

CATF Energy Workgroup

Meeting Minutes

January 21, 2009

Present: Mehdi Anwar, John Bennett, Doug Cooper, Rachelle Howard, Philip Lang, Lee Langston, Stephanie Marks, Benjamin Maycock, Rich Miller, Dennison Nash, Stanley Nolan, Mike Pacholski, Meghan Ruta, George Sabo, Jennifer Sayers, Lisa Sarubbi, Frank Simao, Tom Trahan, Stefan Wawzyniecki

Next meeting: February 11, 2009, 10:30a-12p, Conference Room B, FacOps Building.

I. Welcome & Introductions

II. Discussion: Related Programs & Updates

1) CORE Energy Task Force

- a. Tom Callahan provided the group with an overview of the CORE Energy Task Force's efforts to-date. The PowerPoint presentation and matrix of ideas that were presented by the task force to the CORE were reviewed.
 - i. The focus with the CORE efforts is on reducing cost, especially within the short-term, but the effort is directly related to that of the CATF.
 - ii. The major goals of both groups are to (a) reduce demand/conservation and (b) increase efficiency.

2) Cogeneration Facility Updates

- a. The UConn cogeneration facility has been certified Class III green energy. Therefore, there may be an opportunity to sell the credits to generate money for implementing energy conservation/efficiency improvements. Credits are not regional credits, but rather CT-specific, and 25% of the revenue must be returned to the State of Connecticut. Approximately half of the month of December earned credits, and will provide a baseline estimate for future revenue generation potential of credit sales.
- b. Currently the facility does not operate at capacity. There may also be potential to sell the excess energy that can be generated by the facility back to the grid. However, there are issues here since the facility was constructed using money borrowed from UConn 2000 (publicly financed money). There are also questions about whether changes in the operating protocol may drive up emissions and decrease efficiency. For example, if we generate excess electricity for sale without consideration of the excess steam that will be generated, the facility will not be operating efficiently.

3) Utilities Master Plan

- a. An RFP will be sent out in about a month for the development of a campus utilities master plan. This would be a multiyear million dollar project to determine what utilities infrastructure needs to be replaced/upgraded and a strategy for doing so. The MP will address all campus utilities – water and sewer, steam, electricity, etc.

- b. There is some 'green' language included in the RFP, however there are also efforts underway to explore the feasibility of developing an Alternative Energy Master Plan, which would more comprehensively address opportunities for developing solar, wind, geothermal, biomass, and fuel cell energies on campus.

4) Infrastructural Improvements

- a. Several infrastructural improvement projects are underway including the steam trap maintenance program and the metering program.

5) Campus Renewable Energies Research

- a. Recently several new faculty members with research interests focusing on alternative and/or renewable energies were hired under the Eminent Faculty program, which is a public-private partnership with UTC Power, the Northeast Utilities Foundation and Fuel Cell Energy. The Eminent Faculty program is designed to promote economic development and help build the industry's future energy workforce.
 - i. Dr. Anwar noted that we can get Clean Energy Funds if we emphasize that we will be training the workforce and the students through our efforts. We should also be emphasizing town partnerships, such as the Parnas, *et al.* biodiesel partnership with Mansfield and Tolland.
 - ii. Dr. Anwar also noted that both solar and fuel cell projects have significant momentum and potential funding at the moment.
 - iii. If we connect energy and water we can also gain additional funds through opportunities such as NSF grants. UConn is in a unique position to do so since we are both our own water and energy provider.
 - 1. The Office of Naval research has also approached the university to use the campus as a test site for research.
 - 2. It was noted that there is a plan to try to use the effluent from the wastewater plant for the cooling needs of the cogeneration facility.
- b. Additional programs on campus include the Biofuels Consortium, which is currently exploring opportunities for significant expansion, and the Connecticut Global Fuel Cell Center.

6) Education & Outreach Efforts

- a. Jenny Sayers, Sustainability Coordinator, provided the group with an overview of existing outreach efforts.
 - i. Student education and outreach -- the EcoMadness Residence Hall competition, CFL giveaways, and the Stop-the-Drop campaign (water conservation)
 - ii. Staff and faculty outreach -- the Sustainable Office Guidelines and associated training and assessment workshops
 - iii. Future goals: expand energy conservation outreach efforts on campus, and develop a trial program to determine the most effective methods for each audience (e.g. students, faculty, staff).
 - 1. Fume hoods and lighting are logical starting points.

III. 2007 Preliminary Inventory Results

- Meghan Ruta provided a brief overview of the preliminary 2007 inventory results.
- In general, energy use accounts for 90% of the total emissions.
 - The Cogeneration facility generates approximately 91,512 MTCO₂e* or 45% of the inventory.
 - Stationary sources (e.g. boilers) account for another 69,360 or 36% of the inventory.
 - Purchased electricity accounted for 6% or 11,121 MTCO₂e.

*MTCO₂e = Metric Tonnes of CO₂ equivalents

IV. Moving Forward: Prioritization Strategy?

A survey to prioritize the proposed strategies based upon emissions reductions potential will be distributed at the next meeting.

