

PREFACE

High costs are an unfortunate fact in many aspects of modern life. Utility bills, however, do not have to be exorbitant. The size of your electric bill mostly depends on how many appliances you have and how you use them. So you may take comfort in knowing that at least you can just turn off the switch. Understandably, you probably don't want to take such drastic measures.

With that in mind, OEC has produced this information booklet to help you determine exactly why your electric bill is so high and what changes you can make to reduce the costs and still take care of your household needs. The information contained within is a fairly comprehensive look at home energy use.

There are many factors to consider when doing a home energy analysis, but given this information, there is no reason why the average person could not do-it-themselves. If you have any difficulties or questions in the course of your investigation, please call OEC member services, 321-2024 and ask for an energy auditor.

RATES

Oklahoma Electric Cooperative is a non-profit organization whose main purpose is to supply its members with reliable electric power at competitive rates.

This is being accomplished despite some rather large odds. OEC is a rural electric cooperative, and that means we only have approximately 6 meters or families per mile of power line. In any electric company the facility costs must be spread among its consumers. The costs are included in the rate base along with other operating costs. Therefore, those six families must share the cost of that mile of power line. Compare this to the large investor owned electric companies averaging 26 meters per mile of power line and the municipalities who average 55 meters per mile and you can see why cooperatives are at a disadvantage when it comes to rates.

Despite the disadvantages, OEC has stayed competitive. At the present time, OEC's residential rates are slightly higher and our commercial rates are less than those of our main competitor. Electric rates can fluctuate several percentage points from month-to-month as the power cost adjustment operates, but the point is, rate differences don't matter much when they are this close.

BILLING CYCLES

Most OEC billing cycles are 28 days long. But twelve months of 28-day cycles only adds up to 336 days. So to include the leftover days we have four 35-day cycles and eight 28-day cycles.

Simple enough, right? Wrong! Those extra seven days mean at least a 20% jump in your bill. If the long billing cycle happens to correspond to a particularly severe weather period, you might see an increase of 50% or more.

The 35-day bills are timed to occur during the spring and fall so there will be as little heating or cooling costs as possible on the long bill.

OEC prints a notice on your bill when it is for a longer billing cycle.

THE METER

When a member receives a bill that is higher than he or she thinks is reasonable, the meter is usually blamed. We would like to ease your fears that OEC's meter might be inaccurate.

The electric meters OEC uses for residential applications are very simple, basic pieces of equipment. They consist of an odometer style register, a polarized disk and a magnet. The disk turns when it is acted upon by the magnetic field created when electricity flows through the meter. A worm gear on the axis of the disk turns the gears that operate the

register that shows kilowatt hours used. The faster electricity is being used the faster the disk turns. The meters are very accurate because they are made that way from the factory.

The Oklahoma State Corporation Commission requires that our meters be within 2 % plus or minus of 100 percent accuracy. The total amount of adjustment possible on our meters is only about 5 percent, or \$5 plus or minus on \$100 of electricity.

OEC's own policy is much more stringent than is required by law. We have our own meter shop and test facility where all of our meters are checked and adjusted to within 2 tenths plus or minus of 100 percent accuracy before they are put into use.

Any time an account is disconnected, the meter is pulled, brought in and retested, regardless of the length of time the meter has been in service. OEC also conducts ongoing random meter tests (called sample tests) to ensure long term accuracy. These random tests, combined with the meter tests done when an account is connected or disconnected, add up to about 500 meter tests per month. Each test is documented and the results are available to our members or to the Corporation Commission.

All of these tests are done to insure that our members do not pay any more or less than the cost of the electricity they actually use.

“If it's not the meter, what could have made my bill double from one month to the next?” Factors as diverse as the weather and the condition of your water well pump, along with appliance usage and your personal lifestyle, can make a great deal of difference on your bill. We will cover these problem areas, and suggest things you can do to save on your electric usage.

TROUBLE-SHOOTING YOUR ELECTRIC CIRCUITS WITH THE METER

If your electric usage has increased and you've been unable to figure out any lifestyle considerations or other unusual uses, the following procedure will help locate sources of trouble, with the aid of your electric meter.

STEP ONE: Turn off the main disconnect. If your meter is on a pole, away from the house, the disconnect should be in a box under the meter. If the meter is on the side of your house, there may be a main breaker in the breaker box inside. If not, you will need to turn off all of the circuit breakers at once. The disk in the electric meter only turns if electricity is being used. Therefore, the meter should have stopped. If the disk is still turning, check to see that the water pump is turned off at its own fuse box. Sometimes a water

pump will be wired ahead of the main disconnect for fire protection purposes.

When the water pump has been disconnected and the meter has stopped, you can proceed with trouble-shooting. The idea is to energize as much of your electric wiring system as possible, one circuit at a time, and still have a stopped meter disk.

STEP TWO: Turn off the main fuse or breaker in all buildings, then turn on the main disconnect. If the meter disk is still stopped, this tells you that all wiring from the main disconnect to each building's main fuse or breaker is okay.

STEP THREE: Proceed with each individual building by unplugging or turning off everything that uses electricity, then turn on that building's electrical box or breaker.

To further pinpoint possible trouble, turn on each main fuse or circuit breaker in each building, one at a time.

Continue this process until one of two things result. If the meter disk is stopped, you're okay. If the disk is turning and the appliances are off, you have discovered a source of trouble.

Common sources of trouble include electrical faults in wiring systems that are usually due to physical damage such as moisture and dirt, or improper connections. Sometimes you'll find equipment that you

thought was turned off using electricity, such as a stock waterer, thermostat, basement and attic lights or an attic exhaust fan.

If you don't find any of these problems, we have test meters available that will record the electrical consumption of the appliance plugged into them. By comparing your recorded use with that of our list for farm and home appliances and equipment, you can determine whether that equipment is using an unusually high amount of electricity.

If these methods fail to locate your problem, contact your electrician or OEC.

OKLAHOMA CITY WEATHERDATA

Heating or cooling your home can be the largest part of your electric bill. The weather is a major determining factor in the size of your heating or cooling bill. OEC acquires the weekly weather data to aid in determining the cause of higher-than-normal electric usage.

On the next page is a sample of this weather data for Oklahoma City and the surrounding area. The chart relates average daily temperature for the months and days of the year. The smooth bell shaped (summer) and U shaped (winter) curves denote the 30 year average temperature for the date covered. The dotted line that fluctuates, roughly following the smooth

curve, is the previous year's weather data. The solid line that fluctuates, again roughly following the smooth curve, is this year's actual average daily temperature.

Along the bottom of the chart has been listed the time period covered, the average daily temperature and heating or cooling system operating hours for this year, last year and the norm.

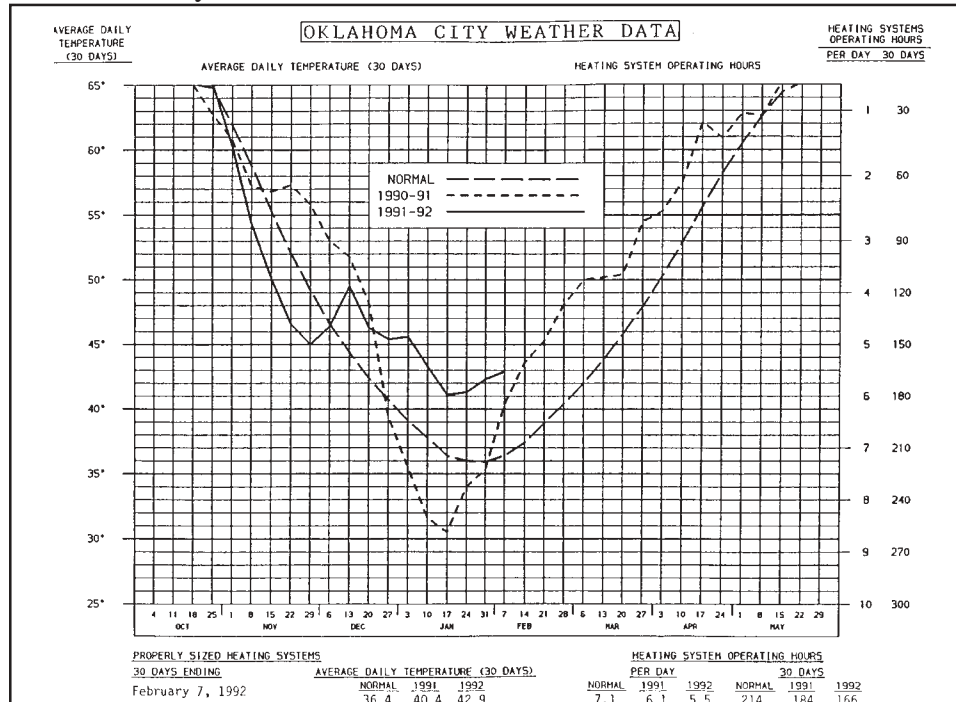
Remember, your heating and cooling system is probably the largest energy user in your home. Even a small difference in the average temperature from one year to another can have a major effect on your electric bill. This chart should help you determine if the weather has been the cause of an increase in the amount of your electric bill.

USAGE HISTORY REPORT

OEC maintains a record of every member's billing history from the time their account was opened. We have the ability to view two years of history on our computer. The usage history report is a copy of what we see when we look at your usage history on the computer.

This history is very helpful in determining whether or not an increase in your bill is normal or unusual. With it you can determine when the increase in usage actually occurred, and if it was due to a long billing cycle or an estimated reading.

Comparing the billing dates with the weather chart can tell us if an increase may have been due to unusually warm or cold weather and



the increase in heating or cooling associated with it.

The usage history report contains the following information arranged in columns.

Month: This is the month of the year that you received the bill. The actual usage occurred mostly in the previous month. For example - your October bill is for usage that occurred mostly in September.

This fact causes many people concern. You would not expect your October bill to be a large one until you realize that when the usage happened in September, you were still needing some air conditioning.

Revenue This is the amount of the bill including the charge for electricity, the monthly customer charge, taxes and security lights, if you have any. It does not include any amounts carried over from previous bills which will be included in the total bill.

kWh: Short for "Kilowatt Hours", this number is a unit of measure meaning "1000 watts operating for one hour." If the wattage of the appliances you are using combine to equal 5000 watts, and if they operate for one hour, the amount of electricity used is 5 kilowatt hours. Conversely if all you are using is one 100 watt light bulb, it must operate for 10 hours to equal one kilowatt hour. OEC's meters are made to measure kilowatt hours and that is the unit of measure by which you are billed.

Reading: This is the actual reading taken by your meter reader.

CD: This is the billing code. This column shows different numbers corresponding to footnotes pertaining to that bill. A six (6) in this column means for some reason the meter reader was unable to get the reading that day and the number in the "reading" column is the result of a computer estimate. A zero (0) in this column means a normal reading and normal billing.

Read Date: This is the date the meter reader read the meter. To determine the number of days in that billing cycle, look at the reading date for the previous bill and count the days to the next reading date. Most billing cycles are for 28 days—exactly four weeks, but a few times each year we must have a long billing cycle of approximately 35 days to account for the days left over. We try to do the long billing cycles during the spring and fall so that there will be as little heating or cooling cost as possible on the long bill. The extra days of usage alone make a higher than normal bill, but if we are having an unusually hot or cold spring or fall, the extra heating or cooling cost combined with a long billing cycle can make the bill almost double.

VACATIONS & SEASONAL USE

When vacation time comes, and you're planning to be gone for a couple of weeks or so, your electric bill should decrease significantly, right? Wrong!

Many people believe when they leave on vacation, their electric meter stops until they return. If they're on vacation for two weeks, they expect their electric bill to be cut in half. Let's ask ourselves a few questions before we assume our electric bill should decrease by any considerable amount during vacation time.

Was the water heater turned off during your vacation? Remember, if the electric water heater is left energized during vacation, it will continue to operate and maintain the tank temperature even if you're not using any hot water.

Were the refrigerator and freezers emptied and turned off? If not, they will continue to operate to maintain the preset temperatures .

Take a look at other electrical appliances that keep running while you are on vacation - clocks, attic fans and power ventilators, heating and air conditioning equipment, lights and TV sets with the "instant on" feature.

If you are determined that no electricity is to be used during your vacation, you can accomplish this by turning off your main breaker or pull-

ing the main disconnect. But remember, when you do this, the automatic appliances and lighting will stop. Your refrigerator and freezer will defrost, your electric water heater will not have hot water ready for use upon your return, and your home may be too hot or too cold when you walk in the door. It's a decision only you can make. Perhaps you can make arrangements with a neighbor to keep an eye on your place and adjust the heat, water heater and/or air conditioner shortly before you return.

You may wish to unplug all appliances not in use. If a light is to be left on, it should be connected to a timer. Read your meter upon leaving, and again when you return. This will let you determine the number of kilowatt-hours used during the period of time you were gone.

Another reminder — many vacationers bring home several days or weeks of dirty laundry. This laundry will give your electric water heater a workout during your first day or two back home. Your clothes dryer will also use a lot of electricity drying all that laundry.

Only you can decide whether your electric meter gets a vacation or not while you are gone.

Some of the seasonal uses for electricity that may cause an increase in consumption include crop dryers, air conditioners, portable heaters in the garage or basement, engine heaters to keep your car, truck or tractor

ready to run in the winter, and heat tape to keep pipes from freezing.

Lets not overlook hobbies, or those businesses that operate from the home. Ceramics shops with kilns, and beauty shops with a number of electric hair dryers, woodworking tools, etc., also have an effect on the number of kilowatt-hours you use.

HEATING, VENTILATING AND AIR CONDITIONING

Heating and cooling costs are usually the biggest part of your energy bill. So many factors affect heating and cooling energy use that to estimate what your usage should be takes a fairly in-depth computer program. However, we can generalize and come up with tips on how to keep those summer and winter bills as low as possible.

The heat required to warm your home in the winter and the amount of heat removed from your home in the summer is a function of outdoor temperature, the thermal efficiency of your home (insulation), and the temperature you want to maintain in your home (thermostat setting).

Barring any problems with your system, the easiest and quickest way to save money on heating and cooling costs is just to use it less. That means turning up the thermostat a few degrees in the summer and down a few degrees in winter. **We recommend 68 degrees in winter and 78 in**

summer but cooler and warmer respectively would save even more.

There is no reason to heat or cool your home when no one is there to enjoy it. Keeping the system off when you are away can cut a large percentage from your heating and cooling bill. At night when the family is asleep in 2 or 3 rooms, you can use fans or electric blankets to stay comfortable instead of conditioning the whole house.

If you can't remember to adjust the thermostat or if you want the house to be comfortable when you get up or arrive home, an automatic setback thermostat can be programmed to suit your schedule. These thermostats are available at home improvement stores to do-it-yourself and from heat and air contractors.

The efficiency of your heating and cooling system is a major determining factor in how much it will cost to do its job. Even the most efficient system can become an energy waster if it is not maintained properly.

Your heating and cooling system should have some type of filter. We recommend checking it for cleanliness once a month and change or clean it as needed. The filter is easily forgotten. Ninety percent of the homes we visit for energy audits have dirty filters in their HVAC systems. This can increase energy use by 20 percent or more

above normal in months when the system sees a lot of use. If the filter is completely clogged the air flow will eventually bend it, allowing dirty air to bypass into the cooling coil. As this continues, the coil gathers dust and eventually becomes clogged. This problem is the same as a dirty filter, but harder to fix.

Your outdoor unit has a coil too. Potential problems for it's coil are similar to the indoor coil problems, only worse. The outdoor coil can collect dirt, grass clippings, dog hair or anything else found outdoors small enough to fit between the coil's fins. The fins are thin aluminum and can be bent over very easily, further restricting air flow.

Monthly filter maintenance and yearly coil inspection and cleaning are easily accomplished by the home owner and will pay big dividends in energy savings. If you suspect the indoor coil in your system is dirty or if a lot of the fins on the outdoor coil are bent over, a heat and air maintenance call is needed.

Another easily forgotten but very important part of your HVAC system is the duct work. If your system's duct work is in the attic, it should be checked periodically for leaks. A leak here could increase your bill significantly and make you think the system is not working properly, when in fact it is trying to condition the house and the attic too. Most homes with attic ducts only have 1/

2 inch of duct wrap insulation and should be insulated with 2 inches.

This is a worthwhile home improvement with a return on investment usually in less than 3 years. The job can be easily accomplished by the home owner with no more tools than duct tape and a shop knife. The insulation should be vinyl backed fiberglass, available at most home improvement stores.

Occasionally a HVAC system can have a problem beyond the ability of the home owner to repair. When it quits completely, there is no doubt about a problem. The time to be careful is if you notice the system running longer than usual and not heating or cooling as well as it should. This type of problem will increase your electric bill a great deal if not dealt with quickly.

A freon leak is a common cause of high usage, but we have even seen systems malfunctioning so that the heating and air conditioning were working at the same time against each other, causing a very high bill.

The normal efficiency of your heating and cooling equipment can be a factor in high bills also. If your air conditioner or heat pump is ten years or more old, it probably has very poor efficiency ratings compared to modern systems.

Ten years ago the system may have been the top of the line. It may have done its job all of these years

without a whimper. But the fact is, manufacturers neither had the technology for higher ratings or the inclination to use it had it been available. Utility rates were much lower, no one cared about depletion of our resources and there just was no real demand for efficient systems at that time.

Efficiency ratings for air conditioners and heat pumps have doubled over the last fifteen years. New heat pumps can be as much as 350% efficient. That means for every one watt of electricity used, you get 3.5 watts of heat energy for your home. Ratings on gas furnaces have gone from 65 percent to 95 percent over the same time period.

In many cases a new, more efficient system is the answer to high bill problems. Since the new high efficiency systems are expensive, we seldom recommend changing your old system until it breaks down, requiring several hundred dollars to repair. In this case you can add the repair money to the savings you will see from the new system to make the return on investment for a new system shorter. **If you choose a new heat pump system, the rebates available from OEC will help too.**

INSULATION, CAULKING AND WEATHERSTRIPPING

The average household expends 50 to 70 percent of its energy dollar

heating and cooling the home. If you really want to significantly reduce your energy bills, reduce the amount of energy required for heating and cooling.

Unless you have recently increased your attic insulation level, this is where you should start. The recommended attic insulation level for homes in this part of the country is R-38. That is 10 to 15 inches of depth depending on the type of insulation you buy.

Wall insulation should be a minimum of R-11. If you own an older house and aren't sure of its wall insulation level, check behind the electric plates on your outside walls. Sometimes you can see insulation through the crack between the electric box and the sheet rock. If you are sure there is insulation in the wall, it is probably R-11 or better. While you are there, seal that crack with caulking.

Frame floors should have R-19 insulation blankets installed between the floor joists. Slab floors should have been insulated between the stem wall and the main floor at the time of construction.

These improvements will greatly reduce the amount of heat lost through uninsulated or poorly insulated areas of the home.

Now it's time to stop the air that is infiltrating your home through cracks in the building envelope. Any gap wider than one inch should be

insulated or weatherstripped. Any gap narrower than one inch should be caulked. Some areas to check are; gaps around doors and window frames, leaky windows, gaps at floor-to-wall and ceiling-to-wall joints, any holes in exterior walls for plumbing or electrical outlets, indoor light fixtures and electrical outlets, dryer, range and bathroom vents.

Obviously doing all of this yourself will take time, but each improvement is one you can do with a minimum of cost and a 100% return on investment in usually less than 3 years.

WATERHEATER

Domestic water heating is one of the largest energy users in the home. Usually the only larger costs are home heating and cooling. Water heating for a four-person family can easily cost \$30 per month or more.

Proper maintenance of the water heater and plumbing system is very important in keeping your electric bill as low as possible. A common cause of excessive water heating cost is a water leak at the water heater, usually at the pressure release valve, or in the home's plumbing system, usually at a faucet. **A hot water leak can cause the water heater to run almost constantly. If the water heater runs constantly for a whole billing cycle it could add as much as \$150 to your bill.**

The thermostat setting is another very important factor in water heating energy use. Don't set the thermostat any higher than is absolutely necessary, certainly no more than 140 degrees, and only then if you have an older dishwasher that can't heat the water as it runs.

Water heaters (except super insulated tanks like the ones OEC sells) are not very well insulated. If you have a standard tank or an older tank it would save money to install one of the inexpensive water heater insulation blankets available at home improvement stores. Remember to insulate the top of the tank. Since heat rises, a greater proportion of heat is lost there. While you are at it, insulate the water lines for the first 3 ft from the tank with pipe wrap or tubular foam insulation.

The way to save the most on water heating cost is to simply use less. This means washing clothes in cold water, installing low flow shower heads, taking shorter showers, using the energy saver dishwasher cycle and any other way you can think of to reduce the amount of hot water your family uses.

WATERWELL

Barring any problems, a water well is a very economical way to supply your home with water.

High electrical usage occurs when the system malfunctions. If

there is a water leak somewhere, the pump could be running much more than normal. If the water leak is in the line between a submersible pump and the pressure switch, the pump will be running constantly. This can also occur if the pressure switch sticks closed. However it happens, a well pump running 24 hours a day will add \$80 dollars or more to the month's bill.

Another common problem is a water logged pressure tank. Normally, the pump runs, pushing water into the pressure tank against the air charge until a preset pressure is reached, at which time the pressure switch turns the pump off. The pressure tank should have the correct air charge so that the pump will be able to build water pressure in the tank. This way the pump does not have to operate during the whole time you are using water, because you have the tank's pressure to draw from. If the pressure tank has lost its air charge, it is said to be water logged. The pump must come on as soon as you turn on the faucet and go off only when the faucet is closed, an inefficient and expensive way to supply water for your home.

Checking the operation of your water well is very easy and worthwhile. Turn off all of the breakers for your home except the breaker to the water well. If the meter still turns, the water well is running or there may be a short somewhere in the water well

system. If you have just been using water, the well should be running. If you haven't been using water for several minutes the well should be off. If the meter stops, continue to the next check. Open a faucet and let the water run until the well pump kicks on. It will be easy to tell when this happens by watching the meter.

If the well is working properly, the water should run for several minutes, draining the water from the pressure tank, and the pump should then kick on, run for a few minutes to recharge the pressure tank, and kick off. If the faucet is left open the cycle begins again.

If the meter has been running the whole time, there is a problem—probably a leak. If the pump starts as soon as the faucet is opened and stops only when the faucet is closed, you have a problem — probably a water logged pressure tank. If the pump kicks on and off quickly, obviously not running long enough to build any pressure in the tank, the tank is almost water logged — lost almost all of its air charge. Any of these problems can cause a higher than normal bill, not to mention the extra wear and tear on your well pump.

APPLIANCE USAGE WORKSHEET

The appliance usage on the following pages lists the most common home appliances and how much electricity they use, on the average, per month. With this worksheet, you can see how much an individual device contributes to your total bill or you can add them up to determine what your total bill should be.

Simply go down the list, marking the average amount shown for appliances you have and use. If you have that appliance but don't use it, leave it off. In some cases you can adjust the usage to match your lifestyle. If the appliance listed does not show a range to choose from, please use the exact number shown. The averages are always more accurate than a personal guess.

Care should be taken with the heating and cooling estimates. Please note that the numbers are based on eight hours per day of run time on the heating and cooling system. Since so many factors affect how much your heating and cooling system runs, this number should be considered a starting point only. When you are investigating why a summer or winter bill was so high, we suggest completing the rest of the sheet first and adjusting the heating or cooling numbers to match the bill in question.

KILOWATT-HOUR CONSUMPTION FORMULA

The average monthly kilowatt-hour consumption figures shown on this chart are based on average usage of the appliances. Your electrical consumption may be higher or lower, depending on how you or the other persons in your home use the various appliances.

For example, the chart states that on the average, a 19" solid state color television uses 13 kilowatt-hours per month if used 4 hours per day. If you have a television in your home fitting this description and you know it is on more than four hours per day, you should adjust the kilowatt-hours consumption figure accordingly

Only you know what appliances you own and operate. Accuracy in filling out this chart will help you understand which appliances contribute to

your total electric bill. You can calculate your own appliance usage and cost of operation as follows: Find the wattage of your appliance, (usually on the serial plate). If wattage is not listed, look for the amperage and voltage ratings on the same plate. Multiply amperage (amps) times voltage (volts) to get the wattage (watts).

Next, multiply the wattage by the hours you use the appliance each month, and divide by 1,000. For example: an 19" color TV is used 8 hours a day. Eight hours times 30 days equals 240 hours per month. The wattage of the TV is 110. The wattage (110) times the hours used (240) equals 26,400 watts. Divide this by 1,000 and you have the kilowatt-hours by the TV in one month (26.4 kWh).

Baseboard units (8 hrs/day)		
500 watts	120	___
1000 watts	240	___
1500 watts	360	___
2000 watts	480	___
Portable space heaters (8 hrs./day)		
1000 watts	240	___
1500 watts	360	___
Elec. blanket	24	___
Water bed heater	85	___
Jacuzzi/hot tub heater (8 hrs/day)		
1500 watts	360	___
6000 watts	1440	___
Fans (8 hrs/day)		
Ceiling fan: high speed	24	___
medium speed	18	___
low speed	15	___
Window fan, 20"	22	___
Furnace, 1/3 hp	60	___
furnace, 1/2 hp	90	___
Humidifier	14	___

Total kWh for Heating & Cooling _____

Lighting

Indoor		
(based on avg. home usage)	100-200	___
(For more accuracy count fixtures & wattage, then use formula.)		
Outdoor (based on 8 hrs. usage)		
60 watt	14	___
150 watt	36	___
175 watt security light	70	___

Total kWh Consumption for Lighting _____

Personal Care

Hair dryer used for 10 minutes/day		
500 watts	6	___
1000 watts	13	___
Curling iron	6	___

Laundry & Cleaning

Clothes dryer (5 loads/wk.)	100	___
Clothes washer (5 loads/wk.)	7	___
Iron	5	___
Sewing machine	1	___
Vacuum cleaner	3	___

Total kWh Consumption for Personal Care & Cleaning _____

Water Supply & Heating

(Avg. kWh usage for family of 4 = 50 kWh) _____

Water pump: To determine the amount of electricity used by your water pump motor, check the horsepower of your pump and estimate how many hours per month it runs. Then follow this formula: HP x hours x .85 (motor efficiency) = kWh _____

Water heater: The average person uses 20 gallons of hot water per day. This includes hot water for bathing, dishwashing, etc. For estimating your consumption, please use the following table:

People	Avg. gals./month	kWh	
1	600	117	___
2	1200	234	___
3	1800	352	___
4	2400	469	___
5	3000	586	___
6	3600	704	___

Total kWh Consumption for Hot Water & Heating _____

Total kWh Consumption for All Appliances in Your Home _____

SUMMARY

1. We recommend 10" to 12" of insulation. Cooling and heating uses 50% - 70% of your energy dollar. Improperly insulated homes cause high usage.
2. Reducing water heater temperatures to 120° can save 18% or more on hot water usage.
3. Each degree you raise the thermostat can save 3% - 4% on the cost of operating your air conditioner. Each degree you lower the thermostat in the winter has the same effect.
4. Change air filters monthly. Dirty filters can increase energy use by 20% or more in normal months of usage.
5. Have your air conditioning unit checked annually. In rare cases, a heating and air conditioning unit can be working at the same time, not only working against each other, but greatly increasing your electric bills.
6. Ceiling fans help circulate the air. Operating a fan for 8 hours a day costs about \$1.50 a day. If you don't have ceiling fans, the investment may be well worth it.
7. Caulking and weatherstripping is a must to eliminate heat gain and loss.

CONCLUSION

Please remember, problems seldom become large if they are dealt with immediately. For that reason, we hope you will keep this booklet handy. It contains all of the knowledge an energy auditor would use if he were to visit your home. With it you can identify and fix a problem before it becomes expensive.

If you have any questions about the information contained herein, or about something you have found while conducting your own Home Energy Audit, please call:

**An OEC Energy Auditor
at 321-2024.
We are here to help.**