

Doug Rye *says ...*



May the force not be with you

As hot as it is now it is hard to remember just how cold it was six months ago. We had a good old fashioned winter like we haven't seen in a while and the utility companies received high bill complaints like they haven't see in a while either. When one receives a high utility bill there is always a reason and it is almost never because the meter is wrong. For years I have spent just about all of my working time teaching folks where their utility dollars go and what they can do to make the situation better. As the summer bills will soon be arriving, I thought it would be a good time to review "Energy Course 101."

The average house energy usage is about 50 percent for heating and cooling, about 20 percent for water heating and about 30 percent for everything else. Since heating and cooling systems are the largest users of energy, let's look at some energy facts. Basically, it is all about heat transfer.

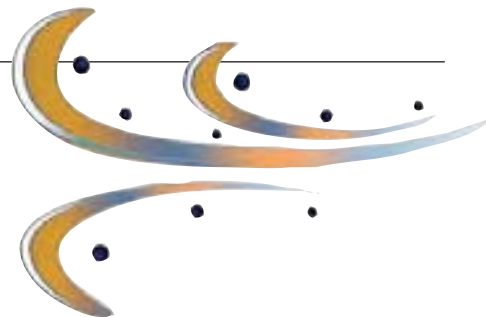
First, heat always moves toward cold and it is an actual force. You could say that there is no such thing as cold, just a lack of heat. In the summer, you don't cool the house, you remove the heat.

Second, the greater the difference between the two temperatures, the greater the force will be. Let's say that your house temperature is 75 degrees and you heat the kitchen oven to 90 degrees. When you open the oven door you will feel a little force of hot air come out the door. Now heat the oven to 350 degrees, open the door, and feel the blast, which is a big force, of air hit you in the face. Again, it is an actual force.

So how does this force relate to the utility bill at your house? Well, let's set the

house thermostat at 75 degrees. Now, let's enjoy a nice 75-degree spring day. Wow, it is a perfect day. There is no force from nature, no heating or cooling is required and the utility meters hardly move. What a day. Of course you knew it wouldn't last. Today it is sunny, 97 degrees and the heat is forcing its way into my house at every possible location. Oh no, now it's winter and 20 degrees outside. The heat that I just paid for is now forcing its way out of my house. In fact I can see the force as it hits my window glass and turns to water. Please help me. What can I do?

Folks, the places in your house that are losing heat in the winter are probably the same places that are gaining heat in the summer. If you can totally seal those places or just make it more difficult for the heat to move through those places, you can help lower your utility bill. Just find those places and fix them. A good energy audit using a blower door and an infrared camera is by far the best way to find those bad spots. Several electric cooperatives provide energy audits for their members. If energy audits are not available, continue to read this column, which has shown you, and will continue to show you how to find and stop those energy hog forces. If you have questions, you may call me at 501-653-7931 and I will be happy to help you. In the meantime, may a **good** force be with you.



Doug Rye, a licensed architect living in Saline County and the popular host of the "Home Remedies" radio show, works as a consultant for the Electric Cooperatives of Arkansas to promote energy efficiency to cooperative members statewide. To order Doug's video or ask energy efficiency-related questions, call Doug at 1-501-653-7931. More energy-efficiency tips, as well as Doug's columns, can also be found at www.ecark.org