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(MCCCH), Rockville, MD

10.0 Summary / Conclusions / Final Recommendations



10.0 <u>Summary / Conclusions / Final Recommendations:</u>

In summary, regarding MCCCH's mechanical and electrical redesigns, the best alternative for the building's central chilling plant turned out to be the York manufactured, electric driven, centrifugal plant. This plant had the lowest lifecycle cost of all of the redesigns, even with its added amount of electrical work/costs. The ice storage mechanical redesign did have a lower annual operating cost but, its yearly savings were not enough to offset the system's very high first costs (the on-peak demand charges by the electric utility were not high enough to justify the extra expense of the ice storage). Furthermore, MCCCH is not a 'mission critical building'. If the grid where to go down and the building did not have cooling for a small amount of time, it would not be a huge deal. There would be no chance of losing major data. The building operation may be affected but it would not have to be ceased. So, here again, the ice storage system was not justified. Therefore, the recommendation for MCCCH would be to incorporate the York manufactured, electric driven, centrifugal type of central cooling plant. (All final design drawings can be found in Appendix G.)

Other recommendations for MCCCH would be to consider changing the incandescent lighting system to compact fluorescent lighting. Even if only the grand ballroom was changed out, great amounts of money could be saved.

Finally, Short Interval Production Scheduling for MCCCH's hotel proved to be extremely successful. Very large amounts of money could be saved in construction costs by using the technique. Therefore, it would be worth looking into applying these methods.