**Meeting Minutes 9/29/2014**

* Met with Dr. Faruque and Jim at the FSU utilities building
* Discussed research progress
* Talked about information sent to us by Jim
  + CW = Chilled Water
  + Use ton/hours of chilled water to determine the amount of cooling that a building needs rather than kW/hr
* City of Tallahassee is raising electricity cost 1.7% in order to raise more income for budget
  + Highlights the need for a system using demand-side management
* Talked about replacing LED’s with fluorescent bulbs
  + LED’s have higher Lumens/Watt
  + Fluorescent bulbs run by FSU currently last for 40-50,000 hours,
  + FSU uses 25 Watt Fluorescent tubes.
  + Cost/tube ~ $5.00 per bulb
  + Jim suggested we don’t look at high-lumen LED bulbs – they are still very expensive, and getting cheaper.
  + Also look at the cost of replacing the lamp itself – fluorescent ballasts last ~ 10-12 years running nonstop, LED lamps might last ~5 years nonstop.
  + Ballasts have 3 bulbs, so when fully on use 75W, however normally only have 1-2 on in a room
* Team should make a list to determine what percentage of load is lighting, HVAC, critical loads.
* Think about developing an algorithm for developing a MATLAB program to test algorithm for managing loads
* Jim said water pump specifications should be on drawings.
* Think about different potential states to determine demand – occupied, unoccupied, occupied with unexpected load for dsm program.
* Think about using CO2 sensors to try and determine how many people are in a building.
* Try to treat different spaces in a building differently
* When determining whether a technology is worth it, look at expected energy savings \*7 to determine cost you can spend to implement
* Demand-Side management doesn’t necessarily reduce energy, just reduce cost by shaving peaks and filling valleys – using more electricity when electricity is cheap can reduce cost