University Sustainability Council

Meeting Summary

December 3, 2009

Attendees
Ann Wylie, Vice President for Administrative Affairs (Chair)
Sally Koblinsky, Assistant President and Chief of Staff
Linda Clement, Vice President for Student Affairs
Mahlon Straszheim, Associate Provost, Academic Affairs
John Farley, Assistant Vice President for Administrative Affairs
Chris Arkell, Associate Director, OIT
Scott Lupin, Associate Director, Environmental Safety and Office of Sustainability
Joan Kowal, Energy Manager, Facilities Management
Matthias Ruth, Professor, Public Policy, and Director, Center for Integrative Environmental Research
Allen Davis, Professor, Civil and Environmental Engineering
Bruce James, Professor and Director, Environmental Science and Policy
Karen Lips, Associate Professor, Biology
Ramy Serour, Graduate Student, Marine-Estuarine Environmental Sciences

Meeting Overview
The focus of the meeting was campus energy use. The meeting began with a 30-minute tour led by Facilities Management (FM) of lighting retrofits in hallways and offices within the Mitchell Building and classrooms in the Armory (see attached). The remainder of the meeting was spent discussing FM proposed endorsements related to energy consumption in buildings, including a campus lighting standard, a campus policy on building temperatures, and issues associated with personal space heater use.

Proposed Council Endorsement Protocol
The Chair proposed that the Council discuss issues (such as the proposed energy-related endorsements) and if appropriate, consider them for tentative endorsement during the meeting. She suggested a two meeting approval process whereby the members would have an opportunity to take any initial endorsements back to their colleagues/constituents for further discussion and consideration. Final endorsement would not occur until the second meeting, pending resolution of any issues raised by absent members and/or from discussions with colleagues/constituents. Members were supportive of this proposal.

Discussion of FM-Proposed Energy Endorsements

Campus Lighting Standard for New Construction and Renovations
As a first item, the Council discussed the lighting standards outlined in the FM Endorsements document, which it had observed firsthand in the Mitchell Building and Armory. Members were generally supportive of what they had viewed on the tour, noting that the lighting was aesthetically pleasing as well as energy efficient. It was pointed out that for classrooms that are not as well lit or in greater need of renovation, the standard would be an improvement but for state of the art classrooms with complex lighting systems (ability to dim for presentations and architectural lighting for aesthetics), the standard
could be perceived as a downgrade, begging the question as to whether certain campus settings would be exempt from the lighting standard. It was explained that there is a difference between flexibility (ability to dim lights in certain portions of a classroom) and functionality, and in many cases, it was possible to have both energy efficiency and aesthetically pleasing and flexible lighting.

It was suggested that the lighting standard would need to allow for exceptions and that a policy for granting exceptions would need to be developed. It was noted that building occupants should not be allowed to subvert the standard by bringing in additional lighting (particularly incandescent task lighting) and this would need to be addressed. As a final comment, a member suggested that any resulting campus standards be written into the Design Criteria Facilities Standards (DCFS). The Chair asked for a motion on the FM proposed standard recommended by the Illuminating Engineering Society of North America (IESNA) and an endorsement of the proposed lighting standard passed by a unanimous vote. See the attached document for the full text of the preliminary endorsement.

**Campus Policy on Building Temperature and Space Heaters**

Members were reminded of the November 5 presentation by Facilities Management about the challenges associated with heating and cooling older buildings, so any temperature policy would hold the caveat of “where and to the extent that it can be controlled.” It was explained that the proposed 68 to 78°F temperature range is a generally accepted zone of comfort, recognizing that there is wide variability in individual temperature preference. While lower temperatures in winter and higher temperatures in summer are generally associated with energy conservation, in campus buildings, due to factors such as electric reheats (where dehumidified air is HEATED in summer to bring it back up to a comfortable ambient indoor air temperature), this is not always the case.

The point of the temperature policy is not to mandate the upper and lower bounds, but rather to provide a range where campus community members should be comfortable. In fact, some spaces would have to be at the higher or lower end of the range (depending on the season) to ensure that all spaces on the same thermostat fall within the temperature range. One member noted that providing a higher winter temperature (e.g., 71°F instead of 68°F) would actually be more energy efficient if it discouraged the use of space heaters.

Members discussed how space heaters are a common response to thermal discomfort, but they have a number of important drawbacks including inefficiency, masking HVAC problems within a building, blowing fuses, and increasing the risk of fire. Per the FM proposed endorsement, it was suggested that the campus prohibit personal space heaters. If the temperature in a work space is outside the range of 68 to 78°F during business hours, then the occupant should apply to FM for an HVAC adjustment to bring the temperature between 68 and 78°F. If the temperature cannot be brought between 68 and 78°F during business hours, then an FM approved and tagged space heater would be issued. Members noted concerns with prohibiting personal space heaters such as after-hours building use and the seasonal changeover periods, particularly in the fall when buildings may be unheated for several days.

It was suggested that mini-refrigerators, like space heaters, are an example where individual preferences circumvent energy efficiency and conservation efforts. It was noted, however, that for a number of reasons such as building layout and use, the issues surrounding mini-fridges are distinct from space heaters. The issue of mini-fridges was tabled until a future meeting. Joan Kowal was asked to draft proposed space heater and temperature endorsements for Council consideration at a subsequent meeting.
Other Reports

- **Faculty Perspectives on After Hours Building Access** – Dr. James provided a brief update regarding student presentations he attended for the Honors English 393 class that is looking into after-hours building access and energy use as part of a technical writing course. He noted that student presentations would continue on December 7 and 9 and that the students would be compiling a summary report covering their findings for the 7 academic buildings for the Council in January 2010. He encouraged Council members to attend the remaining presentations, noting the opportunity for the Council to learn from the students’ thorough and professional work.

- **Documents** – Two documents were distributed in hard copy by the Chair, both related to a National Research Council Report chaired by Maryland faculty member Maureen Cropper, entitled *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use*. [Hard copies were sent to absent Council members by campus mail.]

Next Steps

The next Council meeting will take place on February 4, 2010 and will focus on continuing the dialogue on the FM energy endorsements, transportation, and the renovation of the old journalism building. David Allen, Director of the Department of Transportation Services will discuss how DOTS is working to implement the campus Climate Action Plan, including transportation demand management and planning, how DOTS determines where members of the campus community live, and how best to provide low carbon transportation options to meet commuter needs. Carlo Colella, Director of Capital Projects, will discuss plans for making the renovation of the old journalism building a model for green renovation on campus and within the State of Maryland.