McLaughlin Hall

Consultation Date: March 1, 2014

Building Contact:
Celia Hamman-Cueto *chcueto@berkeley.edu*
myPower Team: Erin Fenley: *fenley@berkeley.edu*
Rohini Rajgopal: *rrajgopal@berkeley.edu*
Additional Attendees: Simon Yang: *shuyu_y@berkeley.edu*
Diana Carriger: *dcarriger@berkeley.edu*

Background

McLaughlin Hall on the Northeast side of campus is home to many of the administrative offices of the Engineering department. No previous surveys have been conducted at this facility but a Pulse dashboard is available for the buildings.

McLaughlin Hall has expressed interest in wanting to find more ways to be green and has already made some efforts including creating a "McGreen" Team that addresses composting, hanging posters around the building and reminding people through email to turn off their monitors when leaving for the day.

The main concern for McLaughlin Hall is how to improve its energy usage, with maintenance problems (broken windows, inefficient light usage in hallways, lack of thermal control, questionable air quality), that may not be fixed relatively soon due to other issues. However, occupants have been making great efforts to save energy despite this issue.

The building is occupied by ~100 people on four different floors of administration offices and 2 classrooms. Generally people operate on normal business schedules, 8-5pm, 5 days of the week. When doing overtime work, most people work remotely rather than remain in the office. Work is also completed during the holidays but the staffing is small.

Lighting

Lights already have stickers to remind people to turn them off. There is a decent amount of access to natural light throughout the facility. Lights are turned off manually when rooms are unoccupied during the day and occupancy sensors have been installed for overhead lighting near the women's bathroom in the kitchenette only. The major problem with lighting is the over-lit hallways. The building could reduce the amount of energy used on these lights by potentially turning on every other light, instead of all at once, or by delamping.

Computers/Printers

All computers share a network printer and the copy machine uses energy-saving settings. Occupants may be using screen savers. Many people have 2 monitors at their desk so reminders to turn them off when not in use would be beneficial.

Kitchenette

The kitchen has one refrigerator/freezer, two microwaves, a dishwasher and a coffeemaker. The refrigerator is regularly used (all year round) and the dishwasher is run almost every night with a full load. The smaller appliances (microwaves and coffeemaker) are not used with power strips. The freezer is not defrosted regularly but remains frost-free. On top of the fridge there are many items (coffee urns etc.) that should be moved to get the most efficient energy usage from the refrigerator.

Thermal Comfort

The building occupants have very limited control over the temperature of the building.. The building tends to get very cold, especially in the winter. One factor contributing to this problem is the broken windows in the building that have not been fixed, due to asbestos issues. People then use space heaters during the winter or will use radiators to keep warm. Windows and doors aren't shut when HVAC is running. When it gets too hot, windows are opened (even in stairwells) and ceiling fans are turned on to regulate the temperature.

McLaughlin Hall
ENERGY SAVING RECOMMENDATIONS

Short Term:

Lighting

- ☐ **Continue to utilize natural light** as much as possible.
- ☐ **Turn off lights in office areas** when unoccupied. **Remind people!**
- ☐ **Diana will talk to Scott Shackleton abouthallway light reduction**

Computers/printers

- ☐ **Remember to turn monitors off** at the end of the day or when not in use for 15 minutes
- ☐ **Look into using smart energy saving power strips.**
- ☐ **Avoid screensavers** – they don't save energy on LCD monitors.
- ☐ **Consider purchasing** sensored powerstrips to turn off monitor energy usage when people are not at their desks.
- ☐ **Ensure energy saving settings are enabled on all machines**

Kitchenette

- ☐ **Unplug** appliances after use, or **put them on a power strip** and turn off the entire strip when done.
- ☐ **Place reminder stickers** conspicuously to remind occupants to unplug appliances when not in use.
- ☐ **Clear items from top of fridge** (prevents higher energy use to generate cold temperatures).
- ☐ **Turn off appliances** after hours.

Thermal Comfort

- ☐ **Consider** using the ceiling fans in the office when it is cold to push hot air down before using space heaters and radiators.
- ☐ **Continue to dress** in layers for the appropriate temperature.

Check out **McLaughlin Hall's Energy Dashboard** here: bit.ly/12pNoGz

Long Term:

- ☐ Keep stocked with stickers to prompt energy conservation. Visit the **myPower Resource Center in 192 Barrows**.
- ☐ **Contact (Scott)** to clean the ventilation system to improve indoor air quality and keep a record for future reference
- ☐ **Assign a person or motivate** occupants to manage the thermostats in the hallways to avoid excessive or unnecessary heating

Further Resources

- ☐ **Keep** stocked with stickers to prompt energy conservation. Visit the **myPower Resource Center in 192 Barrows**.
- ☐ Become a **Power Agent**: bit.ly/PowerAgents
- ☐ Report maintenance issues to **Physical Plant Campus Services** (PP-CS): 642-1032
- ☐ myPower **tips** available at: sustainability.berkeley.edu/mypower/take-action
- ☐ Contact Lin King at Campus Recycling & Refuse for details on bringing **composting** to your building: www.ocf.berkeley.edu/~recycle/