

Committee minutes

Facilities Committee	•			
9.12.2016		6:00 PM		District Office Break Room
Meeting called by	Ted Ammann			
Type of meeting	Monthly Meeting			
Facilitator	Marcin Michalski			
Attendees	Mike Hartsky, Rob Johnson , Marcin Michalski., Ted Ammann			
Public Comment				
Discussion	There was no public comment			
Approval of Minutes				
Approval of minutes	August minutes were approved.			
Major Capital Improvement Phase 1, 2, 3 Update				
Update	Marcin reviewed the status of all active projects and a summary of a tentative agreement regarding the Cooke panels. Marcin also scheduled a tour of major cap projects for October 12 at 1pm for anyone who is able to attend during the day. Please RSVP to Marcin if you will be attending. The tour will begin at Stanton Middle School at the facilities office on the side of the building.			
	Change Order reports were approved.			
ESCO Update				
	contract which en the reasons that work on for the co discussed the ext	nded in June. We achieved we did not meet 100% of t oming year is freeze protec	80% of our estimated the projected saving. ction settings and the akes place after hours	ummary of the first year of the ESCO d savings. The group discussed some of The main examples that the team will after hours schedule. The group s and over the summer and will continue scheduling.
Next meeting				
		district calendar. Octobe		ch month schedule unless there are rd Room (October 10 th is a scheduled

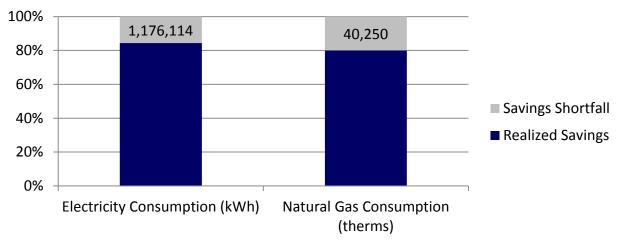


RED CLAY CONSOLIDATED SCHOOL DISTRICT ENERGY SAVINGS PERFORMANCE CONTRACT YEAR ONE RECONCILIATION HIGHLIGHTS

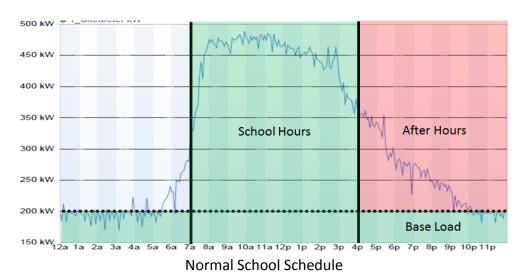
BOTTOM LINE: The Energy Conservation Measures are working. Operation of schools outside specified parameters (schedule & setpoint) have limited actual energy savings values to approximately 80% of the expected values.

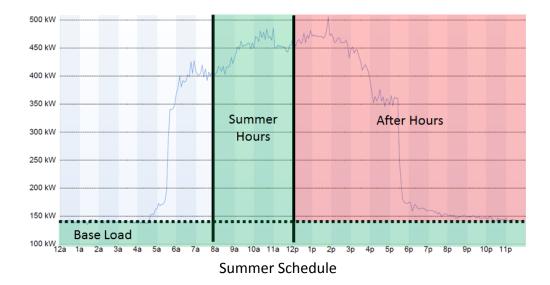
BACKGROUND:

1. <u>District Energy Savings Performance June 2015 – May 2016</u>: The following graph summarizes how the much energy the district saved compared to expectation.



2. <u>After Hours Electrical Consumption</u>: Facility use after hours is the number one cause of additional electrical energy consumption. Our analysis of 15 of the 25 schools showed an additional 1,613,996 kWh after hours consumption. The graphs below demonstrate the impact of afterhours scheduling during the school year and summer schedules.





- 3. <u>Condensing Boilers:</u> Hot water loop temperature set points above condensing levels (120F typical) prevents boilers from operating in condensing mode which increases consumption.
- 4. <u>Freeze Protection Outside Air Temp < 40 degree</u>: The practice of activating the hot water system and running hot water through all the equipment whenever the outside air temperature falls below 40 degrees increases natural gas consumption. In many cases classrooms maintain temperatures around 65 degrees due to the heat radiated and convected off the hot water coils in the Unit Ventilators. An evaluation of 11 of the 25 schools has shown an increased consumption of 20,109 therms.

DISCUSSION:

Once the adjustments for the McKean High School culinary arts kitchen are included and the remaining schools are evaluated for the increased natural gas consumption associated with the current freeze protection approach, we expect the numbers to show that the Energy Conservation Measures did achieve the energy savings expected.

RECOMMENDATIONS:

- 1. Double up on efforts to control facility schedules and restrict occupied hours to the minimum required to accomplish your mission.
- 2. Consider altering your freeze protection approach.
- 3. Continue to make equipment maintenance a high priority. Properly maintained equipment generally has better energy performance. Even a small reduction per unit can have a large impact when multiplied across the whole district.