"Additional Material in Support of a Comprehensive Energy Planning Document" Compiled by Bill Rose from team comments

- 1. Campus Master Planning provides the roadmap for the campus, a "long-term guide for campus growth...that allows administrators to make informed, coordinated and cost-effective decisions." The Utilities Master Plan (2015) (UMP) is the master planning document which relates directly to energy use on campus. While acknowledging the iCAP goals, this document shows that under each scenario studied, the campus will use more greenhouse-gas producing fossil fuels in 2050 than are used at the time of the writing of the report. If the administration fails to include meeting the iCAP energy goal into the master planning process, then iCAP and the campus community must conclude that the university will follow through on its plan to increase production of GHG in 2050 compared to 2015.
- 2. The UMP was commissioned to address energy production for the campus, and not energy consumption. It strongly recommended that the university adopt conservation strategies. Some conservation strategies lie within the purview of Facilities and Service, such as making improvements to building equipment and to building envelopes. Other conservation strategies rely upon incentives to colleges and departments, and to behavior of the campus community. For this reason, this Energy Recommendation must be addressed not only to F&S but also to the Office of the Provost of the University.
- 3. The cost of producing a Comprehensive Energy Plan under this recommendation may be in six figures. This amount would be consistent with similar reports such as the UMP. This 2015 report may serve as a guide regarding quality and depth, but with an expanded scope. Reports to be included in the Campus Master Planning process should not be expected to be commissioned on a shoestring. As described in 2 above, the source of funds to produce the report should not lie solely within F&S.
- 4. The Energy Team is prepared to assist in developing a scope for the Comprehensive Energy Plan. This would include several scenarios that find different balance points between conservation and green generation. It would include study of nuclear as an energy source, while noting difficulties—technical and social—with that adoption. It would include a study of the environmental impacts of various scenarios. It would address abandonment of the district steam system currently in use.
- 5. The Comprehensive Energy Plan will provide costs to the university for achieving the iCAP Energy Goal. It will be important for the university to face these costs head-on. We may note that the *UMP* estimated the cost of swapping district steam for district hot water at \$250M, and this does not include the costs at individual buildings.
- 6. The Energy Team assigns a very high priority to having this recommendation advance through the ICAP process. We recognize that the cost of meeting the goal will seem daunting to say the least. The university owes it to iCAP, and to the campus community, at this point to renew its commitment to iCAP Energy goal, or to make a public acknowledgement if resources to this end cannot begin to be assigned to meeting the goal.