Center ($3,000 value)

• News item in two issues of weekly Krannert Center enewsletter

Sent to over 13,000 subscribers each week

Copyrwiting and technical cost, and space placement value, covered by Krannert Center ($3,000 value)

• Social media coverage by Krannert Center, linking across campus and community

Krannert Center has over 5,300 “likes” on Facebook and over 3,000 followers on Twitter, and regularly amplifies its reach through partnerships and creative collaborations

Copywriting, design, and placement value covered by Krannert Center ($3,000 value)

**Additional Comments:**

The staff of KCPA have contributed significantly to the coordination and installation efforts for the project which resulted in reduced overall cost for the university.