What should you turn off at night?

Here are some power numbers from my setup to help you decide.

Desktop PC tower only, 180 watts

- Two printers left in the On position 6.5 watts each
- A cable modem and router 9 watts
- One USB hub 4.7 watts
- Two external hard drives that are normally off, 9 and 14 watts when turned on
- A wireless keyboard and mouse 0 watts
- Speakers left in the On position 5 watts
- 24 inch LCD monitor 31 watts when on and 0 watts in standby
- The entire setup when on is 236 watts
- Everything but the PC and monitor on is 25 watts
- Everything but the PC and monitor on plus the PC in Standby 26 watts (Standby power for PC is negligible, less than 1 watt)

Assuming that the PC is on 6 hours a day and in Standby 18 hours, the average power is 79 watts. With the cost per KWH at $.15 (use your own rate here), this cost is less than $10 per month. If everything were turned off at night, the cost would be reduced by $2.95 per month. If just the PC would be turned off every night, the savings would be pennies per month.

I recommend leaving the modem and router on 24/7 since it costs less than $1 per month. Leaving a printer on 24/7 costs me half that much. The only time I turn my printers off is while traveling. My router and modem are only turned off to reset them when troubleshooting a problem.

There are many theories regarding leaving your PC on. In my case, as stated above, I have my PC set up to go into sleep mode when unattended for 30 minutes. I do turn off and restart my PC at least once a week since the Windows operating system needs to be refreshed periodically.

If you are really curious about how much power your equipment consumes you can purchase a wattmeter for approximately $20 at Amazon. See the meter here.

I measured 2.5 KWH (Kilowatt Hours) over a 24-hour period. This computes to less than $10 per month for my entire PC setup. It surprised me to find out that one of my printers, an HP 6310 uses 9 watts when turned on and 6.5 watts by just being plugged in. Turning it off would save $0.21 per month and unplugging it would save $1 per month. Who woudda thought? The most frugal setup is to plug all equipment into a power strip and turn it off when not in use.

Here are some more measurements.

- Laptop
    - Just plugged in or standby – 10 watts
    - Running – 30 watts
- Small TV
    - Just plugged in – 5 watts
    - Turned on – 7 watts
- Big TV
    - Just plugged in – 0 watts (surprise)
    - Turned on – 75 watts
- Phone charger
    - Just plugged in – 0 watts
    - Charging a phone – 6 watts (3 times my Desktop PC in standby)

Notes:

1. 1 watt costs approx. $1.58 per year with a rate of $.18/KWH (peak usage month)
2. My actual rate is $.15 to $.18/KWH depending on the month
3. The average for the year was $.15/KWH
4. You need to examine your bill to find out your actual rates
5. I received a cycling discount of $120 per year