Auburn University at Montgomery Predicts $275k in Energy Savings from Wave PowerSteward

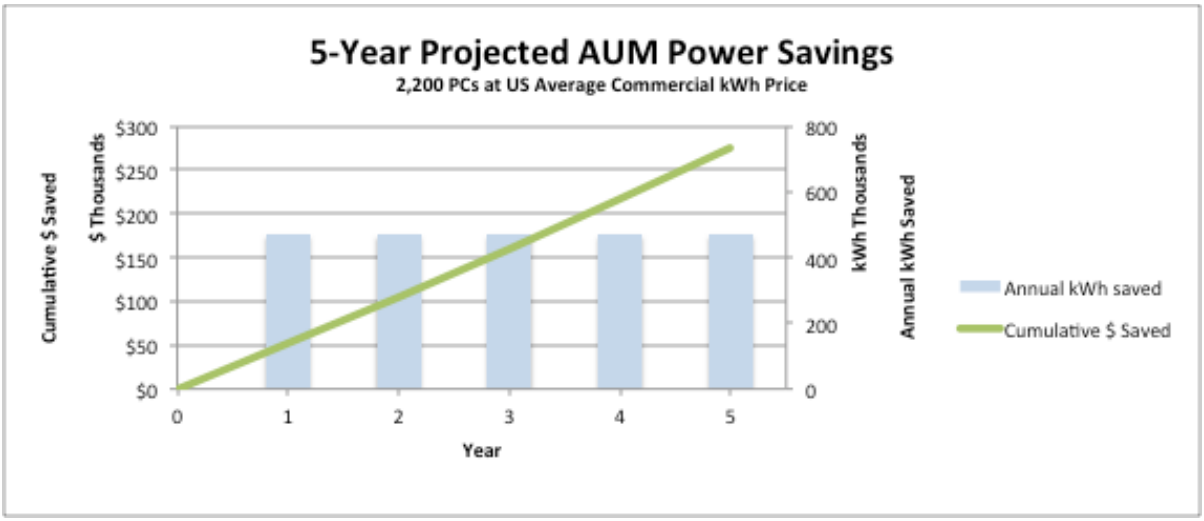
Background

Auburn University at Montgomery (AUM) has enacted a campus-wide energy management initiative to reduce its carbon footprint and decrease costs. AUM announced that the university "is committed to becoming a more responsible corporate citizen by integrating sustainability initiatives into all aspects of university activity to reduce AUM's negative impact on the environment." With over 2,200 computers on campus, the university administration called upon Wave PowerSteward to curtail energy consumption with its computer power management solution. By incorporating Wave PowerSteward technology, AUM strengthens its commitment to sustainability.

Solution

AUM participated in the Wave PowerSteward beta program to measure and reduce the overall energy consumption of its computers. The beta program consisted of Wave PowerSteward's power management technology installed on 74 computers in the Taylor Center Computer Lab. The study began with 3 weeks of baseline data before power management settings were applied. The three hardware sets (Dell, HP, Apple) present in the lab were profiled using Wave's Profiling Tool coupled with a Watts Up watt-meter. Each computer implemented with Wave PowerSteward then searched Wave's profile database for the closest hardware match, and began measuring its own electricity consumption. The computers send 10-minute increments of power management data to the server, allowing for a high level of detail and analysis regarding power consumption.

AUM Power Usage & Savings - Feb 2016	
Baseline Usage (kWh)	8,177
Usage with Wave PowerSteward (kWh)	3,569
Power Savings (kWh)	4,608
Monthly Savings per Computer (kWh)	17.8
Avg. Price per Commercial kWh in U.S. (EIA)	$0.109
Est. Annual Savings per Computer ($)	$23.36
Est. Annual Electricity Savings for AUM (2,200 PCs)	$51,400
Est. Annual Electricity Price Increase	3.50%



Results

Once Wave PowerSteward began its power saving mode, AUM quickly realized monthly savings of 17.8 kWh per computer, or 214 kWh per year. According to EIA, the average commercial price per kWh in the United States is 10.94 cents (September 2015). This data translates into an annual electricity savings of over $23 per computer.

With a patent-pending technology to profile the power consumption of customer hardware configurations, Wave PowerSteward is capable of measuring the electricity draw of each computer within 95% accuracy. After a baseline period, this technology allows Wave PowerSteward to offer innovative pricing based on the amount of energy saved.