Jefferson Currents: The Energy Conservation Newsletter

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Don’t let your house get “sun-burned”!
Cut your air conditioning load, reduce pollution, and fight your local “heat island” effect by planting leafy trees and vines around your home and installing reflective tiles on your roof and adequate insulation in your attic – which can reach temperatures of 115°F or higher! (Visit www.simplyinsulate.org for insulation information.)
And tired of coming home to a sweltering house on hot summer days? A programmable thermostat automatically coordinates indoor climates with your daily and weekend patterns, increasing home comfort and reducing energy waste. And you don’t have to “remember” to turn the air conditioner OFF when you won’t be home.

Electricity Bills Rising!
On campus, our monthly electric bill is based on how much electricity we use (kilowatthours) and also the highest rate of use throughout the month (kilowatts). This latter item is determined by measuring the highest rate of use in any 30 minutes throughout the month and it’s called peak demand. Unfortunately, PECO Energy’s demand costs are among the very highest in the country.
The “driver” behind peak demand is air-conditioning our buildings.
For the past few years, we have been obtaining electric generation and transmission from Sempra Energy, rather than our regulated utility, PECO Energy. As a result, we have been enjoying very low demand charges. Our contract with Sempra Energy has ended now, due to marketplace conditions, and we have returned to PECO Energy for generation and transmission services.
Our peak demand costs almost quadruple with this shift back to PECO Energy. Our usage costs, on the other hand, are halved. However, the overall impact here is not good, as our monthly bills will be rising dramatically.
Please, please — as you go through your workday, look around you for seemingly insignificant ways that we are hemorrhaging kilowatts. Anything that can be shut OFF, turned down, etc. without adverse risks to life, operations, patients or staff on hot, humid days during the summer is now a priority. If you have any questions about cutting demand, please contact me.

What’s Up?
Did you know that between 80% and 85% of the energy used to do the wash comes from heating the water? Use warm or cold water whenever possible. And are you aware that transportation accounts for 67% of the oil that we use in this country and that this oil is also more than we produce? Today our country imports 56% of its total oil supply and that this figure is anticipated to rise to 70% over the next two decades.
And has it registered that the single most common cause of poor operating efficiency using an air conditioning system is dirt build-up on the indoor coil? So clean it and save! It’s your money and your environment.

Energy Myths Debunked!
Energy Myth #6: It uses less energy to boil water if you start with hot water from the tap.
The Facts: It uses essentially the same amount of energy (and costs essentially the same amount of money) whether you use hot or cold water. If you use hot water, you’ve already paid to heat the water in the water heater.

Do the Philly Flip!
On the Home Front

It’s not that a new Energy Star-rated air conditioner is more expensive, it’s that you can’t afford the electricity to run that cheaper unit.

Over an air conditioner’s lifetime, only one-fourth of the total cost is for purchasing the unit. The greater cost — three-fourth’s of the total cost — is solely for the electricity to operate the air conditioner.

Cut your cooling costs for years to come — buy Energy Star-rated equipment. Replacing an old air conditioner with an Energy Star model will cut your costs about 20%.

Healing Our Environment

Our planet warms, ocean currents shift and the polar ice cap melts at an alarming rate. Yet, our use of energy increases unabated. Each citizen uses enough energy to release 50,000 pounds of carbon dioxide, the major contributor to global warming, annually. This issue of Currents and the 3 ensuing issues will each describe five steps that you can take to undo global warming. Take heed and act.

#1 Be informed about environmental issues. Keep track of candidates’ voting records and write or call to express concerns.
#2 Clean or replace air filters as recommended. Cleaning a dirty air conditioner filter can save 15% of the energy used.
#3 Wash clothes in cold water. Take the Tide cold water challenge (see our spring 2005 issue).
#4 Turn down your water heater thermostat; 120˚ F is usually hot enough.
#5 Don’t overheat or overcool rooms. Adjust your thermostat (lower in winter, higher in summer).

Bright Ideas

And the Winner Is...

John McMillian, Facilities Services Supervisor, is receiving his $100 reward from Randy Haines, Energy Manager, for his suggestion to repair steam valves on sterilizers and washers throughout the campus. His suggestion will save thousands of dollars per year in wasted steam especially on night and weekend shifts. If you operate steam equipment, don’t forget to shut it off when not in use. Our steam costs are very high due to high oil prices.

Don’t stop looking for ways to cut energy use around here. We need your input and are counting on you. We’re also counting out the bucks — don’t forget, we’ll be awarding a $100 bill to that person who submits the best idea for cutting energy use on campus.

The Future

Did you know that Pennsylvania passed an “Alternative Energy Bill” that requires that 18% of the electricity sold must come from renewable sources within 15 years?

Look around your area and observe operations, develop a good idea to lower energy use and then call me, Randy Haines at 503-6099 or email me at randolph.haines@jefferson.edu.

Savings at Work – Center City Campus

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<th>Actual</th>
<th>Prior Year Actual</th>
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<tr>
<td>Water</td>
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</table>

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