

February 2013

To Whom It May Concern,

I'm writing a letter of support for considering the Brandeis University Sustainable Energy Program for an AASHE STARS Innovation Credit. The program combines two key challenges – comprehensive deferred maintenance and energy efficiency program into a single holistic program that results in a significant investment in campus renewal while maximizing the financial return, reducing disruptions to the campus environment and engages the community. The program combines high ROI energy savings projects such as lighting efficiency upgrades and retro-commissioning, with lower-return deferred maintenance projects such as chiller and cooling tower replacements. The result is a combined program that addresses DM, reduces ongoing maintenance costs and achieves a return on investment of 10%.

Phase One of the program was commenced February 2012 and will be completed June 2013. The \$5.4 million program is expected to achieve a 10% return on investment and address \$3 million in deferred maintenance, with an expected energy savings are \$540,000/year. The work in this phase includes the following:

- Controls improvements to laboratory ventilation systems
- Replacing approximately 875 linear feet of steam line and 875 linear feet of condensate line.
- Installing new boiler system
- Two new chiller and cooling tower installations
- Retrocommissioning in science facilities and associated enhancements including:
- Replacing failed control valves
- Recommissioning building controls
- Variable frequency drive installations
- Kitchen hood controls and fan refurbishment
- Campus-wide communications, awareness and engagement
- Behavior change and building occupant awareness program targeting campus laboratory buildings

Non-energy benefits of the program include:

- Drainage with new steam lines to reduce future maintenance requirements
- New steam lines, condensate lines and manholes
- Enhanced zone temperature control
- Replaced numerous aged pieces of equipment (including several chillers and cooling towers)
- · Aesthetic improvements associated with restoration of steam line work and relocation of cooling tower

Combining long and short-term return on investment energy projects, in a program that also aligns with the campus deferred maintenance program and campus user awareness and engagement results in a holistic program that improves the campus learning, living and work environment, with reduced disruption to the campus community. The design and execution program results in savings from both execution, as well as long-term operating. This combined approach of maintaining a high quality campus environment, an engaged community, significant energy reductions and the resulting reduced carbon emissions, and the financial returns make this an excellent example of an innovative sustainability program that should be duplicated on other campuses.

Sincerely,

Bonny

Bonny C. Bentzin Director of Sustainability, GreenerU