

## **Environmental Issues Committee Meeting Minutes**

February 11, 2013, Noon to 1 pm

Century Room D

### **MEMBERS PRESENT**

- Alan Dickman – Environmental Sciences/Biology (chair)
- Peg Gearhart – Oregon Humanities Center
- Ellen Ingamells – student
- Andrew Louw - Office of Sustainability (ex officio)
- Meg Mattson – Academic affairs
- Erin Moore – Architecture
- Mark Reed – Geology
- Bitty Roy – Biology
- Fred Tepfer – Campus Planning and Real Estate
- Kristin White – student
- Louisa de Heer – Student Sustainability (ex officio)
- Steve Mital – Office of Sustainability (ex officio)
- Christine Thompson - Campus Planning and Real Estate (ex officio)

### **MEMBERS ABSENT**

- Doug Brooke – Environmental Health and Safety (ex officio)
- Nick Hughes – student

### **WELCOME, SELF-INTRODUCTIONS, AND REVIEW OF MINUTES**

Alan welcomed the committee and members introduced themselves. The committee approved the January minutes.

### **RANDY COLLINS – CPS OVERVIEW/UPDATE**

Randy Collins, the Central Power Station (CPS) Plant Manager provided a high-level overview of the CPS before the upgrades. He discussed the broad goals of the upgrade project (reliability and stability of power, as well as improved efficiency) and provided a high-level overview of the CPS upgrades. Andrew shared a summary graphic of these two plants models/processes. These upgrades were designed for a 40-year build-out of the UO main campus with space in the plan to increase the capacity of the system as the campus grows.

The new combustion turbine model generates all the University's heat as well as close to 100% of the University's electrical needs. It runs on natural gas with a diesel backup. The system can run up to 85% efficient. Although the combustion turbine generator can burn diesel fuel, this is not desirable and would only be used as a last resort backup. In an emergency scenario where natural gas was not available for the combustion turbine generator, the back-up diesel generators

can be brought online to supply heat to campus. The University currently has storage for 90,000 gallons of diesel. During cold snaps when energy demand is greatest, this would provide between 3 and 4 days of heat and power.

In relation to the option of a “flex-fuel” week (where the CPS would run on biofuel for a week) Randy explained that running the combustion turbine generator on biofuel is possible, but currently does not make economic sense and would be less reliable than using natural gas. This would also require a significant financial investment to recalibrate the combustion turbine generator and install storage and distribution for biofuels. Biofuel would have the same (or more severe) needs for in-the-ground storage as diesel and finding a reliable supply of biofuel is a concern.

Andrew and Steve are still unclear about how the GHG accounting for the new CPS will work, but they are working with Randy and Jeff Madsen to establish how the emissions will be counted. Because the UO is maintaining its long-standing relationship with EWEB, the University will continue to purchase electricity from (and now sell electricity to) the public utility. Randy and Steve both anticipate that the new CPS model will cause a shift in GHG emissions (most likely a net increase). Randy identified that there were opportunities for energy savings such as equipment and insulation upgrades to the west campus steam tunnel system. Along with energy pilot projects like solar hot-water heaters and ground source heat pump assists, these distribution system upgrades should be considered in the 2013 CAP update.

Randy fielded many questions from the committee. Louisa asked whether the design team had considered a hot water distribution system instead of steam. Randy said they had, but that was not feasible since the distribution system would need to be changed. Fred asked about the possibility of using a biogas fuel if that option because economically viable. Randy said it would, but this would require recalibrating the combustion turbine generator and a reliable supply of biogas. Mark expressed concerns about the environmental impact of biofuels.

## **EMU CARBON OFFSETS**

Steve updated the committee on the carbon credits purchased for offsetting the EMU GHG emissions (~550 MTCDE annually). The EIC got an extension from ASUO on the funding until Oregon-based credits became available. The registry-retired offsets were purchased from climate trust (for approximately \$13 per MTCDE) and will go to a biodigester project in at Misty Meadows Farm in Tillamook.

## **NEXT MEETING**

The March meeting will take place on Monday March 11<sup>th</sup> from noon til 1pm in the Century D room.