

1. Boiler plant tuning and optimization. Gary Rogers and Mike Hillenbrand have created boiler optimization sheets to be hung in all the boiler rooms so we have agreed upon operation of the boilers in different seasons. Gary Rogers also performed stack efficiency testing on the boilers and provided that data to John Cross.

2. Chiller optimization and trouble shooting. Rick Berrios and Matt Wilson have worked with John Cross's team to trouble shoot some of the chiller operation and we were able to get the chilled water loop pumps off this winter (as they aren't necessary to run in the winter). Matt Wilson will be onsite in the spring to assist with chiller start up and help get the district ready for the cooling season.

3. Spring Glenn - Mike Hillenbrand rezoned and programmed Spring Glenn to be able to control more zones and areas.

4. EF and manual setback of equipment not on automation/controls - Michelle Sewell and Matt Stellar have worked with Paul to identify equipment not on controls and needing manual daily setback. Many of the Exhaust Fans aren't on controls and Paul has worked with the custodians to manage these daily.

5. Dunbar Controls - Josh Kempself

a. Paul and Kenny wanted to zone out this ES to smaller zones a one classroom would be occupied for after school activities but would occupy the whole school. Working with Kenny and Paul we broke the ES school into 3 smaller zones allowing just one zone to be occupied for after school activities. We added programming to achieve this and corrected the graphics on the AX platform so Kenny can access the scheduling.

6. Middle School Controls – Josh Kempself

a. The middle school is on the new Tridium platform N4. This is not a overlay like Dunbar and has Distech Controls and true tridium setup. This means that programming and interfacing is very different, as we approached the zoning for this building, we realized that the Schedules are hosted on the Supervisor station. We were not able to access the controller GFX code to determine how these schedules are received to each unit. We will have to do a deeper dive into the GFX code (also need to get the programming to view this code) to determine how the schedules function currently then work on zoning out this building.

7. Standby Mode Programming – Josh Kempself

a. One ongoing back and forth that Kenny has with Cenergistic is the unoccupied complaints that the cleaning staff has. The cleaning staff sees the thermostats set to 60 degs and complains about it being cold in the spaces while they clean. We looked at space temp trend for several areas, these trends showed spaces holding temps until 7pm of which the lowest temp the spaces get to be is 63 degs. Working with Kenny we implemented a standby mode schedule. Remapping the Occupied point from a on/off point to a Enum (0=occupied, 1=unoccupied, 2=bypass, 3=standby) schedule point we then relinked all the units to this schedule. We setup a standby schedule to operate until 7pm and maintain a setpoint of 65 degs, after 7pm the building will go into unoccupied mode. This should cut down on the comfort complaints from the cleaning staff. Programmed the site to better optimize and gave Kenny a backup so the work wouldn't be lost.

8. Measurement and Verification - Kent Hess, Shannon Smith and Matt Stellar have worked with Paul in ECAP and GreenX to get all the utility bills and proper adjustments (like the fuel cell going offline) into ECAP to provide program impact and correct cost avoidance.

9. Moisture Management – Our team has worked with John’s team to create recommendations for moisture management using data loggers to ensure there is a heat load in the space over the summer. The main area for concern is Westwoods.

10. Assisted in creating a more formal filter and coil cleaning program. Paul checks units during his weekly audits to ensure that compliance is being upheld. We had found that some filters had not been changed for over a year and were impacting equipment performance.

Monthly Summary

	2020		
	Cost Avoid \$	Cost Avoid %	* Total \$
Jan	38,329	18.8	38,329
Feb	29,490	15.6	29,490
Mar	31,781	23.0	31,781
Apr	32,193	27.9	32,193
May	54,915	42.8	54,915
Jun	84,408	48.1	84,408
Jul	104,677	44.2	104,677
Aug	54,232	27.0	54,232
Total	430,025	31.0	430,025

* The Total \$ column is the sum of Cost Avoidance Savings and Other Savings.

Energy Summary

	Use				Cost				
	BATCC	Actual	Avoid	Avoid %	BATCC	Actual	Avoid	Avoid %	Total Savings \$
Electric (KWH)	6,856,258	4,408,609	2,447,649	35.7	1,163,903	770,163	393,739	33.8	393,739
Natural Gas (CCF)	272,554	201,712	70,842	26.0	205,548	169,263	36,286	17.7	36,286
Lighting (KWH)	54,581	54,581	0	0.0	18,141	18,141	0	0.0	0
Total (KBTU)	51,652,845	36,004,721	15,648,124	30.3	1,387,592	957,567	430,025	31.0	430,025

Requested by: shaylasox

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Filters: Billing Period Between Jan 2020 and Aug 2020; ; ; Account is Active Equals 1;