

Executive Summary

In the Proposal of AE Senior Thesis Study for 2006, the topics of study as well as the method to their investigation will be discussed. The topics of breadth work will also be discussed.

The bulk of the work will be on changing the mechanical systems of the MOB from all electric packaged electric air handlers and terminal electric reheat to a more efficient system utilizing steam and chilled water from the nearby central plant. In addition to this, the MOB will also be evaluated for use of a DOAS system in the hopes of cutting down on first cost and operating costs.

The breadth work for the MOB consists of a constructability study and an electrical integration study. The constructability study will determine the added cost and schedule impact of connecting the MOB to the central plant. The electrical study will access any possible savings in equipment costs from removing the electrical equipment associated with the current all electric HVAC equipment.