

Energy Conservation Project Update – December 2017

PROJECT INFORMATION:

ENERGY CONSERVATION MEASURE	LOCATION	CONTRACTOR
Kitchen Hood Controls	Donovan Dining Hall	Air Solutions & Balancing, B. Baptista Electric
Roof Top Unit Replacement	Donovan Dining Hall	NexGen Mechanical
Heat Recovery Unit Repair	Pennfield Hall	NexGen Mechanical
Transformer Replacement	Pennfield Hall	Complete Energy Solutions, B. Baptista Electric
Energy Management System	Campus Wide	Siemens

AMERESCO PM

Chris Guccione

OBSEVATIONS:

- *New kitchen hood ventilation controls and variable frequency drives have been installed at Donovan Dining Hall. The new controls and VFDs will lower energy use by allowing fans to operate at variable speeds, rather than 100%.*
- *New energy efficient fridge/freezer condensers have been installed at Donovan Dining Hall.*
- *All 6 heat recovery units at Pennfield Hall have been refurbished.*
- *6 new energy efficient transformers have been installed at Pennfield Hall.*
- *New environmental control systems installed at the Murray Center.*

Energy Savings Totals

ECM	Annual Savings per ECM					
	Electricity (kWh)	Natural Gas (Therms)	Propane (Gallons)	#2 Fuel Oil (Gallons)	Water (kGallons)	Sewer (kGallons)
ECM4: EMS	320,642	56,295	0	8,944	0	0
ECM 5A: Central Plant Boiler Improvements	18,623	59,324	0	13,034	68	68
ECM 10: VFDs	50,309	0	0	0	0	0
ECM 14A: Water Conservation - Aerators Only	0	922	0	203	242	242
ECM 14B: Water Conservation	1,030	1,425	363	313	2,263	2,263
ECM 15: Weatherization	4,343	14,016	959	2,703	0	0
ECM 18: Vending Machine Controls	40,024	-740	-17	-160	0	0
ECM 24: Efficient Motors	5,653	0	0	0	0	0
ECM 25: Demand Control Ventilation	27,127	6,829	0	1,322	0	0
ECM 26: Transformer Replacement	130,912	0	0	0	0	0
ECM 27: WAC Timers	29,971	0	0	0	0	0
ECM 28: AHU/Rooftop Unit Replacement	3,972	222	0	0	0	0
ECM 40: Kitchen Hood Controls	60,731	14,688	0	3,227	0	0
ECM 41: Repair Heat Recovery Units	23,808	18,147	0	3,987	0	0
ECM 42: Underground Steam and Condensate Piping	0	10,238	0	2,249	536	536
Grand Total	717,144	181,367	1,306	35,821	3,110	3,110

Photos

Kitchen Hood Controls/Variable Frequency Drives - Donovan Dining Hall



Fridge/Freezer condensers – Donovan Dining Hall

- *Existing units as of November 2017*



- *New units as of December 2017*



Energy Efficient Transformers – Pennfield Hall

- Existing units as of November 2017



- New units as of December 2017



Filter replacement in Pennfield Heat Recovery Unit

