Breadth Topics

Electrical

Implementing a CHP system will reduce the loads for chillers. CHP will utilize absorption chillers to cool the building which run off the waste heat and not electrical power. Implementing a CHP system will also have electrical implications because the building would be generating its own electricity. Enough power must be supplied to the equipment as well as the data center in the DMA Building. Emergency power must also be accounted for to ensure non-stop operation of the building. An electrical analysis will be done and compared to the current design to make sure that all the necessary loads are met.

Acoustical

Acoustics can play a big part in building design when CHP is being considered. CHP prime movers such as turbines are very noisy. Acoustical considerations must be accounted for when designing this type of system. Spaces adjacent to the plant as well as above and below must be designed to reasonable operating levels. Noise levels from equipment must be isolated from the conference rooms and television studios. An acoustical study on the mechanical rooms with CHP equipment will be done on the DMA Building to make sure acceptable noise levels are achieved.