

## PWR

Attendees: Tim Stark, Rob McKim, Bill Rose (ECBS), Macie Sinn, Maddy Liberman, Sowmiya Raju, Neal Shannon, Julija Sakutyte

Date: 7 February 2019

Time: 5-6PM

1. Next Meeting:
  - a. 1 March 2019
    - i. iCAP 2020 renewal, Section 2, half.
    - ii. Student Research Update
    - iii. A. Finder iBUY update
    - iv. R. McKim Ethics training update
2. Bill Rose, ECBS SWATeam
  - a. Consultant/opinion on recommendation of motion sensor lights
    - i. Two types of motion sensors: movement and CO2 based
    - ii. The type of sensor varies based on room size:
      1. Large rooms typically are CO2 based.
        - a. This is common in public spaces (like auditoriums, museums, etc).
      2. Smaller spaces typically are motion-based.
        - a. Common in private and public spaces (conference rooms, hallways, bathrooms, laboratories, etc).
        - b. Standard method.
        - c. Not simple, but effective (as well as in F&S building standards).
          - i. They are extremely effective and show reduction in building conditioning by 25%.
    - iii. Two modes of introduction: Updated building standards and Retro-commissioning
      1. Retro-commissioning is used for older buildings which were built after the building standards were updated.
        - a. First-come, first-serve situation.
      2. All new buildings must adhere to the updated building standards.
    - iv. ECBS believes that the motion-sensor standards are fairly accurate, and the regulations are effective.
    - v. Building zoning is variable between buildings, and so motion sensor installation is highly variable.
    - vi. LED lights have drastically reduced the energy consumption.
    - vii. The motion sensor lighting is great, but the idea is to combat the culture tendency to leave lights on.
    - viii. Is a recommendation to encourage the installation of motion-sensor lighting feasible, desirable, and would ECBS like to collaborate with PWR on such a recommendation?

1. B. Rose will run it past the ECBS SWATeam, but he suspects that some members, particularly Karl Helmink, will feel that the strides made in this regard are sufficiently integrated into operations, and do not need to be called out
    - b. Would B. Rose be interested in consulting with PWR in order to promote the purchasing system to prefer environmentally sustainable options (Ex: LED lights, computer monitors?)
      - i. ECBS would love to collaborate on analyzing the current work that ECBS is undertaking, as well as considering areas which could be improved upon.
        1. One thing that ECBS is considering is looking into how ventilation could be improved, as there is remarkable potential for improvement on the sustainability front.
          - a. Most energy input into buildings goes into air conditioning, which depends on efficient ventilation.
            - i. More so than lighting.
    - c. Energy Performance Contracts
      - i. A company which improves building efficiency and makes profit based solely on the savings from utility bills could be looking into being the future of contract making on campus construction.
        1. ECBS recommended that the university input more funds into these kinds of contracts, but the university shied away from accepting precise budgeting numbers.
      - ii. These contracts would follow the standards, which includes the implementation of motion sensor lights.
    - d. Commentary (M. Liberman): While most people wouldn't mind turning off the lights, some people don't feel the authority to turn off the lights in common spaces (hallways, lounges, bathrooms even).
      - i. These spaces would be great targets for motion sensors.
      - ii. Retro-fitting is based on each individual building, not sweeping geographical areas.
3. iCAP 2020 Renewal
  - a. Noted in internal document.