CHP Convention

* 1/3 of fuel converted to electricity at a coal plant 34% efficient
* 66% of energy wasted
* US wasted energy is greater than the national energy use of 213 countries
* 70-85% efficient from CHP

Utilities master plan

* Breakdown of chiller plant capacity:

“Seven chillers with a combined capacity of 27,630 ton are located at the Oak Street Chiller Plant, seven chillers with a combined capacity of 9,400 ton are located at the North Campus Chiller Plant, four chillers with a combined capacity of 4,340 ton are located at the Library Chiller Plant, two chillers with a combined capacity of 2,000 ton are located at the Animal Science Chiller Plant, three chillers are located at the Chem Life Science Chiller Plant with a combined capacity of 3,630 ton, and five chillers are installed at the Veterinary Medicine Chiller Plant with a combined capacity of 3,200 ton. The TES tank is 6.5 million gallons, which provides 50,000 ton-hours of daily cooling capacity”

* Peak cooling load was 30,948 ton in 2012
* 23 miles of piping for chillers
* Oldest 1993, newest 2012
* Total capacity 51700 tons
* run in either a fixed flow output mode or a differential pressure mode to satisfy campus building loads
* Oak Street Chiller Plant - Physical Plant Services Building (PPSB), future connection to Housing Food Stores.
* North Campus Chiller Plant - Microelectronics Laboratory, Beckman Institute, Computer and Systems Research Laboratory, Civil Engineering Hydrosystems Laboratory, Newmark Civil Engineering Building, Digital Computer Laboratory, future Electrical and Computer Engineering Laboratory.
* Library Air Conditioning Center - Main Library
* Chem Life Sciences Plant - Chem Life Science Building
* Animal Sciences Plant - Animal Sciences Building, Madigan Laboratory, Turner Hall, ACES Library
* Vet med not connected to central loop
* Oak has steam turbines that use steam from abbott
* Water out 40F back 56F in summer 44F in winter

Grant was control of program might have original list

Complaints about low flow fixtures

Some low flow sinks have been removed because of not enough hot water

Dual flush several places like arc and cerce

Low flow urinals installed but have some problems

Removed domestic water booster pumps out

Bottle filling stations help decrease plastic waste but increase potable water use

Liam filbern in charge of refrigeration

Work orders might start with the switch to AIM

Send link to mark warner help him catch up

Send morgan a list of availability for march week of the 10th

Look at BIF plumbing pdf to find if it has info on low flow

Create list of questions about chiller plant and the whole project to Kent directors of utilities